

Fossil fuel subsidies in Australia

Federal and state government assistance to fossil fuel producers and major users 2020-21

In 2020-21, Australian Federal and state governments provided a total of \$10.3 billion worth of spending and tax breaks to assist fossil fuel industries. The \$7.8 billion cost of the fuel tax rebate alone is more than the budget of the Australian Army. Over the longer term, \$8.3 billion is committed to subsidising gas extraction, coal-fired power, coal railways, ports, carbon capture and storage, and other measures.

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Summary

Australia is a major fossil fuel producing country. It is the world's largest exporter of liquified natural gas (LNG) and its coal exports make up 29% of the global trade. Fossil fuel industries are politically powerful, and they have been able to extract significant subsidies and assistance from Australian state and federal governments.

With climate action becoming ever more urgent and the USA's Biden administration moving to phase out fossil fuel subsidies in that country, the question emerges: how much are Australian fossil fuel subsidies costing governments and the wider community?

The answer is, in short, a lot: \$10.3 billion in the budget year 2020-21. In other words, for every minute of every day in 2020-21, these subsidies cost the public \$19,686

The largest subsidy is the federal fuel tax credit scheme. This cost the Federal Government \$7.8 billion in 2020-21. Federal budget papers list it as the 18th largest cost in the budget; it costs more each year than spending on the Australian Army or the Royal Australian Air Force, and almost as much as federal funding to childcare or public schools. Other tax concessions on aviation fuel and the offshore oil and gas industry cost the federal government another \$1.03 billion in 2020-21.

Beyond tax concessions, governments spent \$1.4 billion on other measures that assisted fossil fuel production, such as infrastructure provision. The Queensland government was the largest contributor, spending \$744 million — largely on state-owned coal mines, coal-fired power stations and coal ports. WA's \$135 million also related mainly to power stations and ports. This sort of government spending on infrastructure provision is a form of subsidy, even if user fees are charged later. The Queensland Treasury has repeatedly made this point:

Governments face budget constraints, and spending on mining related infrastructure means less infrastructure spending in other areas, including social infrastructure such as hospitals and schools.¹

Over the longer term, the federal and state governments have budgeted a total of \$8.3 billion worth of assistance to fossil fuel companies through a range of projects and capital spending. The largest project identified is the Northern Territory Government's \$3.8 billion to buy gas from the offshore Blacktip project, owned by Italy-based multinational Eni.

¹ Queensland Government (2013) *Queensland Treasury Response to Commonwealth Grants Commission*, <https://www.cgc.gov.au/inquiries/2015-review/Consultation#PS>

The Federal Government's project commitments include discounted loans to LNG projects via Export Finance Australia (\$698 million), financial support to fossil fuel-related projects through the Northern Australia Infrastructure Facility (\$317 million), grants for new diesel fuel storages (\$204 million), and a range of other projects including those under "JobMaker" and the "Gas-Fired Recovery".

As with their 2020-21 spending, Queensland and WA's future capital spending comprises assistance for power stations, ports and other infrastructure, while Victoria's will go toward Carbon Capture and Storage and hydrogen-from-coal projects. NSW committed \$100 million to its Coal Innovation Fund some years ago and \$71 million remains. SA's capital assistance is directed mainly to upgrading a petroleum jetty near Whyalla.

No fossil fuel assistance was identified in the ACT budget. Tasmania's exploration subsidies have benefited the state's small coal industry in 2019, but no assistance was identified in 2020-21.

Reforming and eliminating these subsidies will be important not only for Australia to play its part in avoiding dangerous climate change, but also for facilitating public spending in more beneficial areas.

Introduction

Australia is the world's third biggest exporter and fifth biggest miner of fossil fuels by CO₂ potential.² It is the world's largest exporter of liquified natural gas (LNG) and our coal exports make up 29% of the global share.³

Subsidies for fossil fuels obscure the true cost of these polluting industries and enable them to continue exploring for, extracting and burning coal, oil and gas. As the world works towards reducing global greenhouse emissions to mitigate climate change, international pressure is mounting for countries to stop subsidising fossil fuels so that competitively priced, clean sources of energy can be scaled up and fossil fuel use can be phased out. In 2020, UN Secretary-General António Guterres highlighted that "we need sustainable COVID-19 recovery plans that tackle climate change... [that] do not bail out polluting industries, especially coal; [that] end fossil fuel subsidies and put a price on carbon".⁴

The election of President Biden has seen the USA change course on climate policy, with a key initiative being to reduce subsidies for fossil fuels:

Today the tax code contributes to climate change by providing significant tax preferences and subsidies for the oil and gas industry. The President's tax plan would remove subsidies for fossil fuel companies, while providing incentives to reposition the United States as a global leader in clean energy and to ensure that our infrastructure is resilient to storms, floods, fires, and rising sea levels.⁵

US Treasury estimates that government revenue could be increased by \$35 billion over ten years by cutting out various ways that the US Government and tax system assist the fossil fuel sector.

This raises the question of how much fossil fuels are subsidised in Australia. Various estimates of Australia's assistance have been made in recent years, with selected findings below:

² Swann (2019) *High Carbon from a Land Down Under: Quantifying CO₂ from Australia's fossil fuel mining and exports*, <https://australiainstitute.org.au/report/high-carbon-from-a-land-down-under-quantifying-co2-from-australias-fossil-fuel-mining-and-exports/>

³ Ibid.

⁴ United Nations (2020) *Continuing Current Trends Will Lead to Unimaginable Suffering Worldwide, Secretary-General Tells High-Level Round Table on Climate Ambition*, <https://www.un.org/press/en/2020/sgsm20280.doc.htm>

⁵ US Treasury (2021) *The made in America tax plan*, https://home.treasury.gov/system/files/136/MadeInAmericaTaxPlan_Report.pdf

- International Monetary Fund (IMF) – US \$29 billion in 2015, including unpaid costs of air pollution and climate change.⁶
- OECD – \$10 billion in 2019.⁷
- Productivity Commission – \$1 billion in 2018-19 to sectors that include fossil fuel activities.⁸
- Australia Institute – \$4.5 billion in 2013 federal subsidies to the mining industry, \$18 billion in state government subsidies over six years to 2014.⁹
- Market Forces – \$12 billion in 2017-18.¹⁰

This wide range demonstrates a key issue in any discussion about subsidies – different definitions of “subsidy” make a large difference to the final estimate. The largest estimates, such as those from the IMF, incorporate the uncompensated costs of climate, health and other environmental damage into their definition of fossil fuel subsidies. The lower estimates, like those from the Productivity Commission, incorporate a much narrower range of assistance measures, typically direct payments and the estimated value of trade barriers.

In this paper, our estimates have been guided by the information that is available in official, public documents. Federal and state government budget papers and annual reports of government-owned entities provide data on a range of government spending and other support measures to fossil fuel industries. In some instances, public announcements around these measures provide more detail than is contained in official documents and have been used in our estimates.

The assistance measures detailed in budget papers and annual reports include far more support measures than are considered by the narrowest definitions of “subsidies”, but do not include the environmental pollution or damage costs of fossil fuel extraction and use. This omission is not because these costs are unimportant, but because they are difficult to calculate, estimates are contested and there are few official estimates. Furthermore, these

⁶ Coady et al (2019) *Global fossil fuel subsidies remain large: An update based on country level estimates*, <https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509>

⁷ OECD (2020) *OECD.stat – Fossil fuel support – AUS*, https://stats.oecd.org/Index.aspx?DataSetCode=FFS_FRA; OECD (2019) *Fossil Fuel Support Country note: Australia*, <http://www.oecd.org/fossil-fuels/data/>; and OECD (2018) *OECD Companion to the Inventory of Support measures for fossil fuels 2018*, https://read.oecd-ilibrary.org/energy/oecd-companion-to-the-inventory-of-support-measures-for-fossil-fuels-2018_9789264286061-en#page4

⁸ Productivity Commission (2020) *Trade and assistance review 2018-19*, <https://www.pc.gov.au/research/ongoing/trade-assistance/2018-19>

⁹ Grudnoff (2013) *Pouring more fuel on the fire: The nature and extent of federal government subsidies to the mining industry*, <https://australiainstitute.org.au/report/pouring-more-fuel-on-the-fire/>; Peel et al (2014) *Mining the age of entitlement: State government assistance to the minerals and fossil fuel sector*, <https://australiainstitute.org.au/report/mining-the-age-of-entitlement/>

¹⁰ Market Forces (2017) *How your tax dollars subsidise fossil fuels*, <https://www.marketforces.org.au/campaigns/ffs/tax-based-subsidies/>

wider costs are borne by the community and the natural environment, not by governments directly. By concentrating on official estimates in budget papers and similar documents, we derive an estimate of how government decisions and policies result in benefits to fossil fuel producers and major consumers and, conversely, how much revenue could be raised or saved by reversing these decisions.

In some cases, identifying which budget items meet the criteria of a fossil fuel subsidy is straightforward — in particular, where their title suggests the that intended beneficiaries are fossil fuel industries (for example, the National Gas Infrastructure Plan or Coal Innovation NSW). Other relevant items require further investigation as their titles do not explicitly identify fossil fuel-related activities. This is particularly the case for infrastructure projects that fossil fuel industries rely on, such as rail and port projects.

As a result, investigating various budget item payments was necessary to determine whether, and to what extent, particular funding would directly or indirectly benefit fossil fuel industries. For example, budget funding for Broome Port of \$4.3 million is not, at face value, a fossil fuel subsidy. However, the budget paper later clarifies that this money will be spent to purchase a new marine crane that will assist oil and gas vessels.

The provision of infrastructure represents a major subsidy to fossil fuel industries in Australia. Governments spend significant amounts of money on ports, railways, pipelines, power stations and other infrastructure that assists the production, transport and consumption of fossil fuels. While the users of this infrastructure often pay to use it, and the management bodies may return surplus money to the government that owns the asset, the acceptance of risk and up-front costs by government-owned entities provides benefit to industry and imposes costs on the community. State treasuries are explicit on this point:

Some costs may be recovered by the government over time if they are directly industry related. However, there is a real opportunity cost for governments in undertaking the initial capital expenditure. Governments face budget constraints, and spending on mining related infrastructure means less infrastructure spending in other areas, including social infrastructure such as hospitals and schools. The opportunity cost of this use of limited funds is a real cost to government and the community. – Queensland Treasury¹¹

Western Australian Treasury calculated that in 2010 net present value terms, the estimated cost of its commitments to assist the North West Shelf project (e.g.

¹¹ Queensland Treasury (2014) *Queensland Treasury Response to Commonwealth Grants Commission 2015 Methodology Review*, https://www.cgc.gov.au/sites/default/files/documents/2015%20Review%20Report/General%20Consultation/Commission%20position%20and%20staff%20discussion%20papers/State%20responses/R2015%20-%20CGC%202013-05%20-%20CGC%202013-06-S%20-%20CGC%202013-07-S%20-%20CGC%202013-08-S%20-%20QLD%20Response.pdf?acsf_files_redirect

payment of subsidies to the State's power utility to help cover the losses it initially incurred under crucial 'take or pay' gas contracts) is estimated to be around \$8 billion.¹²

Our approach reflects Queensland Treasury's logic – where governments choose to allocate scarce resources to fossil fuel industries in a way that restricts use of those resources for other government priorities, this represents a subsidy to fossil fuels. The fact that user fees may later be collected does not change the fact that a government decision directed resources in a particular way.

¹² WA Treasury (2017) *Western Australia's Submission to the Productivity Commission's Inquiry into Horizontal Fiscal Equalisation*, <https://www.wa.gov.au/sites/default/files/2020-02/western-australias-submission-to-the-productivity-commissions-inquiry-into-horizontal-fiscal-equalisation.pdf>

Methodology

Estimates of subsidies and other assistance to fossil fuels are for the 2020-21 budget year, with a small number of exceptions where the 2019-20 estimate is the latest available and a similar result is likely in the following year. Funding for fossil fuel projects or programs that have been announced since the publication of 2020-21 Federal, State and Territory Budget Papers have not been included in this analysis.

We have compiled estimates of assistance in 2020-21 and a separate estimate of the total value of programs/projects that run over a number of years. This includes multi-year funding packages for non-ongoing projects, and capital value of long-term physical assets. Estimating the value of industry assistance from ongoing programs such as long-running tax breaks and established government departments is difficult as estimating the long-term cost into a present value would require forecasting government policy and assigning a relevant discount rate. To avoid these risks of misrepresentation, only the relevant spending for the 2020-21 year is included for such items. This is perhaps relevant to the fuel tax credit scheme, which dominates overall results for 2020-21, and analysis of its estimated costs over the forward estimates is included in the Federal Government section.

Relevant tax breaks, known as concessions, on existing taxes reduce revenue and carry opportunity costs for governments. Such concessions are included in our estimates where they advantage major fossil fuel producers and users, through a reduced tax rate and their value is calculated in budget documents. This approach means the federal fuel tax rebate is included (it applies only to certain fossil fuel users and is calculated in budget documents), but the benefit to similar parties provided by the abolition of carbon pricing is not (no group pays an explicit carbon price and the lost revenue is not calculated in budget documents).

All items of expenditure were classified according to which type of fossil fuel industry segment was the beneficiary: coal, gas/oil or various. Items categorised as “various” provided support to several segments or referred to a larger industry investment. For example, many of Queensland’s ports import and export a combination of coal, oil, gas and other products, and were thus categorised as “various”.

Subsidies were assessed as being wholly, primarily, or only partly dedicated to these industries:

- Subsidies classified as wholly dedicated to fossil fuels were judged to be undertaken for the singular purpose of supporting the consumption, extraction, processing, or transport of fossil fuel commodities. An example is the Queensland Government’s \$2.5 million funding for the pre-feasibility study into the Bowen Basin gas pipeline, which would connect the Bowen Basin to east coast energy markets and export

terminals, allowing the development of new gas basins and use of gas from existing underground coal mines.

- Items were considered primarily dedicated to fossil fuels were those where the fossil fuel industry received tangible economic benefit from the spending, but were not the exclusive beneficiaries. An example is the federally-owned Australian Rail Track Corporation's \$130.2 million capital expenditure on the Hunter Valley Rail Network in 2020-21, the benefits of which abundantly accrue to the coal industry, but also some other industries and passenger services.
- In cases where expenditure was categorised as partly dedicated to fossil fuels, the industry received a tangible economic benefit from the spending, but that benefit was not the primary aim of the project or it was not clear which stakeholders received the primary benefit. Infrastructure projects often fall into this category as fossil fuel producers may be major, but not primary, users of these resources. However, a range of resource and other industries may also use the same infrastructure. The new Darwin Ship Lift, funded by the NT Government and the Federal Northern Australia Infrastructure Facility, will partly benefit ships that service the offshore oil and gas industry, but is also aimed at defence and other marine services.
- Where spending benefits the fossil fuel industry either incidentally, or at levels too low to be differentiated in official documents, these items were not included. For example, Tasmania's mining exploration grants have benefited coal mining companies, but are small in the context of the program and the state budget, and were not easily identified within budget papers or other official documents of the 2020-21 year.

Some spending by government departments has been included where:

- The role of the department includes provision of services (particularly geoscience information), or activities that incentivise and promote fossil fuel investment and production. Often these bodies also play a more basic regulatory role, or promote not just fossil fuels but also the wider mining industry. In such cases, the spending is considered as only partly dedicated to fossil fuel assistance.
- Significant under-recovery of regulatory expenses has been identified. Agencies that incur significant administrative costs, but charge few fees to the fossil fuel industries they are administering. One clear example is the NT's onshore gas regulator, where an independent inquiry in 2018 highlighted its costs and minimal revenue, but this has not been addressed some years later despite increased budget allocation.

Queensland Treasury highlights that “mining regulation expenses are now material”¹³ and some regulators that make minimal effort to recover such expenses.

Carbon capture and storage (CCS, sometimes including “use and storage” and abbreviated as CCUS) is generally considered to be dedicated wholly to fossil fuel industries. While much climate research suggests CCS will be necessary to reduce emissions from sectors that are difficult to decarbonise, the intended purpose of most CCS projects funded by state and federal governments is to enable the continued operation of fossil fuel industries. For example, the Federal Government’s Carbon Capture, Use and Storage Development Fund has a stated intention to “support emissions reduction in power generation, cement, natural gas production or heavy industry.”¹⁴

Hydrogen can be derived through a number of different methods, including renewable energy, processing from fossil gas and gasification of coal. Unless hydrogen project funding specifies that it only applies to renewable-derived hydrogen, it is included as at least partly a subsidy to fossil fuels.

¹³ Queensland Treasury (2020) *Queensland response to the Draft Report on the 2020 Methodology Review*, https://www.cgc.gov.au/sites/default/files/qld_submission_-_2020_review_draft_report.pdf

¹⁴ Australian Government (2020) *Industry, Science, Energy and Resources*, https://www.infrastructure.gov.au/department/statements/2020_2021/ministerial-statement/industry-science-energy-resources.aspx

Results overview

This section provides an overview of total results and discussion of the basic differences between jurisdictions. More detail on each government's assistance to the fossil fuel sector can be found in the following sections.

2020-21 FOSSIL FUEL SUBSIDIES

Every year Australian governments provide subsidies worth billions to fossil fuel producers and major users. As Table 1 shows, these subsidies cost state, territory and federal governments in Australia \$10.3 billion in 2020-21. Or, in other words, for every minute of every day in 2020-21, these subsidies cost the public \$19,686.

Table 1: 2020-21 fossil fuel subsidies by state, territory and Federal governments

	Tax concessions (\$m)	Spending measures (\$m)	Total assistance (\$m)
Federal	\$8,868	\$266	\$9,134
QLD	\$87	\$744	\$831
WA	N/A	\$135	\$135
NT	N/A	\$107	\$107
VIC	N/A	\$100	\$100
SA	N/A	\$22	\$22
NSW	N/A	\$17	\$17
Total	\$8,955	\$1,392	\$10,347

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Source: Budget papers, annual reports and tax expenditure documents

The largest fossil fuel subsidy in Table 1 is tax concessions from the Federal Government. These tax breaks are dominated by the fuel tax credit, which saw major fossil fuel consumers refunded \$7.84 billion in 2020-21. The fuel tax credit scheme does not only subsidise the consumption of fossil fuels by major users; fossil fuel producers are themselves key beneficiaries of the subsidy as coal mines and some gas operations use large amounts of liquid fuels eligible for the rebate. Of the \$7.84 billion total cost, approximately \$1.5 billion accrued to coal and gas producers.¹⁵

As the largest single fossil fuel subsidy, it is important to put the fuel tax credit in context. It is one of the most expensive items in the federal budget, costing more than the Army or the Air Force, as shown in Figure 1 below:

¹⁵ Australia Taxation Office (2020) *Taxation statistics 2018-19, Excise and fuel schemes, Table 4*, https://data.gov.au/data/dataset/taxation-statistics-2017-18/resource/72d2fc45-9484-4e08-bd5f-5d8282157860?inner_span=True

Figure 1: Excerpt from Federal budget papers

Table 3.1: Top 20 programs by expenses in 2020-21

Program(a)	Function	Actual	Estimates			
		2019-20	2020-21	2021-22	2022-23	2023-24
		\$m	\$m	\$m	\$m	\$m
** 14 larger programs omitted to fit**						
Government schools national support	Education	8,387	9,067	9,748	10,447	11,027
Child Care Subsidy	SSW	7,921	8,978	9,331	9,843	10,292
Public Sector Superannuation - Benefits (c)	Other purposes; General public services	8,513	8,264	9,108	9,231	9,320
Fuel Tax Credit Scheme	Fuel and energy	7,343	7,838	7,925	8,380	8,947
Army Capabilities	Defence	7,298	7,820	8,253	8,374	8,961
Air Force Capabilities	Defence	6,652	7,553	7,759	8,326	8,766

Source: Australian Government (2020) *Budget Paper number 1*, page 6-10

Figure 1 shows that the fuel tax credit scheme cost only slightly less than Federal Government support for public schools, childcare or superannuation for the public sector.

Other federal tax concessions include tax breaks for aviation fuel and for petroleum producers mainly operating in Commonwealth waters. These amount to just over \$1 billion in 2020-21. Beyond tax concessions, the Federal Government funds a range of programs and projects that collectively received \$266 million in 2020-21. These included “gas-fired recovery” programs, various CCS and hydrogen projects, the clean-up of a disused oil rig, and spending on Hunter Valley coal railways via the federally-owned Australian Rail Track Corporation.

Table 1 shows that, after the Federal Government, Queensland provided the most assistance to fossil fuels in 2020-21. Most of this cost relates to Queensland Government spending on publicly owned coal-fired power stations, coal mines and ports that export coal and import petroleum products. WA also provides support to fossil fuel power stations and ports that service the gas industry.

The next most generous jurisdiction in 2020-21 was the Northern Territory, primarily due to \$93 million spent on a ship lift that would partly service the offshore oil and gas industry. Victoria comes in next due to a well-funded mining bureaucracy that includes carriage of a major CCS project. South Australia’s spending relates mainly to the parts of its public service that provide data and investment promotion services to fossil fuel industries, as well as \$5 million spent on the Port Bonython petroleum jetty.

NSW ranks low in Table 1, with 2020-21 spending relating mainly to research funding and bureaucratic support. This is perhaps surprising given that at time of writing a by-election in the Upper Hunter has seen NSW Government and opposition parties compete as to which can provide the most public support for the coal industry. NSW Governments have a long history of changing legislation to suit the coal industry, particularly following court cases and

planning decisions that do not favour the industry; parts of the NSW public service, meanwhile, sometimes seem entirely captured by the coal industry.¹⁶ However, while the NSW Government and public service provide political and administrative support to a degree that the Victorian and SA governments do not, the NSW Government does not own ports, power stations, power companies or railways that tend to show up in financial statements.

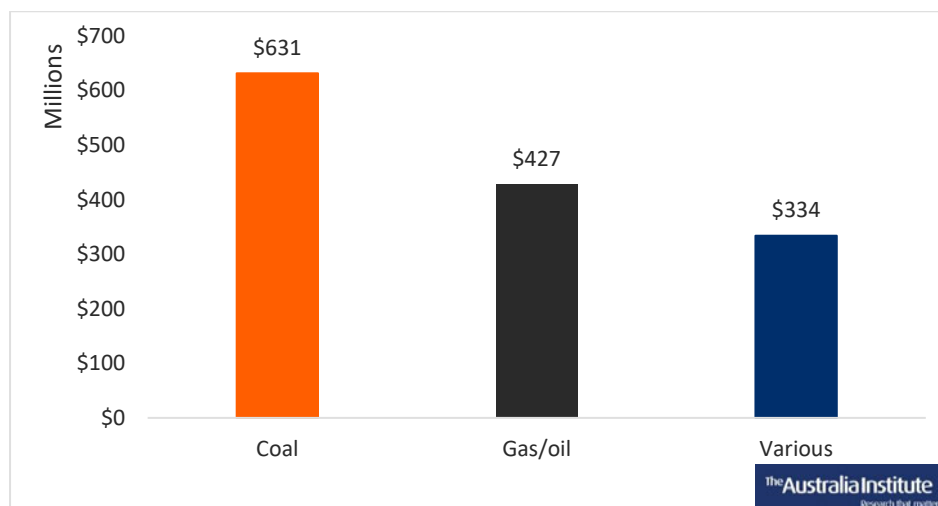
Tasmania does not feature in Table 1. While it has a mining exploration subsidy that sometimes provides grants to the state's small coal industry, no fossil fuel subsidy was clear in the 2020-21 budget. Hydroelectricity has dominated Tasmania's energy system for a century — and while it is not without its own environmental controversies, this does mean that the state is largely fossil fuel-free.

The ACT does not produce any coal, gas or oil and its 2020-21 budget does not contain any subsidies for fossil fuels. The territory has been powered by 100% renewable electricity since 2020 and its government has committed to zero emissions by 2045, the most ambitious target in Australia.¹⁷

2020-21 SPENDING BY INDUSTRY

Subsidies for fossil fuels have been categorised according to industry segment: coal, gas/oil or various. As shown in Figure 2 below, coal was the major beneficiary of fossil fuel subsidies in 2020-21:

Figure 2: Total Budget 2020-21 spending by industry segment, not including concessions



¹⁶ For an example see conclusion section of Campbell (2021) *Pleasant dreams: Submission on the Mount Pleasant Optimisation Project economic assessment*, <https://australiainstitute.org.au/report/pleasant-dreams/>

¹⁷ ACT Government (2021) *Making Canberra a more sustainable city*, <https://www.act.gov.au/our-canberra/latest-news/2021/january/act-budget-2020-21-investing-in-climate-action>

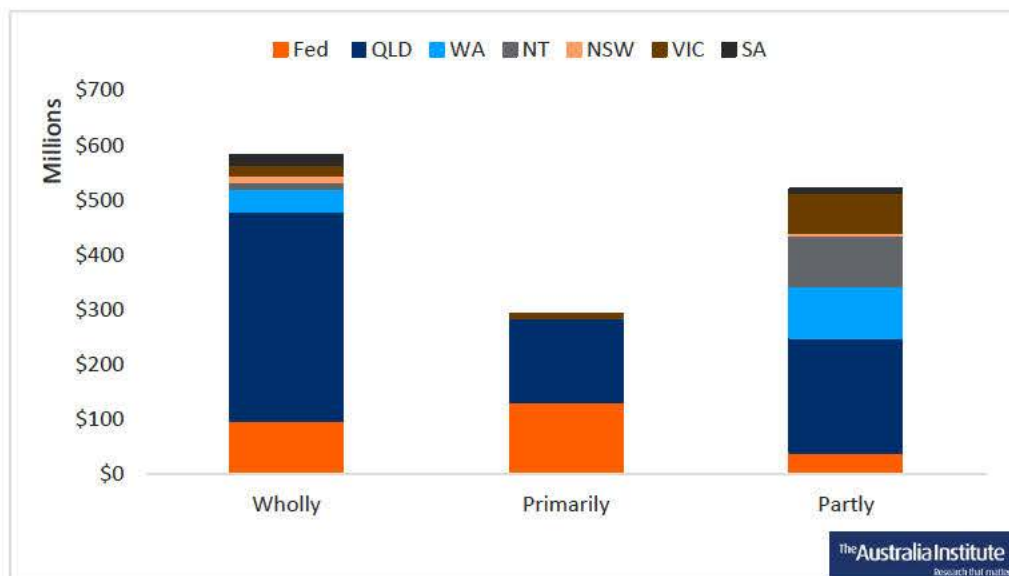
Source: Budget papers and annual reports

The result in Figure 2 above mainly reflects Queensland's support for coal of \$431.3 million. Queensland is also a major supporter of its gas industry with \$109 million spent in 2020-21, followed by the NT (\$107 million) and WA (\$94 million).

BUDGET 2020-21 SPENDING BY DEDICATION

Budget 2020-21 spending was classified as wholly, primarily or partly dedicated to fossil fuels. Figure 3 shows Budget 2020-21 spending classified by dedication to fossil fuels, not including concessions.

Figure 3: Budget 2020-21 spending by dedication, not including concessions



Source: Budget papers and annual reports

Most subsidies in the report were classified as wholly dedicated to fossil fuels, worth \$580.6 million in 2020-21, followed closely by subsidies dedicated partly to fossil fuels, worth \$519.5 million.

Subsidies dedicated partly to fossil fuels are where the industry receives tangible economic benefit from the spending but are not the exclusive beneficiaries. Partly dedicated fossil fuel subsidies represented more than subsidies classified as wholly or primarily for fossil fuels in Western Australia, Victoria and Northern Territory. Queensland is the only state where the majority of subsidies were classified as wholly dedicated to fossil fuels. The majority of subsidies dedicated wholly to fossil fuels are from the Queensland Government, worth \$382.7 million in 2020-21.

TOTAL PROJECT/CAPITAL VALUE

Assistance to fossil fuels — and, indeed, much government spending — is often provided not just in one budget year, but as part of a non-ongoing project funded over several years. Other longer term assistance relates to the provision and maintenance of capital assets. Examining these longer-term projects provides a different view of the way fossil fuel industries are subsidised by Australian governments. As shown in Table 2 below, Australian governments have committed to longer term assistance worth \$8.3 billion:

Table 2: Total project/capital value of assistance measures

	Project/capital value (\$m)
NT	\$3,855
Federal	\$1,850
QLD	\$1,615
WA	\$658
VIC	\$140
NSW	\$100
SA	\$39
Total	\$8,257

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Source: Budget papers, annual reports and tax expenditure documents

Table 2 shows that in terms of long-term projects and assets that subsidise the fossil fuel industry, the Northern Territory is the most generous jurisdiction in Australia. This is due to the multi-billion dollar commitments that the Power and Water Corporation — owned by the NT Government — made to purchase gas from Italy-based multinational Eni, along with later commitments made to transport unused gas for sale in Queensland via a new pipeline.

The Federal Government's project commitments involve discounted loans to LNG projects via Export Finance Australia (\$698 million), financial support to fossil fuel-related projects through the Northern Australia Infrastructure Facility (\$317 million), grants for new diesel fuel storages (\$204 million) and a range of other projects including those under "JobMaker" and the "gas-fired recovery".

As with 2020-21 spending, Queensland and WA's capital spending comprises assistance for power stations, ports and other infrastructure, while Victoria's spending is on CCS and hydrogen-from-coal projects. NSW committed \$100 million to its Coal Innovation Fund some years ago and \$71 million remains. SA's capital spending was directed mainly to the Port Bonython upgrade.

Federal Government

In the *Budget 2020-21*, the Federal Government provided assistance worth \$9.1 billion to fossil fuel interests. The largest component of this is tax breaks for major fossil fuel users, particularly via the Fuel Tax Credit Scheme. Project funding is also significant, with major subsidies to fossil fuel exploration and grants for liquid fuel storage. The “gas-fired recovery” includes several subsidised projects and money is also directed to a long-time government favourite technology: carbon capture and storage (CCS).

The total value of project funding, 2020-21 spending and 2020-21 tax concessions are summarised in Table 3 below:

Table 3: Federal Government fossil fuel subsidies 2020-21

Degree of dedication to fossil fuels	Total value of project funding	2020-21 Budget spending	2020-21 tax concessions	Total 2020-21 assistance
Wholly	\$1,198	\$96	\$8,813	\$8,909
Primarily	\$147	\$130	\$55	\$185
Partly	\$505	\$39	\$0	\$39
Total	\$1,850	\$266	\$8,868	\$9,134

Source: Federal Government Budget Papers 2020-21

TAX CONCESSIONS

Fuel tax credit

The biggest Federal Government fossil fuel subsidy is the Fuel Tax Credit Scheme. The scheme allows businesses to claim a tax credit on fuel used in machinery, heavy vehicles and light vehicles used off public roads.¹⁸ This tax break works to make fossil fuel use cheaper for energy-intensive businesses, such as coal mines, but it is not available to other businesses and individuals that use machinery and vehicles for productive use. Fuel taxes are not linked in any way to road funding, as is commonly suggested by recipients of this subsidy; they simply contribute to general revenue, like most other federal taxation.

The cost of the scheme has steadily increased since 1999, reaching an estimated \$7.84 billion in 2020-21. This amount is included as wholly assisting fossil fuel use in 2020-21. As an ongoing program, no total/capital value is included.

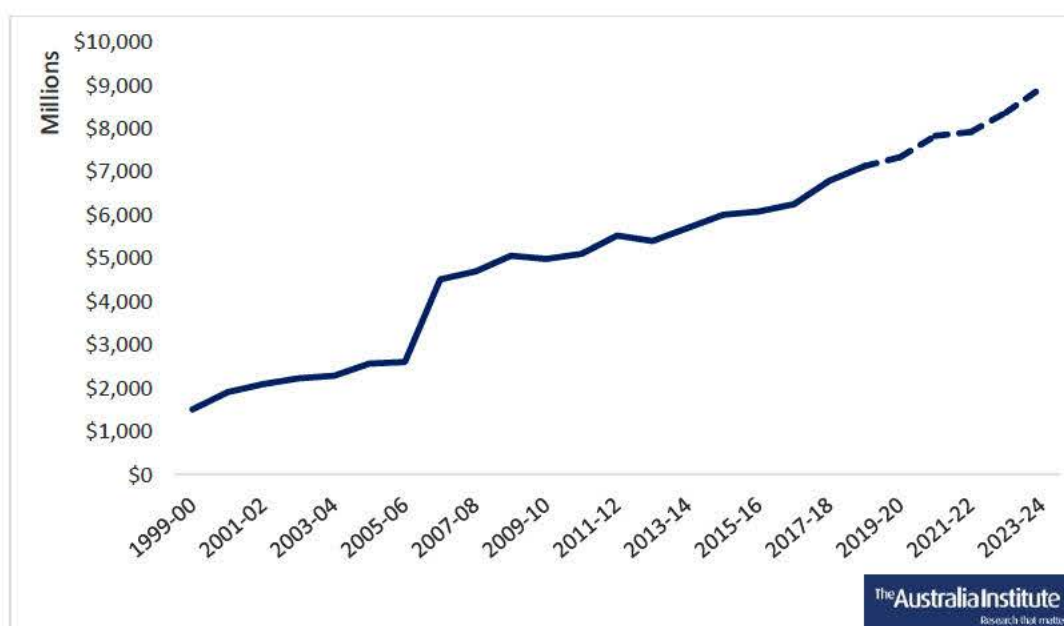
For context, the Fuel Tax Credit Scheme is listed in budget papers as the 18th largest expense item in the Federal Budget. Its cost is higher than that of funding the Australian

¹⁸ ATO (2021) *Fuel tax credits – business*, <https://www.ato.gov.au/Business/Fuel-schemes/Fuel-tax-credits---business/>

Army or the Royal Australian Air Force. Another revealing comparison is unemployment support: in 2019-20 (before the provision of the extraordinary COVID supplement), the Federal Government spent \$10.8 billion on unemployment payments. That means the fuel tax credit is worth 72% of what the Government generally spends on unemployment support.

The cost of fuel tax credits is expected to increase to \$8.9 billion by 2023-24, as shown in Figure 4 below:¹⁹

Figure 4: Total cost of the fuel tax credit scheme per year



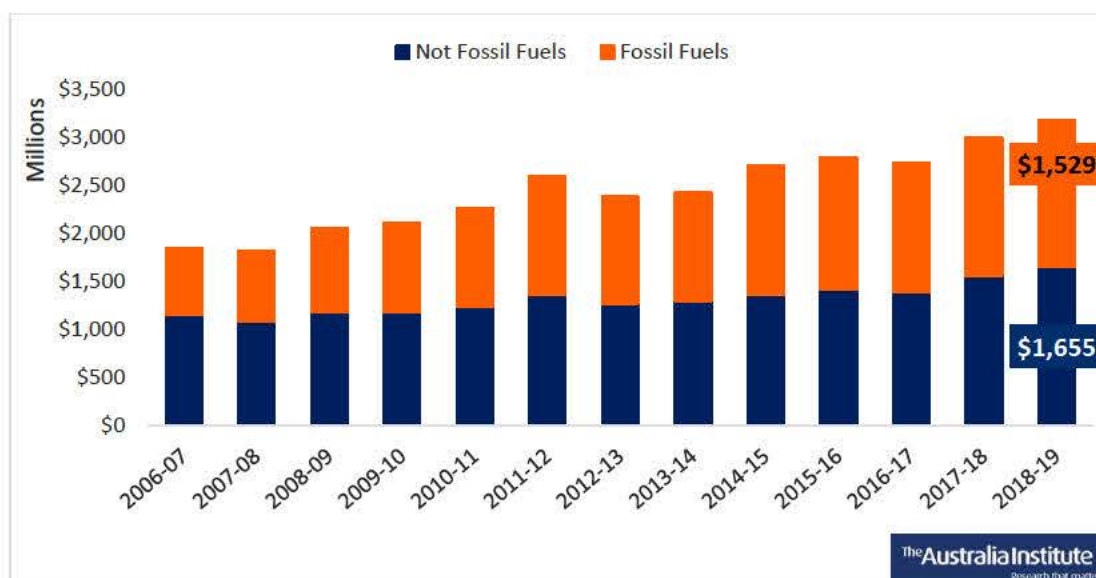
Source: Australia Taxation Office (2020) *Taxation statistics 2018-19, Excise and fuel schemes, Table 4*; Australia Government (2020) *Budget Paper 1*.

Note: The change in 2006 is due to the fuel tax credit replacing the previous energy grant scheme.

The fuel tax credit scheme does not only subsidise the consumption of fossil fuels; fossil fuel producers themselves are key beneficiaries of the subsidy. The mining industry has received 43% of total fuel tax credits since 2006, and around half of this accrues to coal and gas companies, as shown in Figure 5 below.

¹⁹ The fuel tax credit replaced the energy grant scheme in 2006.

Figure 5: Fuel tax credit benefit to fossil fuel and non-fossil fuel mining industry 2018-19



Source: Australia Taxation Office (2020) *Taxation statistics 2018-19, Excise and fuel schemes*, Table 4

As shown in Figure 5 more than \$1.5 billion accrued to fossil fuel producers in 2018-19, and almost half the total that accrued to the total mining industry. Not surprisingly, the mining industry leads an active campaign to maintain this lucrative subsidy.²⁰

Other tax concessions

Fossil fuel producers and users receive exemptions from various taxes and excises. Such exemptions serve to reduce government revenue and reduce incentives to minimise fossil fuel use. The cost of these concessions is estimated in the *Tax Benchmarks and Variations Statement* prepared by the Federal Treasury.²¹ For some items, Treasury estimates a range rather than a point estimate. In these cases, our estimates take the midpoint of Treasury's range.

²⁰ Fuel Tax Credit Alliance (2020) *Fuel tax credits*, <http://fueltaxfacts.com.au/>

²¹ Treasury (2021) *Tax Benchmarks and Variations Statement*, https://treasury.gov.au/sites/default/files/2021-01/145906_2020-tbvs.pdf

Table 4: Tax-based fossil fuel subsidies 2020-21

Tax concession	Dedication	Industry segment	Estimated cost
Transport for oil rig and remote area employee exemption	Primarily	Oil	\$55,000,000
Concessional rate of excise levied on aviation gasoline and aviation turbine fuel	Wholly	Gas/Oil	\$700,000,000
Excise concessions for "alternative fuels" (including LPG and LNG)	Wholly	Gas/Oil	\$110,000,000
PRRT — expenditure uplift rate	Wholly	Gas/Oil	\$55,000,000
PRRT — gas transfer price regulations	Wholly	Gas	\$55,000,000
PRRT — starting base and uplift rate for capital assets	Wholly	Gas/Oil	\$55,000,000
Total			\$1,030,000,000

Source: 2020 Tax Benchmarks and Variations Statement

The largest concession in Table 4 relates to aviation gasoline and turbine fuel. Civil aviation companies pay a lower rate of excise than other fuel users. Other discounts apply to "alternative fuels", a category that includes liquified petroleum gas (LPG) and liquified natural gas (LNG). Like the fuel tax credit discussed above, lowering the price of fossil fuels for selected users reduces government revenue, transferring costs onto other parties, and also reduces incentives to minimise fossil fuel use and related pollution.

Petroleum resource rent tax (PRRT) is levied on the profits generated from the sale of oil and gas. However, a range of concessions reduce the amount of PRRT paid by the industry, including credits for any tax losses, the use of a pricing method that undervalues gas, and deductions based on the value of project assets that can be carried forward and uplifted.

BUDGETED SUBSIDIES AND COSTS

Geoscience Australia – Exploring for the future

Geoscience Australia is the Australian Government's provider of geology and geoscience information. Some of its projects overtly subsidise fossil fuel production:

For [the oil and gas] industry to commit to exploration in frontier regions, additional pre-competitive information is needed to adequately evaluate the resource potential. This will effectively de-risk the area and give industry the confidence to initiate exploration activities.²²

²² Geoscience Australia (n.d.) *Exploring for the future: Energy*, <https://www.ga.gov.au/eftf/energy>

In addition to its usual budget of around \$250 million per year, in the 2020-21 budget an additional \$124.5 million was allocated to Geoscience Australia to fund the extension of its *Exploring for the Future* program from its focus on northern Australia to include southern Australia. The program involves exploring, identifying and encouraging investment in oil and gas by publishing survey, mapping, sampling and drilling data.²³ Some \$20.4 million is budgeted for 2020-21 from the total project cost over several years of \$124.5 million. These figures are included in Table 4 as partly dedicated to assisting fossil fuel industries, as non-fossil fuel industries also receive benefit from this expenditure.

JobMaker Plan – Gas-fired recovery

The Budget allocated \$52.9 million over four years (\$23.8 million in 2020-21) to a “gas-fired recovery” aimed at increasing gas supply and subsidising gas infrastructure. These sums are included in Table 4 as “wholly” dedicated to fossil fuel industries. This includes government support for a range of gas subsidies:

- \$28.3 million over three years to accelerate development of “strategic” gas basins.²⁴
- \$13.7 million over four years for the Gas Industry Social and Environmental Research Alliance (GISERA). The CSIRO is a member of GISERA, along with Santos, Origin Energy, QGC (owned by Shell, China National Offshore Oil Corporation and Tokyo Gas) and Australia Pacific LNG (owned by Origin, ConocoPhillips and Sinopec).
- \$10.9 million to develop the National Gas Infrastructure Plan, which is designed to encourage private investment through government subsidy of the gas industry.

In January 2021, the first of the “strategic” gas basin plans was released for NT’s Beetaloo Basin. Media reports of the announcement said that an additional \$173 million would be spent in subsidising the gas industry in the Basin. This funding should appear in the 2021-22 budget and is not included in calculations here.²⁵

JobMaker Plan – Investment in new energy technology

As part of the 2020 JobMaker plan, the Federal Government established an investment package dedicated to new energy technologies. While the stated aim is to reduce emissions, some of the initiatives support the fossil fuel industry. These include:

²³ Australian Government (no date) *Exploring for the Future: Energy*, <https://www.ga.gov.au/efft/energy>

²⁴ Australian Government (2021) *The Beetaloo Strategic Basin Plan released as part of the gas-fired economic recovery*, <https://www.industry.gov.au/news/the-beetaloo-strategic-basin-plan-released-as-part-of-the-gas-fired-economic-recovery>

²⁵ Vivian (2021) *Commonwealth tips another \$173 million into Beetaloo Basin gas reserve, insists emissions targets on track*, <https://www.abc.net.au/news/2021-01-14/federal-government-road-funding-props-up-beetaloo-development/13057974>

- The Regional Hydrogen Export Hub, a \$70.2 million grant program designed to support Australia's hydrogen industry over five years, with \$14 million spent in 2020-21. The program takes a "technology neutral" approach to project funding, so it is likely to fund fossil fuel-based hydrogen production as well as green hydrogen projects. As such, it is included as partly dedicated to fossil fuels.
- A new Commonwealth Carbon Capture, Use and Storage Development Fund, worth \$50 million over three years. This will fund projects in power generation, cement, natural gas production or heavy industry, and thus is included as primarily dedicated to fossil fuels.²⁶
- The Underwriting New Generation Investments (UNGI) program, which provides \$2.2 million over two years to new electricity generation projects, with the goal of reducing electricity prices and increasing competition in the electricity market. The program is "technology neutral", meaning that financial support can be allocated to fossil fuel technologies, and is therefore included as partly dedicated to fossil fuel use. (In the most recent round of UNGI investments, 12 projects were shortlisted, including five gas projects and one coal-fired power station.)²⁷
- A total of \$5.2 million over four years from 2020-21 to the Technology Investment Roadmap, a program that has the stated aim of guiding investment in low emissions technologies. Despite this, renewable energy sources — including solar, wind and hydro — are not included as priority technologies; instead, priority is given to identifying "clean" but not exclusively renewable hydrogen, energy storage, low carbon materials, CCS and soil carbon, while other technologies such as electric vehicles are low priority "watching brief" technologies.²⁸
- The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), which is largely funded by revenue raised from the oil and gas industries. However, the 2020-21 budget includes \$1.4 million for NOPSEMA as part of the JobMaker Plan over two years. This allocation is included as wholly dedicated to assisting fossil fuel industries.
- Energy sector cyber security, including a \$4.9 million program over two years to "build, consolidate and strengthen cyber security capability in the ... electricity, gas, and liquid fuel industries". This spending has been categorised as partly dedicated to assisting fossil fuel industries.

²⁶ Australian Government (2020) *The Department of Industry, Science, Energy and Resources*, https://www.infrastructure.gov.au/departments/statements/2020_2021/ministerial-statement/industry-science-energy-resources.aspx

²⁷ Australian Government (2019) *Underwriting New Generation Investments Program Shortlist*, <https://www.energy.gov.au/government-priorities/energy-programs/underwriting-new-generation-investments-program>

²⁸ Australian Government (2020) *Technology Investment Roadmap: First Low Emissions Technology Statement - 2020*, <https://www.industry.gov.au/sites/default/files/September%202020/document/first-low-emissions-technology-statement-2020.pdf>

- Outside of the JobMaker programs:
 - the hydrogen energy supply chain pilot project will receive \$12.5 million in 2020-21 to support a feasibility study of hydrogen production from gasification of Victorian brown coal for export to Japan. The Federal Government's total contribution to this program is \$50 million.
 - A total of \$95.2 million has been allocated to the CarbonNet CCS program in the Latrobe Valley.

See the chapter on Victoria for more details on the final two projects.

JobMaker Plan – securing Australia's liquid fuel stocks

A total of \$250.7 million will be provided to various support measures for oil and other liquid fuel supplies. The largest component is \$203.7 million in grants for new diesel fuel storages. This funding is over ten years with \$17.8 million budgeted for 2020-21.

Non-disclosed funding for fossil fuels

The Government has been maintaining the Northern Endeavour, an oil rig in the Timor Sea, since its owner went into liquidation in February 2020. The Northern Endeavour received an undisclosed amount of taxpayer funding in the 2020-21 Budget. It was therefore not included in the calculation of subsidies in this analysis, but GR Engineering subsidiary Upstream Production Solutions, which has been maintaining the rig, has since been awarded a one-year contract worth \$130 million by the Department to continue operating the vessel.²⁹

The 42-year-old Vales Point coal power station on Lake Macquarie in NSW emits around seven million tonnes of greenhouse gas emissions into the atmosphere every year and is due to close in 2029. In the Budget, the Government has allocated an unspecified amount of taxpayer's money to upgrade Vales Point, although media reports suggest the company has rejected the grant as the reported \$8.7 million would take too long to be processed for the company's investment requirements.³⁰

Australian Rail Track Corporation (ARTC)

The Federal Government-owned ARTC is responsible for the Hunter Valley coal rail network. \$130.2 million in new capital expenditure was spent in the last reported year. This sum is included in federal calculations as capital expenditure and 2020-21 spending. See NSW chapter for further discussion.

²⁹ Milne, P. (2020) *Northern Endeavour debacle hits \$209M with much more to come*, <https://www.boilingcold.com.au/northern-endeavour-debacle-hits-209m-with-much-more-to-come/>

³⁰ Mazengarb (2021) *Delta turns down Taylor's \$8.7 million grant for Vales Point upgrades*, <https://reneweconomy.com.au/delta-turns-down-taylors-8-7-million-grant-for-vales-point-upgrades/>

CONCESSIONAL FINANCE

Fossil fuel producers can access a range of subsidised finance services provided by the Federal Government. These subsidies can also be accessed by other industries and their provision to the mining and fossil fuel sector has often been controversial.

Northern Australia Infrastructure Facility

The Northern Australia Infrastructure Facility (NAIF) is a \$5 billion fund that issues loans to infrastructure projects across sectors in northern Australia.³¹ It gained notoriety in 2016 due to links to the Adani coal project, and while it has since distanced itself from the most controversial projects, it continues to issue loans to fossil fuel projects, such as:

- A \$300 million loan for a ship lift that partly services the oil and gas industry in Darwin (see also NT chapter).
- A \$16.8 million loan for a “Marine support base” to service the offshore oil and gas industry at Onslow, WA (see also WA chapter).

NAIF’s lending remit and processes is to expected be expanded.³² The changes will widen the scope of the projects eligible for funding, allow more risk-tolerant investment, and bypass states/territories to lend directly to project proponents. These alterations could increase support for fossil fuel projects.

Export Finance Australia

Australia’s export credit agency has a long record of funding disastrous resource projects, with historic involvement in Papua New Guinea’s Ok Tedi mine and the Panguna mine that sparked the Bougainville civil war. More recently the organisation — and, therefore, Australian taxpayers — backed the PNG LNG project, which has contributed to armed conflict in PNG’s highlands and materially damaged PNG’s economy.³³

A quarter of Export Finance Australia’s loans and other services are to the LNG industry: some \$698 million across its commercial and national interest accounts. In 2019-20 it provided \$25 million worth of financial services to a gas company Senex on its commercial

³¹ Australian Government (no date) *NAIF: Investment Guidelines*, <https://naif.gov.au/about-naif-finance/investment-guidelines/>

³² Pitt (2020) *Further NAIF reforms to free up investment options for the north*, <https://www.minister.industry.gov.au/ministers/pitt/media-releases/further-naif-reforms-free-investment-options-north>

³³ Fletcher and Campbell (2017) *Submission: Export Finance and Insurance Corporation Amendment (Support for Commonwealth Entities) Bill 2016 [provisions]*, <https://australiainstitute.org.au/report/export-finance-and-insurance-corporation-amendment-support-for-commonwealth-entities-bill-2016-provisions/>; Fox (2018) *Papua New Guinea's massive LNG project fails to deliver on economic promises*, <https://www.abc.net.au/news/2018-04-30/png-lng-project-fails-to-deliver-on-economic-promises/9710136>.

account and granted a \$500,000 loan for “other energy generation” to Ensign Pty Ltd, a company whose list of clients consists almost exclusively of multinational fossil fuel producers.

In the 2020-21 budget, a \$500 million “COVID-19 Export Capital Facility” was provided to Export Finance Australia, which appears likely to partly benefit fossil fuel industries, but has not been included in calculations in this report.

Queensland

Queensland is Australia's largest state for onshore gas production and has extensive undeveloped gas and petroleum resources basins.³⁴ In 2019-20, Queensland exported LNG valued \$15.7 billion, thermal coal valued \$6 billion and metallurgical coal valued at \$37 billion.³⁵ Coal and gas are primarily exported to China, Korea and Japan.³⁶ There are 29 operating coal mines in Queensland and 450 active exploration permits for coal with exploration expenditure in 2018-19 worth \$138.4 million.³⁷

Total Queensland gas exploration was worth \$194 million in 2018-19, including private sector investment and exploration for metallurgical coal, and is exported primarily to China.³⁸ More than 93% of Australia's potential coal seam gas reserves are in Queensland.³⁹

The Queensland Government's *Budget 2020-21* (referred to for the remainder of this chapter as "the Budget") dedicates more than \$744 million to assisting fossil fuel developments in the state, including the development of coal and gas exploration and extraction, and the provision of financial assistance to the import and export of coal, gas and oil products. Additionally, concessions resulting in forgone government revenue in the Budget are worth \$86.9 million.

³⁴ Ibid.

³⁵ Queensland Government (n.d.) *Economic dashboard*, <https://www.treasury.qld.gov.au/queenslands-economy/economic-dashboard/>

³⁶ Queensland Government (n.d.) *National Resources Inventory for Queensland*, https://inventory.dnrme.qld.gov.au/energy?p1=coalThermal&&p3=mp_e_ren_solar&&

³⁷ Ibid.

³⁸ Ibid.

³⁹ Geoscience Australia (n.d.) *Australian Energy Resources Assessment (AERA)*, <https://aera.ga.gov.au/#!/gas>

Table 5: Queensland Government 2020-21 fossil fuel subsidies

QLD budget fossil fuel assistance	Total/capital value	2020-21 expenditure
Wholly	\$1,456,970,000	\$382,662,000
Primarily	\$34,141,000	\$153,089,000
Partly	\$123,670,000	\$208,421,000
Total	\$1,614,781,000	\$744,172,000
Coal	\$1,395,473,000	\$431,258,000
Gas	\$163,467,000	\$23,499,000
Gas/oil	\$16,716,000	\$500,000
Oil	\$0	\$84,663,000
Various	\$39,125,000	\$204,252,000
Total	\$1,614,781,000	\$744,172,000

Source: Queensland Government (2020) *Budget Papers 2020-21*

COAL MINES AND POWER STATIONS

Callide Power Station and Calvale Substation

Callide Power Station is a 1,525 megawatt (MW) black coal-fired power station in Biloela, Central Queensland, operated by government-owned CS Energy.⁴⁰ Callide Power Station comprises three power stations – Callide A, Callide B and Callide C – that deliver energy to the National Electricity Market. Callide A, the smallest of the three (120 MW), is currently being decommissioned after taking part in the Callide Oxyfuel Project, which retrofitted the power station to operate with carbon capture technology from 2012-15.⁴¹ Captured carbon was used for injection tests at the CO2CRC Otway Project in South Western Victoria.⁴² The project achieved 5,600 hours of carbon capture, but data on the quantity of carbon captured from Callide A or stored at the injection site in Victoria are not available.⁴³ CS Energy wrote down the value of the Callide B and Callide C generators by \$191.7 million and \$161.7 million respectively in December 2020, a move driven by electricity prices.⁴⁴ The Budget dedicates \$88.1 million to Callide Power Station enhancements, overhauls and refurbishment, with a capital value of \$509.1 million. The Budget also provides \$1.3 million

⁴⁰ C. S. Energy (n.d.) *Callide Power Station*, <https://www.csenergy.com.au/what-we-do/generating-energy/callide-power-station/callide-power-station>

⁴¹ C. S. Energy (n.d.) *Callide Oxyfuel Project*, CS Energy, <https://www.csenergy.com.au/what-we-do/generating-energy/callide-power-station/callide-oxyfuel-project>

⁴² Ibid.

⁴³ C. S. Energy (n.d.) *The Callide Oxyfuel Project*, https://www.csenergy.com.au/ArticleDocuments/222/Callide_Oxyfuel_Project_-_Completion_-_LEGACY_PUBLICATION_-_FINAL_eBook_artwork_-_smaller_size-1.pdf.aspx

⁴⁴ Mazengarb (2020) *Queensland budget delivers \$500m renewables fund, as coal plant revenues slump*, <https://reneweconomy.com.au/queensland-budget-delivers-500m-renewables-fund-as-coal-plant-revenues-slump-94819/>

to Callide B Substation and Calvale Substation, which services Callide A Power Station, for secondary systems replacement at a capital value of \$23.2 million, classified as wholly dedicated to fossil fuels.

Meandu mine and Tarong Power Station

Meandu coal mine is operated by state-owned Stanwell and services Stanwell's coal-fired Tarong Power Stations.⁴⁵ Meandu has five working pits and produces up to seven million tonnes of coal each year.⁴⁶ Meandu mine is also used to deposit ash waste from Tarong Power Stations.⁴⁷ The Budget allocates \$41.8 million to Meandu mine's fleet ancillary equipment program, development program, minor works and overhauls. The capital value of the Meandu mine works is \$181.5 million, classified as wholly dedicated to fossil fuels.

Tarong Power Stations are among Queensland's largest electricity generating sites, comprised of four units each capable of producing 350 MW and a 443 MW unit.⁴⁸ In December 2020, Stanwell Corporation wrote down the value of both Tarong Power Stations and Stanwell Power Station by a total \$719.5 million.⁴⁹ The Budget allocates \$146.3 million to Tarong Power Stations for transformer replacement, ash off take projects, low temperature reheater replacement, overhauls and other projects, classified as wholly dedicated to fossil fuels.

Stanwell Power Station and Stanwell Corporation Limited

Stanwell Power Station is a 1,460 MW coal fired power station that supplies electricity to the National Electricity Market, using black coal sources from the Curragh Mine in Blackwater, Central Queensland.⁵⁰ In December 2020, Stanwell Corporation wrote down the value of both Tarong Power Stations and Stanwell Power Station by a total \$719.5 million.⁵¹ The Budget allocates \$65.5 million to Stanwell Power Station's ash storage plan, control systems upgrades, overhauls and other projects. The capital value of the Stanwell Power Station works identified in the Budget is \$519.2 million. Funding is also allocated generally to Stanwell Corporation Limited for information communications, technology hardware and

⁴⁵ Stanwell (n.d.) *Meandu Mine*, <http://www.stanwell.com/wp-content/uploads/Fact-sheet-Meandu-Mine-AUGUST-2016.pdf>

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Stanwell (n.d.) *Our power stations*, <https://www.stanwell.com/energy-assets/our-power-stations/>

⁴⁹ Mazengarb (2020) *Queensland budget delivers \$500m renewables fund, as coal plant revenues slump*, <https://reneweconomy.com.au/queensland-budget-delivers-500m-renewables-fund-as-coal-plant-revenues-slump-94819/>

⁵⁰ Stanwell (n.d.) *Stanwell Power Station*, <https://yhejitl3sl24wn203q4vn14z-wpengine.netdna-ssl.com/wp-content/uploads/FactSheet-Stanwell-MAY-2018.pdf>

⁵¹ Mazengarb (2020) *Queensland budget delivers \$500m renewables fund, as coal plant revenues slump*, <https://reneweconomy.com.au/queensland-budget-delivers-500m-renewables-fund-as-coal-plant-revenues-slump-94819/>

software upgrades, amounting to \$12.5 million with a capital value of \$95.4 million, classified as wholly dedicated to fossil fuels.

Swanbank E

Swanbank E is a 385 MW gas-fired power station operated by state-owned CleanCo in South East Queensland.⁵² Swanbank E was mothballed in 2014 but brought back online in 2017 with financing from the Queensland Government.⁵³ In February 2021 CleanCo, which operates the Queensland Government's zero emissions project investments, wrote off the \$35 million value of Swanbank E to zero and expects net losses from operating Swanbank E until its expected retirement in 2036.⁵⁴ The Budget allocates \$7.1 million to Swanbank E with capital value expenditure of \$92.5 million post-2021 for operating costs.

Mine dozer replacement program

The Budget allocates \$3.8 million to a Mine Dozer Replacement Program, which has a capital value of \$28.9 million. No information is available on the program and so is classified as partly dedicated to fossil fuels.

PORTS

Fossil fuel subsidies in the Budget include funding for a number of ports in Queensland. Queensland's port sector is a significant recipient of Budget infrastructure funding to support both imports and exports. Port-related Budget funding is granted to the Port of Townsville Limited, Far North Queensland Ports Corporation Limited, Gladstone Ports Corporation Limited and North Queensland Bulk Ports Corporation Limited. These port companies manage both fossil fuel (gas, coal, oil/petroleum products) and non-fossil fuel imports and exports, such as timber, sugar, cargo, agricultural and food products, and minerals.

Port of Townsville

The Port of Townsville is a major Queensland port, through which companies including Shell, Mobil, Caltex, BP, Ampol, Amco, HC Sleigh and Vacuum Oil Pty have been importing oil and petroleum products since the 1930s.⁵⁵ The Port of Townsville imports and exports a range of products, including cement, vehicles, sugar, timber, agricultural products and minerals.⁵⁶ Petroleum products, including petrol, diesel and aviation fuel, are the Port's largest import

⁵² CleanCo Queensland (n.d.) *Factsheet Swanbank E Power Station*, https://cleancoqueensland.com.au/wp-content/uploads/Documents/Assets_and_Projects/Factsheet_Swanbank-E.pdf

⁵³ Morrison (2021) *Queensland writes off Swanbank E gas-fired power plant*,

<https://www.argusmedia.com/en/news/2184709-queensland-writes-off-swanbank-e-gas-fired-power-plant>

⁵⁴ Ibid.

⁵⁵ Port of Townsville (n.d.) *Port History*, <https://www.townsville-port.com.au/about/port-history/>

⁵⁶ Port of Townsville (n.d.) *About Us*, <https://www.townsville-port.com.au/about/about-pot/>

commodity.⁵⁷ The 2020 Annual Report shows that due to COVID-19, imported fuel volumes fell by 2% — but still remained the largest import, at 816,250 tonnes or 40% of total imports.⁵⁸

The Townsville Channel Capacity Upgrade (TCCU) will deliver 62 hectares of reclaimed land for port operations and widen the shipping channel to allow access to larger vessels and increase trade capacity for the region.⁵⁹ The TCCU has received joint funding of \$75 million each from the Queensland and Australian Governments in addition to \$43.5 million from the Port of Townsville Limited and total costs are now estimated to be \$232 million.⁶⁰

Funding for the Port of Townsville in the Budget is \$78.3 million for wharf facility and road network upgrades, plant, equipment and minor works, and channel capacity upgrades, considered primarily dedicated to fossil fuels.

Far North Queensland Ports Corporation Limited

Far North Queensland Ports Corporation Limited, trading as Ports North, owns and manages the Port of Cairns and other small ports in Far North Queensland and trades a range of products. Petroleum products made up 47% of imports for the Port of Cairns in the 2020 financial year and 3% of imports.⁶¹ Far North Queensland Ports Corporation Limited received \$6.4 million of funding in the Budget for general cargo consolidation, lease acquisition, plant, equipment and minor works and site decontamination.

Gladstone Ports Corporation Limited

Gladstone Ports Corporation Limited operates the Port of Gladstone, Port Alma and the Port of Bundaberg. Fossil fuel trade occurs primarily through the Port of Gladstone. In the 2020 financial year fossil fuels comprised a significant portion of trade at the Port of Gladstone. Coal and LNG exports were 92% of total exports, while LPG and petroleum products were 6% of total imports.⁶²

Budget items for Gladstone Ports Corporation Limited are for both the corporation broadly and for specific Port of Gladstone services and operations. Funding for Auckland Point 3 is in

⁵⁷ Port of Townsville (2020) *Annual Report 2019-20*, https://s3-ap-southeast-2.amazonaws.com/os-data-2/port-townsville/documents/port_of_townsville_annual_report_2020.pdf

⁵⁸ Port of Townsville (2020) *Annual Report 2019-20*, https://s3-ap-southeast-2.amazonaws.com/os-data-2/port-townsville/documents/port_of_townsville_annual_report_2020.pdf

⁵⁹ Queensland Budget 2020-21 Capital Statement p. 90

⁶⁰ Queensland Budget 2020-21 Capital Statement p. 10

⁶¹ Ports North (n.d.) *Annual Report 2019 2020*, https://os-data-2.s3-ap-southeast-2.amazonaws.com/portsnorth-com-au/bundle1/200928_pn_ar_fy2020_website_version.pdf

⁶² Gladstone Ports Corporation Limited (n.d.) *Origin & Destination of Cargoes Totals for the Financial Year 2020 (Gladstone)*, <http://content1.gpcl.com.au/viewcontent/CargoComparisonsSelection/CargoOriginDestination.aspx?View=G&Durat=F&Key=2020>

the Port of Gladstone and trades petroleum products and LPG. Funding is provided for Auckland Point 3 Projects and general Gladstone Ports Corporation Limited operations including port services, process control systems, stockpile management and upgrades, safety projects, ship loader replacements, tug projects, capacity maximisation, conveyer life extension, environment projects, pontoon replacements, information systems, plant equipment, and minor works. Funding for Auckland Point 3 is \$1.1 million, while other funding is over \$133.1 million, with a total of \$134.2 million. Funding for Auckland Point projects is classified as primarily for fossil fuels, while the remaining funding for Gladstone Ports Corporation Limited is considered partly dedicated to fossil fuels.

North Queensland Bulk Ports Corporation Limited

North Queensland Bulk Ports Corporation Limited owns and manages Weipa, Abbot Point, Mackay and Hay Point trading ports, which are responsible for more than half of Queensland's trade by tonnage.⁶³ Coal makes up 87% of exports and fuels make up 86% of imports. Analysis of throughput by industry shows that 21% is energy-related thermal coal and fuel, with the remaining being metallurgical coal, bauxite and magnetite.⁶⁴ Budget items are for port developments at Abbot Point, Hay Point and Mackay Port, plant, equipment and minor works, vessel upgrades, acquisition programs and business improvements, totalling \$28.8 million. Abbot Point and Hay Point throughput is entirely dedicated to coal, with allocated funding classified here accordingly. Weipa and Mackay ports trade in coal, fuel and other products and funding is thus classified here as primarily dedicated to fossil fuels.

INDUSTRIAL PRECINCTS

Salisbury Plains Industrial Precinct

The Salisbury Plains Industrial Precinct is located within the Abbot Point State Development Area and is identified by the Queensland Government as suitable for supporting infrastructure for the Adani/Carmichael Rail, Adani Abbot Point Coal Terminal, GVK Hancock Rail and Queensland Coal Investment projects.⁶⁵ Industries considered suitable for the area include a LNG facility, fuel storage and associated infrastructure, and extractive industries.⁶⁶ The Budget dedicates \$250,000 to the Salisbury Plains Industrial Precinct and identifies a capital value of \$9.3 million, classified as primarily dedicated to fossil fuels.

⁶³ North Queensland Bulk Ports Corporation Ltd (2017) *Our Ports*, <https://nqbp.com.au/our-ports>

⁶⁴ North Queensland Bulk Ports Corporation Ltd (n.d.) *2019/20 Annual Report*, https://nqbp.com.au/__data/assets/pdf_file/0030/35859/NQBP-Annual-Report-2019-20_FINAL.pdf

⁶⁵ Economic Development Queensland (n.d.) *Salisbury Plains Industrial Precinct*, <https://industrial.edq.com.au/Salisbury-Plains-Industrial-Precinct-property-for-sale>

⁶⁶ Ibid.

Townsville Regional Industrial Estate

Budget papers refer to spending on the Townsville Regional Industrial Estate, which appears to be within the Townsville State Development Area. The Townsville State Development Area serves the Port of Townsville and nearby roads and rails that provide access to industrial and resource development areas.⁶⁷ The Townsville State Development Area is currently home to a number of large-scale high-impact industries, including Origin Energy's Mt Stuart peaking generator plant.⁶⁸ The Budget dedicates \$200,000 to the Townsville Regional Industrial Estate and identifies a capital value of \$8.12 million, classified as primarily dedicated to fossil fuels.

Gladstone State Development Area

The Gladstone State Development Area connects major rail and roads to processing facilities and ports for large industrial activities, including a number of fossil fuel-related activities. The Gladstone State Development Area includes Australia Pacific LNG, Santos Gladstone LNG, Queensland Curtis LNG and Southern Oil's northern oil refinery.⁶⁹ The Budget dedicates \$500,000 to the Gladstone State Development area and identifies a capital value of more than \$16.7 million, classified as primarily dedicated to fossil fuels.

BOWEN BASIN GAS PIPELINE

The Bowen Basin is home to major open-cut and underground coal mines already operating, as well as large quantities of largely unexploited gas.⁷⁰ The Queensland Government states that construction of a pipeline has the potential to open up new areas within the basin for gas exploration, as well as capture unutilised gas from existing underground coal mines.⁷¹ The Bowen Basin gas pipeline is described as a "cornerstone" of the Queensland Government's COVID-19 recovery plan for Central Queensland, despite such investments being largely ineffective as fiscal stimulus.⁷² The proposed pipeline would stretch 500km to connect Bowen Basin gas reserves to east coast domestic markets and export terminals.⁷³

⁶⁷ Queensland Government (n.d.) *Townsville State Development Area*, <https://www.statedevelopment.qld.gov.au/coordinator-general/state-development-areas/current/townsville-state-development-area>

⁶⁸ Ibid.

⁶⁹ Queensland Government (n.d.) *Gladstone State Development Area*, <https://www.statedevelopment.qld.gov.au/coordinator-general/state-development-areas/current/gladstone-state-development-area>

⁷⁰ Australian Government (2014) *Bowen Basin*, <http://www.ga.gov.au/scientific-topics/energy/province-sedimentary-basin-geology/petroleum/onshore-australia/bowen-basin>

⁷¹ Queensland Government (n.d.) *Bowen Basin pipeline pre-feasibility study*, <https://www.dnrme.qld.gov.au/mining-resources/initiatives/bowen-basin-pipeline>

⁷² Denniss et al (2020) *Design principles for fiscal policy in a pandemic*, <https://australiainstitute.org.au/report/design-principles-for-fiscal-policy-in-a-pandemic/>

⁷³ Queensland Government (n.d.) *Bowen Basin pipeline pre-feasibility study*, <https://www.dnrme.qld.gov.au/mining-resources/initiatives/bowen-basin-pipeline>

The Queensland Government is also seeking investment from the Federal Government to support the project.⁷⁴

In February 2021 a Queensland company that is a first-time explorer was granted preferred access for CSG exploration over an area of 114km², part of a total 8,205km² released by the Queensland Government as part of the COVID-19 economic recovery plan.⁷⁵

The pre-feasibility study for the Bowen Basin pipeline is a \$5 million project with \$2.5 million funding in the Budget, classified as wholly dedicated fossil fuel industry spending.

GAS DEVELOPMENT

The Queensland Government views gas as a critical resource for domestic energy security and economic prosperity through exports and is dedicated to increasing gas development in the state. Queensland's large gas basins include the Surat, Bowen and Cooper Basins that produce more than 90% of the state's gas, while petroleum and coal areas such as the Galilee Basin also produce some gas.⁷⁶ In 2020 the Queensland Government opened up 3000km of new land for gas exploration,⁷⁷ awarded new gas permits⁷⁸ and allocated funding for the Bowen Basin Gas Pipeline study,⁷⁹ all of which serve to further expand gas production in the state to support domestic gas consumption and increase gas exports. The *Budget 2020-21* includes \$11.4 million for general "gas development" to be spent in 2020-21. This allocation received no other explanation in the budget papers that we could find. In our calculations this was classified as wholly dedicated to fossil fuels.

HOPELAND UNDERGROUND COAL GASIFICATION

The Queensland Government assumed responsibility for the Hopeland underground coal gasification site in 2016 after management company Linc Energy entered liquidation.⁸⁰ Just prior to the transferral of responsibility for the site to the Queensland Government, an Environmental Protection Order was issued, requiring Linc Energy to decommission most of

⁷⁴ Ibid.

⁷⁵ Queensland Government (n.d.) *First time gas explorer gets green light in world class Bowen and Surat Basins*, <https://statements.qld.gov.au/statements/91399>

⁷⁶ Queensland Government (2015) *Petroleum and coal seam gas*, <https://www.business.qld.gov.au/industries/mining-energy-water/resources/petroleum-energy/outlook-statistics/petroleum-gas>

⁷⁷ Hartmann (2020) *Four companies get gas exploration greenlight in Queensland*, <https://www.energymagazine.com.au/four-companies-get-gas-exploration-greenlight-in-queensland/>

⁷⁸ Santos (2020) *Santos wins new gas exploration acreage in Queensland*, <https://www.santos.com/news/santos-wins-new-gas-exploration-acreage-in-queensland/>

⁷⁹ Queensland Government (2020) *Queensland's economic recovery plan*, https://www.covid19.qld.gov.au/__data/assets/pdf_file/0025/128194/economic-recovery-plan.pdf

⁸⁰ Queensland Government (2017) *Linc Energy*, <https://environment.des.qld.gov.au/management/monitoring/locations-of-interest/hopeland/linc-energy>

the site's dams.⁸¹ Linc Energy was convicted in 2019 by the Brisbane District Court of "five counts of wilfully and unlawfully causing serious environmental harm...the result of the largest and most complex environmental investigation conducted by the environmental regulator in Queensland's history."⁸² The Queensland Government has been left to carry the cost of this damage.

Funding from the Queensland Government is now dedicated to "investigating, isolating, decommissioning, decontaminating and dismantling facilities" at the site.⁸³ Stage 1 and Stage 2 of the project have been completed and Stage 3 is underway, dedicated to dismantling, decontaminating and removing gas-to-liquids infrastructure.⁸⁴

The capital value of the Hopeland site remediation is \$31 million,⁸⁵ including Budget allocation of \$2.3 million. These sums are included in the summary table above as wholly dedicated to subsidising the fossil fuel industry.

NORTH WEST MINERALS PROVINCE

The North West Minerals Province around Mount Isa and Cloncurry has been identified by the Queensland Government as one of the world's richest mineral-producing regions.⁸⁶ In the 2017-18 State Budget, \$39 million was allocated over four years to facilitate resources development in the region, diversify regional economies and create employment opportunities, and work with businesses and communities to deliver services.⁸⁷

Funding for the North West Minerals Province is intended for "internal cost and analysis". Initiatives for the North West Minerals Province are identified in the Strategic Blueprint for the region. Natural gas geoscience exploration programs, data systems and development potential outside existing gas basins are identified as priorities within the Strategic Blueprint.⁸⁸ Queensland's Mining Equipment, Technology and Services (METS) sector, which supplies equipment and services to the mining, oil and gas industries, is selected in the Strategic Blueprint to host an annual technology and investor forum in Townsville.⁸⁹ Funding

⁸¹ Ibid.

⁸² Ibid.

⁸³ Queensland Government (n.d.) *Hopeland (ex-Linc Energy)*, <https://www.qld.gov.au/environment/land/management/abandoned-mines/projects/former-linc-energy-plant>

⁸⁴ Ibid.

⁸⁵ Australasian Mine Safety Journal (2019) *Queensland taxpayers to pay for cleanup*, <https://www.amsj.com.au/queensland-taxpayers-to-pay-for-cleanup/>

⁸⁶ Queensland Government (n.d.) *A Strategic Blueprint for Queensland's North West Minerals Province*, <https://www.statedevelopment.qld.gov.au/regions/regional-priorities/strategic-blueprint-nwmp>

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ Ibid.

is also dedicated towards enabling infrastructure use for industry projects in the province to lower costs.⁹⁰

STRATEGIC RESOURCES EXPLORATION PROGRAM

The Geosciences Data Modernisation Program is part of Queensland's Strategic Resources Exploration Program.

The Strategic Resources Exploration Program dedicates \$27 million over four years to 2021 to develop resources projects for gas and minerals in North West Queensland, including support for the North West Minerals Province.⁹¹ The Strategic Resources Exploration Program funds gas exploration in the Georgina, South Nicholson and Isa Super Basins, in addition to furthering research techniques for geological mapping.⁹² The program also funds the Collaborative Exploration Initiative; this evolved from the Collaborative Drilling Initiative, which provided funding for up to half the project drilling costs to encourage exploration in North West Queensland, test high risk or innovative exploration concepts, and develop areas considered "under explored".⁹³

The Budget dedicates \$845,000 for the Geoscience Data Modernisation Program with a capital value of \$27 million, classified as partly dedicated to fossil fuels.

ABANDONED MINES: CARE AND MAINTENANCE, RISK MITIGATION, REMEDIATION AND CONSULTATION

The Queensland Government uses the Abandoned Mine Sites Management Policy (AMLMP) to manage mine sites that are considered abandoned when there is no current mining tenement or environmental authority.⁹⁴ The AMLP is managed jointly by Queensland Treasury, the Department of Natural Resources, Mines and Energy and the Department of Environment and Science, to minimise hazard exposure to surrounding areas, control environmental impacts, minimise maintenance and monitoring requirements and also investigate "opportunities to commercialise abandoned mines and/or repurpose the land".⁹⁵ In 2018 the Department of Natural Resources, Mines and Energy identified 120

⁹⁰ Ibid.

⁹¹ Queensland Government (n.d.) *Strategic Resources Exploration Program*, <https://www.dnrme.qld.gov.au/mining-resources/initiatives/strategic-resources-exploration-program>

⁹² Ibid.

⁹³ Bulletpoint (2017) *Collaborative Drilling Initiative (CDI)*, <https://www.bulletpoint.com.au/collaborative-drilling-initiative/>

⁹⁴ Queensland Government (n.d.) *Abandoned Mines Management Policy*, https://www.dnrme.qld.gov.au/__data/assets/pdf_file/0008/1454939/policy-abandoned-mines.pdf

⁹⁵ Ibid.

priority abandoned mines with a disturbance area of 10,300 hectares.⁹⁶ Abandoned mines are allocated \$500,000 in the Budget. Funding is considered partly dedicated to fossil fuels as abandoned mines for remediation include some coal mines, while a large number are old gold rush era mining sites.⁹⁷

ROADS

The Bowen Developmental Road sealing project, the first of ten such projects, will seal the road and add a road shoulder between Rockingham Creek to Mount Coolon.⁹⁸ This road section is between Collinsville and Mount Coolon and used by heavy vehicles associated with mining and agricultural operations.⁹⁹ The Budget commits \$7.6 million to the project in 2020-21, which has a total capital value of \$28.8 million. Of the total investment, the Federal Government contributed \$23 million, classified as partly dedicated to fossil fuels.

RAIL

Mount Isa Line

The Mount Isa Line transports copper, lead, zinc, silver and phosphate rock, responsible for 75% of Queensland's non-coal mineral output.¹⁰⁰ However, the Mount Isa Line Infrastructure Master Plan identifies that "current interest in developing substantial coal deposits in the Northern Galilee Basin underwrite the unprecedented growth opportunities for the Mount Isa Line".¹⁰¹ The Port of Townsville is the primary destination for the majority of products transported on the Mount Isa Line.¹⁰² The Budget allocates \$12.5 million for works on the Townsville-Mount Isa Rail Line, classified as partly dedicated to fossil fuels.

⁹⁶ Queensland Government (2018) *Achieving improved rehabilitation for Queensland: addressing the state's abandoned mines legacy*, https://s3.treasury.qld.gov.au/files/8243_Abandoned-Mines-Discussion-Paper_v61.pdf

⁹⁷ Ibid.

⁹⁸ Queensland Government (n.d.) *Bowen Developmental Road sealing Rockingham Creek to Mount Coolon*, <https://sc-tmrwcmgr-cd.azurewebsites.net/projects/bowen-developmental-road-sealing-rockingham-creek-to-mount-coolon>

⁹⁹ Queensland Government (n.d.) *Bowen Developmental Road sealing Rockingham Creek to Mount Coolon*, <https://sc-tmrwcmgr-cd.azurewebsites.net/projects/bowen-developmental-road-sealing-rockingham-creek-to-mount-coolon>

¹⁰⁰ Queensland Rail (2012) *Mount Isa Line Rail Infrastructure Master Plan*, https://www.queenslandrail.com.au/business/access/Documents/Maps/QR4159.1%20Infrastructure%20Master%20Plan%202012_Updated_LR.pdf

¹⁰¹ Ibid., p. 3

¹⁰² Ibid.

Maintenance of below rail assets – North Coast Line & West Moreton rail

The West Moreton rail line predominantly carries coal, including that from the Surat Basin mine and the New Acland Mine.¹⁰³ The West Moreton system connects Brisbane to west and south western regions, including as a major artery to the Darling Downs.¹⁰⁴ The North Coast Line is a freight and passenger line predominantly transporting sugar, grain and livestock, but also links the Mount Isa Line to the Port of Townsville.¹⁰⁵ Funding for the North Coast Line and the West Moreton rail system are for the maintenance of below rail assets, at \$32.7 million and \$47.8 million respectively in 2020-21. Funding for the North Coast Line is classified as partly dedicated to fossil fuels and funding for the West Moreton rail system is classified as primarily for fossil fuels.

CONCESSIONS

Concessions in the Budget include targeted discounts, rebates and subsidies for Queenslanders and businesses. These are listed in the Budget's Concessions Statement, and include consistent concession arrangements along with additional concessions created to support individuals, households and businesses throughout and beyond the COVID-19 pandemic, including targeted, temporary relief. Concessions include both direct budget outlays (fee subsidy payments) and forgone revenue (i.e revenue lost through reduced fees and charges). Only concessions above the minimum materiality threshold of \$50,000 forgone revenue are included in the Concessions Statement.¹⁰⁶ Fossil fuel concessions total \$86.9 million in the Budget.

¹⁰³ Queensland Rail (n.d.) *West Moreton System Information Pack - Issue 3.1*, <https://www.queenslandrail.com.au/business/access/Documents/West%20Moreton%20System%20Information%20Pack%20-%20Issue%203.1%20-%20October%202016.pdf>

¹⁰⁴ Queensland Rail (n.d.) *West Moreton system*, <https://www.queenslandrail.com.au/forbusiness/the-regional-network/west-moreton-system>

¹⁰⁵ Queensland Rail (n.d.) *North Coast line system*, <https://www.queenslandrail.com.au/forbusiness/the-regional-network/north-coast-line-system>

¹⁰⁶ Queensland Government (2020) *Budget Strategy and Outlook 2020-21 (Budget Paper no.2)*, https://s3.treasury.qld.gov.au/files/2020_21_Budget_Strategy_and_Outlook_2-2.pdf

Table 6: QLD Government 2020-21 concession-based fossil fuel subsidies

QLD budget fossil fuel assistance	2020-21 concessions
Wholly	\$9,800,000
Primarily	\$8,500,000
Partly	\$68,600,000
Total	\$86,900,000
Coal	\$20,000,000
Oil	\$12,800,000
Various	\$54,100,000
Total	\$86,900,000

Source: QLD Government (2020) Budget Papers 2020-21

Fossil fuel subsidies include subsidies provided through the Concessions Statement, through concessions by port corporations to organisations and businesses, and through Departmental service delivery for natural resources, mines and energy.

Departmental concessions are provided through the Backing Explorers (Resources Sector) Waiver, which waived rents and charges for petroleum, gas and mining exploration tenures from April 2020 to March 2021. The Backing Explorers (Resources Sector) Waiver is classified as wholly subsidising various fossil fuels to the amount of \$9.8 million.

The Mount Isa Line Incentive Scheme subsidises eligible freight users to reduce rail costs and promote the use of rail for freight and developing the North West Minerals Province. This concession is classified as partly subsidising fossil fuels, coal specifically, worth \$20 million the Budget.

Concessions delivered by Government-Owned Corporations (GOC) related to fossil fuels include:

- Far North Queensland Ports Corporation Limited, partly dedicated to fossil fuels (oil), worth \$6 million;
- Gladstone Ports Corporation Limited, partly dedicated to fossil fuels (various), worth \$42.6 million;
- North Queensland Bulk Ports Corporation Limited, primarily dedicated to fossil fuels (various), worth \$1.7 million; and
- Port of Townsville Limited, primarily dedicated to fossil fuels (oil), worth \$6.8 million.

GOC concessions are for COVID-19 measures delivered to eligible organisations and businesses, such as temporary reductions to commercial leases, fees and other charges resulting in forgone government revenue. The Concessions Statement identifies that GOC concessions below the minimum materiality threshold of \$50,000 forgone revenue were

also delivered by CS Energy, Stanwell and CleanCo, which own and operate fossil fuel-related projects and sites as detailed previously.¹⁰⁷

GOCs also provide concessions via Concessional Leases (Industry, Commercial and Community) to industry participants that are below commercial rates. Gladstone Ports Corporation Limited is specifically identified for providing Concessional Port Charges where port charges are contracted at significantly below market rates.¹⁰⁸

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

Western Australia

Western Australia is the nation's largest oil and gas producer, accounting for 54% of natural gas and 80% of crude and condensate production in Australia.¹⁰⁹ The coal industry in Western Australia is comparatively small, producing only 1.4% of Australia's saleable coal.¹¹⁰

Approximately 93% of the oil and gas produced in Western Australia is exported, while all coal produced is used domestically, primarily in energy production.¹¹¹ Fossil fuels made up 73.4% of energy generation in 2020, with half of this coming from coal; only 26.4% of energy generation was from renewables.¹¹²

The dominance of the fossil fuel industry in the state's energy generation and export industry is reflected in the level of assistance it is provided by the Western Australian Government. Table 7 shows that the Government is to spend a total of \$658 million on assisting fossil fuel industries, with \$135 million budgeted for 2020-21.

Table 7: Government of Western Australia 2020-21 fossil fuel subsidies

WA budget fossil fuel assistance	Total/capital value	2020-21 expenditure
Wholly	\$369,174,000	\$40,254,000
Primarily	\$7,600,000	\$1,900,000
Partly	\$281,154,000	\$93,254,000
Total	\$657,928,000	\$135,408,000
Gas	\$321,435,000	\$57,565,000
Gas/Oil	\$117,963,000	\$36,544,000
Oil	N/A	\$200,000
Coal	\$216,670,000	\$21,023,000
Various	\$1,860,000	\$20,076,000
Total	\$657,928,000	\$135,408,000

Source: Government of Western Australia (2020) *Budget Papers 2020-21*

¹⁰⁹ Government of Western Australia (2020) *2019-2020 Economic indicators resources data*, <http://www.dmp.wa.gov.au/About-Us-Careers/Latest-Statistics-Release-4081.aspx>

¹¹⁰ Government of Western Australia (2020) *Western Australian Mineral and Petroleum statistical digest, 2019-2020*, <http://dmp.wa.gov.au/About-Us-Careers/Latest-Statistics-Release-4081.aspx>; Australian Government (2020) *Resources and Energy Quarterly, December 2020, Historical Data*, <https://publications.industry.gov.au/publications/resourcesandenergyquarterlydecember2020/index.html>

¹¹¹ Government of Western Australia (2020) *Major commodities resource data*; Government of Western Australia (2020) *2019-20 Economic indicators*, <https://www.dmp.wa.gov.au/About-Us-Careers/Latest-Statistics-Release-4081.aspx>

¹¹² McConnell et al (2021) *Energy, Western Australia*, <https://opennem.org.au/energy/wem/?range=1y&interval=1w>

ELECTRICITY SUPPLY

The majority of total project spending on fossil fuels in the Western Australian budget relates to electricity provision via the state's publicly owned power companies. A total of \$462 million has been allocated to building or upgrading gas and coal-fired power stations, with \$53 million to be spent in 2020-21.

Synergy

Western Australia's major energy supplier, Synergy, is state-owned, and a large portion of its generation portfolio comprises coal, gas and liquid fuel.¹¹³ The Government plans to spend \$26.3 million on upgrading and maintaining fossil fuel power stations in the state, a sum that was considered wholly dedicated to fossil fuels in this analysis. The Collie and Muja coal-fired power stations received a total of \$21 million for upkeep in 2020-21. Gas-fired power stations Cockburn, Pinjar and Kwinana are in line to receive a total of \$123.3 million in capital spending, with \$5.3 million in 2020-21.

Onslow Power Station

In partnership with Chevron, state-owned power company Horizon Power constructed a distributed energy resource (DER) microgrid over the last four years to delivery energy to Onslow, a beach town of 848 people in the state's Pilbara region. The Onslow DER project involves a mix of power sources and technology, including a solar farm, battery storage, transmission line, substation and a gas-diesel power station.¹¹⁴ The project aims to generate 50% of the energy supplied to the town from renewables, but the remaining 50% will be generated from natural gas resources.¹¹⁵

The Government spent \$93 million to build the gas-fired power station in 2017-18 and construct the solar farm and battery in 2019. In 2020-21, the Government spent an additional \$13 million on power station upgrades, which equates to almost 10% of the fossil fuels subsidies in Western Australia. As this funding is also dedicated to renewable energy, it was classified as partly dedicated to fossil fuels in this analysis.

The justification for such major expenditure in a relatively small town may relate to the siting of a "marine support base" for the offshore oil and gas industry here in 2017. This project is estimated to be worth \$120 million, including a \$16.8 million loan from the

¹¹³ Synergy (no date) *Power stations*, <https://www.synergy.net.au/About-us/Who-we-are/What-we-do/Electricity-generation/Power-stations>

¹¹⁴ Horizon (2020) *Onslow Distributed Energy Resource (DER) Project*, <https://www.horizonpower.com.au/our-community/projects/pilbara/onslow-distributed-energy-resource-der-project/>

¹¹⁵ Horizon Power (2018) *Annual Report 2017-18*, <https://www.horizonpower.com.au/about-us/reports-publications/annual-reports/>

Federal Government's Northern Australia Infrastructure Facility, included and discussed further in the Federal Government chapter.

Esperance Power Station

A controversial 22 MW gas-fired power station is being built in Esperance¹¹⁶ as part of a wider Esperance Power Project, which includes renewable energy.¹¹⁷ The Esperance power project will cost the Government \$13 million in 2020-21 and is only partly dedicated to fossil fuels for the purposes of this analysis.

PORTS

The main ports involved in handling Western Australia's oil and gas exports are the Fremantle, Kimberly and Pilbara port authorities. In Western Australia's *Budget 2020-21* (referred to throughout the rest of this section as "the Budget"), these state-owned port authorities allocated \$56 million to capital works that at least partly benefit the oil and gas sector.

Fremantle Port Authority

Fremantle Port's "principal bulk cargo" is petroleum products, accounting for 53% of its imports and 13% of its exports.¹¹⁸ In the Budget, the Port's Kwinana Bulk Terminal and Bulk Jetty received over \$24 million for a range of infrastructure works including equipment and electrical upgrades, land acquisition and asset replacement works.¹¹⁹ As the terminal and jetty are not entirely used by the oil and gas industry, this funding was considered partly dedicated to the fossil fuel industry.

Kimberly Port Authority

Broome Port, operated by the Kimberly Port Authority, supports offshore oil and gas operations and exports in north Western Australia.¹²⁰ In 2020-21, the port received \$6.75 million for improvements including to purchase a new marine crane to help with the

¹¹⁶ Smith (2020) *Esperance power station approval calls WA Government process into question*, <https://www.abc.net.au/news/2020-09-20/esperance-power-station-approval-dap-panel-shire-state-process/12678912>

¹¹⁷ Horizon (2020) *Esperance Power Project: cleaner, greener*, <https://www.horizonpower.com.au/our-community/projects/goldfields-esperance/epp/>

¹¹⁸ Fremantle Port (2020) *Annual Report 2020*, p 31 <https://www.fremantleports.com.au/publications>

¹¹⁹ Government of Western Australia (2020) *2020-21 Budget Statement, Budget Paper No. 2 – Volume 2*, p 639-40, <https://www.ourstatebudget.wa.gov.au/budget-papers.html>

¹²⁰ Kimberly Port Authority (2020) *About Port of Broome*, <https://www.kimberleyports.wa.gov.au/Port-of-Broome/Home>

movement of oil and gas cargo. The funding for the crane was considered wholly dedicated to fossil fuels, while the other infrastructure spending was classified as partly dedicated.

Pilbara Port Authority

The Pilbara Port Authority encompasses the ports of Ashburton, Dampier and Port Hedland, which are large bulk exporters.¹²¹ Port Dampier and Ashburton export 39.6% of Australia's LNG,¹²² and received \$15 million for infrastructure upgrade projects and wharf works. As other resource sectors make use of this infrastructure, this funding was classified as partly dedicated to the industry. As part of the Western Australia Recovery Plan Project, the authority is also offering concessional port charges for liquified natural gas fuelled vessels refuelling in the Pilbara, worth \$1.9 million and considered primarily dedicated to fossil fuels.¹²³

INFRASTRUCTURE AND OTHER SUPPORTIVE SPENDING

The Western Australian Government funds a range of projects that subsidise oil and gas production, transportation, consumption, and export infrastructure. These include:

- The Gorgon Gas Carbon Dioxide Injection Project, which is owned by multinational oil giant Chevron and is one of the world's largest LNG projects (and also one of the largest drivers of Australia's recent emission increases¹²⁴). It is located off the northwest coast of Western Australia and extracts approximately 15.6 million tonnes of LNG a year. The Gorgon project includes a CCS operation, which was constructed with a \$60 million subsidy from the Federal Government in 2018 but faces ongoing performance issues.¹²⁵ For reasons that are not detailed in the budget papers, the Gorgon CCS project will receive \$400,000 from the state budget over the next four years.
- The Dampier-to-Bunbury pipeline, which is Australia's longest gas pipeline, running 1600km from Dampier to Bunbury and transporting around 650-700 terajoules of gas a day.¹²⁶ Although the pipeline is privately owned, the Budget allocates \$5.8

¹²¹ [https://www.pilbaraports.com.au/about-ppa/publications/forms-and-publications/forms-publications/strategy-plan/2020/september/full-annual-report-\(interactive-pdf\)](https://www.pilbaraports.com.au/about-ppa/publications/forms-and-publications/forms-publications/strategy-plan/2020/september/full-annual-report-(interactive-pdf))

¹²² Pilbara Port Authority (2020) *2019-20 Annual Report*, p 11, <https://www.pilbaraports.com.au/about-ppa/publications/annual-report>

¹²³ Government of Western Australia (2020) *2020-21 Budget Statement, Budget Paper No. 2 – Volume 2*, p 645, <https://www.ourstatebudget.wa.gov.au/budget-papers.html>

¹²⁴ Saddler (2018) *National Energy Emissions Audit – October 2018*, <https://australiainstitute.org.au/report/national-energy-emissions-audit-october-2018/>; Government of Western Australia (no date) *Gordon carbon dioxide project*, <https://www.dmp.wa.gov.au/Petroleum/Gorgon-CO2-injection-project-1600.aspx>;

¹²⁵ Swann (2018) *Gorgon-tuan Problem*, <https://australiainstitute.org.au/report/gorgon-tuan-problem/>

¹²⁶ Dampier Bunbury Pipeline (2020) *About DBP*, <https://www.dbp.net.au/about-dbp/>

million in 2020-21; this sum is for the purchase of land to widen the pipeline corridor.¹²⁷

- The 353km long Mid West Pipeline, which transports gas from the Dampier-to-Bunbury pipeline to generate power for mining and minerals processing at Windimurra.¹²⁸ The pipeline is co-owned by the state-owned power company Horizon and private energy infrastructure business AP Pipelines. The Budget suggests that the WA Government is investing \$1 million to connect the pipeline to the liquefied natural gas production plant in Mount Magnet, thus supplying power to nearby gold mining companies.
- The Future Energy Cooperative Research Centre, which supports the LNG industry with research, education and training.¹²⁹ With the support of the Federal Government, the centre is planning to establish the LNG Futures Facility, a 10 tonne-per-day LNG plant to be based at Kwinana. In the Budget, the centre received \$1.1 million, wholly dedicated to LNG.
- The National Energy Resources Australia Partnership, a Perth-based think tank for the gas industry funded by the Federal and state governments, along with major gas companies. It received \$500,000 in the WA 2020-21 budget.

DEPARTMENT OF MINES, INDUSTRY REGULATION AND SAFETY

The Department of Mines, Industry Regulation and Safety is responsible for providing advice and regulatory services to industry, and for ensuring that the state's natural resources are "developed and managed responsibly".¹³⁰ The Department coordinates a range of initiatives which support fossil fuel research and development:

- In 2020-21, \$5 million was allocated to the Exploration and Incentive Scheme (EIS), which supports the resource sector with exploration, drilling, mapping and data collection. The EIS includes an "Energy Analysis Program" specific to petroleum and geothermal companies.¹³¹ The EIS is an ongoing initiative in which the Western

¹²⁷ Government of Western Australia (2020) *Dampier to Bunbury pipeline*, <https://www.dplh.wa.gov.au/projects-and-initiatives/dampier-to-bunbury-pipeline>

¹²⁸ APA (no date) *Mid-West Pipeline*, <https://www.apa.com.au/our-services/gas-transmission/west-coast-grid/mid-west-pipeline/>

¹²⁹ Andrews, Karen (2020) *Investing in Australia's mining and energy future*, <https://www.minister.industry.gov.au/ministers/karenandrews/media-releases/investing-australias-mining-and-energy-future>

¹³⁰ Government of Western Australia (2020) *2020-21 Budget Statements, Budget Paper No. 2 – Volume 1*, p 254-6, <https://www.ourstatebudget.wa.gov.au/budget-papers.html>

¹³¹ Western Australian Government (no date) *Exploration Incentive Scheme (EIS)*, <https://www.dmp.wa.gov.au/Petroleum/Exploration-Incentive-Scheme-2251.aspx>

Australian Government has invested \$45 million since 2017-18.¹³² The funding for EIS was classified as partly dedicated to fossil fuels, as this assistance is also extended to other natural resources including, gold, nickel and copper.¹³³

- The Federal and Western Australian governments will fund resource sector “export hubs”, which aim to help small and medium-sized businesses access the global oil and gas industry supply chain.¹³⁴ One of the hubs is to be operated by Subsea Energy Australia, an industry association consisting of oil and gas operators, contractors and research institutions.¹³⁵ The hub received \$400,000 from the Western Australian Government in 2020-21 to plan networking events, provide education and training, represent industry interests to government and facilitate research and development between stakeholders.¹³⁶

¹³² McGowan, M, and Johnston, (2020) *\$8.2 million in COVID-19 recovery funding for resources and exploration*, <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/08/8-point-2-million-dollars-in-COVID-19-recovery-funding-for-resources-exploration.aspx>

¹³³ Government of Western Australia (2015) *Exploration Incentive Scheme creates millions in benefits to WA*, <http://www.dmp.wa.gov.au/News/Exploration-Incentive-Scheme-5059.aspx>

¹³⁴ Government of Western Australia (2020) *\$3.8 million resources export hubs to help WA recover from COVID-19*, <https://www.wa.gov.au/government/announcements/38-million-resources-export-hubs-help-wa-recover-covid-19>

¹³⁵ Subsea Energy Australia (n.d.) *About us*, <https://www.subseaenergy.org.au/about-sea/>

¹³⁶ Subsea Energy Australia (n.d.) *About us*, <https://www.subseaenergy.org.au/about-sea/>

Northern Territory

The Northern Territory hosts processing facilities for several offshore LNG export projects and also has a nascent onshore unconventional gas industry, all of which receive substantial government assistance. The largest component of NT fossil fuel subsidy estimates, however, relates to the NT Government-owned Power and Water Corporation, which has been instrumental in subsidising the development of both the Blacktip gas project in the Bonaparte Gulf near Wadeye and the Northern Gas Pipeline from Tennant Creek to Mt Isa in Queensland.

Table 8: NT Government 2020-21 fossil fuel subsidies

NT budget fossil fuel assistance	Total/capital value	2020-21 expenditure
Wholly	\$3,755,000,000	\$13,882,000
Primarily	\$0	\$0
Partly	\$100,000,000	\$93,152,000
Total	\$3,855,000,000	\$107,034,000
Gas - export	\$100,000,000	\$107,034,000
Gas - domestic	\$3,755,000,000	\$0
Total	\$3,855,000,000	\$107,034,000

Sources: Budget Papers, PWC annual reports

POWER AND WATER CORPORATION

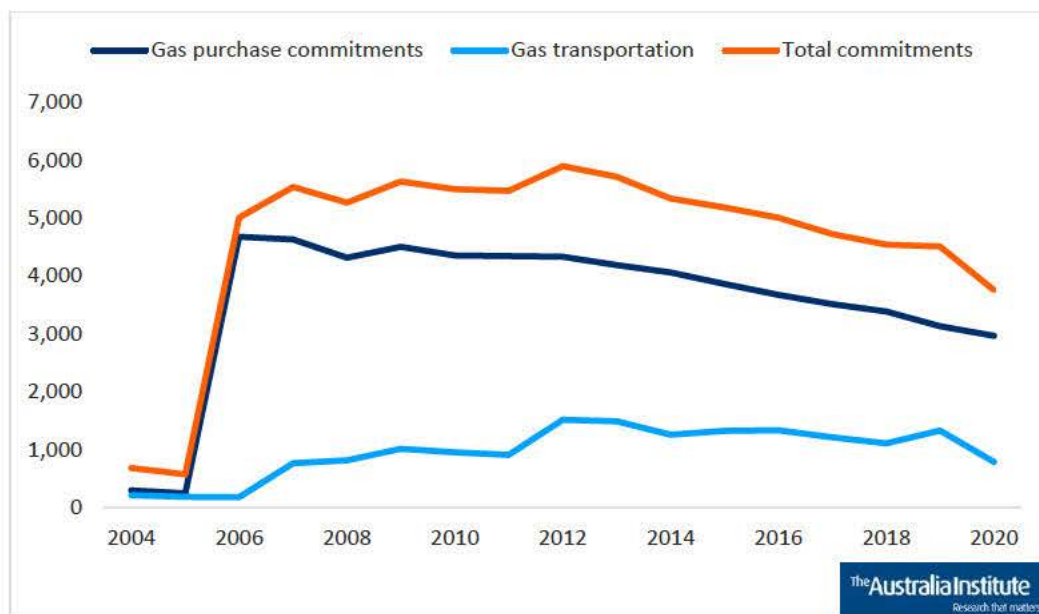
The largest item in Table 8 above is the purchase agreement that the Power and Water Corporation ("the PWC") has in place to purchase gas from the Blacktip project, which is owned by Italy-based oil company Eni. As highlighted in the NT budget papers:

A financial risk to the Territory budget is Power and Water Corporation's long-term gas purchase, sales and transportation agreement. The fixed price nature of the contracts, volatility of the market price of gas, uncertainty in relation to both pricing and volume from as yet unsecured sales contracts are risks to the Corporation's ability to sell the gas at a competitive price.¹³⁷

The PWC's multi-billion dollar commitment to purchasing gas from Blacktip was essential for the project's development, but it resulted in the procurement of far more gas than the Territory needed. The PWC's latest annual report shows that this commitment currently constitutes \$2.9 billion in purchase commitments and \$788 million in gas transport commitments, as shown in Figure 6 below:

¹³⁷ NT Government (2020) Budget Paper 2, p82

Figure 6: Power and Water Corporation gas commitments



Source: PWC annual reports

The PWC has subsidised the Blacktip project with these multi-billions dollar commitments since 2006. Far more gas was committed to than the NT needed. This was clear to the PWC and NT Government decision makers at the time, with the NT Utilities Commission noting in 2006:

Contract quantities available from Blacktip will be in excess of projected requirements under the Commission's high growth scenario through to 2015-16 and beyond.¹³⁸

NT taxpayers paid for large quantities of gas that they could not use, or sell due to low local demand and no infrastructure to sell elsewhere. As the PWC puts it:

The current gas contracts relating to the sale and purchase of gas have resulted in Power and Water previously paying for gas that will be delivered in future years.¹³⁹

While a detailed estimate is beyond the scope of this report, the loss on take-or-pay agreements with Blacktip was estimated at a total of \$375 million by the NT News.¹⁴⁰ With the similarly-subsidised Northern Gas Pipeline now in operation, PWC is now able to sell

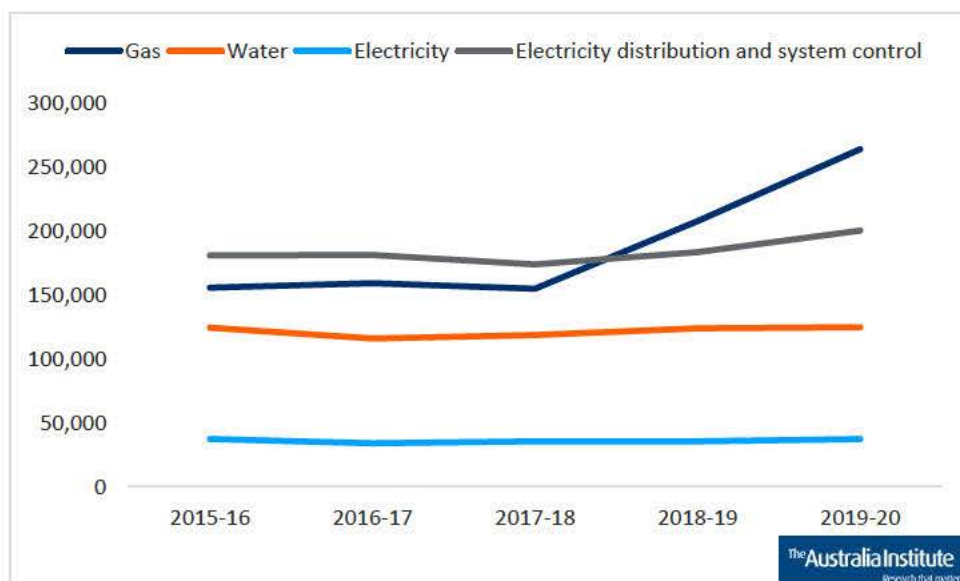
¹³⁸ NT Utilities Commission (2006) *Annual power system review December 2006*, https://utilicom.nt.gov.au/__data/assets/pdf_file/0008/743039/2006_PSR_final.pdf

¹³⁹ PWC (2020) *Annual report*, p20, <https://www.powerwater.com.au/about/what-we-do/our-plans-and-values/past-corporate-reports>

¹⁴⁰ Manicaros (2017) *Business Confidential*, NT News 3 May 2017, page 15. This column does not appear to be on the NT News site. The Australia Institute also has personal correspondence with Mr Manicaros regarding this figure.

Blacktip gas to buyers in Queensland. This has seen PWC's gas sales increase by over \$100 million in two years, as shown in Figure 7 below:

Figure 7: PWC sales revenue, selected streams



Source: PWC annual reports

As shown in Figure 7, the Northern Territory Government-owned PWC now collects over \$250 million per year in gas sales revenue. This is seen as good news at PWC:

Pleasingly, revenue from gas sales was favourable to budget by \$3.5 million. This marked an important milestone for our Gas Services team — achieving a sizable net profit and significant positive cash flow for the first time. Since 2014, the team has doubled revenue and contracts under management and maintained controllable costs within budget.¹⁴¹

Compared to losing vast amounts of money, perhaps this *is* good news. But another way of looking at this is that the NT government has spent more than a decade losing money on a gas deal that needs a quarter of a billion dollars in sales per year just to begin paying for itself. With total NT government budget revenue of just \$6.4 billion, not to mention an operating deficit of \$1.7 billion, the PWC's gas sales represent a potentially significant source of revenue. This presents any NT Government with a major conflict of interest. The Government cannot impartially assess controversial gas projects when it owns a gas supplier of this size. Renewable energy projects now present a "risk" to NT Government revenue, a fact that is clear in PWC reports:

The corporation has in place long term contracts to procure gas and associated transport charges. The fixed price nature of the long-term gas contracts; the volatility

¹⁴¹ PWC (2020) *Annual report*, p20, <https://www.powerwater.com.au/about/what-we-do/our-plans-and-values/past-corporate-reports>

in the market price of gas; the pricing and volume risk from as yet unsecured contracts or contracts currently under negotiation; increasing competition in the gas supply market; and more recently the potential impact from the displacement of gas by renewables over time are risks to the corporation's ability to sell the gas at a price higher than the cost of gas and transport.¹⁴²

No annual value relating to PWC's gas operations is included in Table 8, as there is insufficient data to estimate the various losses of the division and how that may relate to this year's profit result, which is itself not disclosed.

DARWIN SHIP LIFT

The NT Government, in conjunction with the Federal Government's Northern Australia Infrastructure Facility, is building ship maintenance facilities that will partly benefit the oil and gas industry:

In July 2020, the Territory entered into a loan facility agreement with the Northern Australia Infrastructure Facility (NAIF) to borrow \$300 million for the Darwin ship lift and marine infrastructure project. The project is estimated at \$400 million and will enable the maintenance and servicing of Defence and Australian Border Force vessels, along with commercial and private vessels, including from the oil, gas and marine industries.¹⁴³

Budget papers state that \$93 million will be spent on the ship lift project in 2020-21. This has been included in Table 8 above as spending partly attributable to fossil fuel industries. The \$100 million total contribution from the NT Government is included in the total/capital value column as partly attributable, while the NAIF's \$300 million contribution is included in the Federal Government section total program estimate, with no value registered for 2020-21.

INVESTMENT TERRITORY

Investment Territory is a part of the Department of Chief Minister and Cabinet, charged with facilitating "major projects and significant investments in the [Northern] Territory". As part of its remit, the body will "lead the coordination and delivery of the Territory's gas strategy and development of a gas-based manufacturing industry."¹⁴⁴ This year's budget papers do not break down Investment Territory's \$50.2 million budget, but in past years a budget of \$5 million per year has been allocated to the Territory's "Gas Taskforce" which appears to

¹⁴² PWC (2020) *Annual report*, p20, <https://www.powerwater.com.au/about/what-we-do/our-plans-and-values/past-corporate-reports>

¹⁴³ NT Government (2020) Budget Paper 2, p89

¹⁴⁴ NT Government (2020) Budget Paper 2, p13-14

have been subsumed into Investment Territory. \$5 million has been included in Table 8 above as wholly attributable to the export gas industry.

MINES AND ENERGY

The Department of Industry, Tourism and Trade Mines and Energy group includes two programs that subsidise the gas industry.

The Resource Industry Development Services program has a budget of \$10.4 million this budget year. This appears to include the \$6.5 million per year “Resourcing the Territory” exploration initiative, that provides “geoscience, investment attraction and exploration stimulus programs”.¹⁴⁵ This program is the successor to an earlier program, “Creating Opportunities for Resource Exploration”, which provided \$2 million per year to the onshore gas industry.¹⁴⁶ Table 8 assumes that this \$2 million annual subsidy to onshore gas continues under Resourcing the Territory, and is wholly dedicated to the export gas industry. Arguably, this could be categorized as assistance to the domestic gas industry; however, most discussion around large scale onshore gas focuses on eventual export as LNG in either new facilities or backfilling for existing operations.¹⁴⁷

The Energy Services program works to:

Advance the Territory’s economic development and energy security through administration of exploration applications and permits, licences, resource management, operational approvals and regulatory activities, including monitoring and compliance under the Petroleum Act 1984 and Energy Pipelines Act 1981.¹⁴⁸

A recommendation of the NT Government’s 2018 Fracking Inquiry was that the expense of this program should be recovered from gas companies. The NT Government committed to implement all recommendations of the Fracking Inquiry, but three years later, progress has been minimal. According to the body charged with overseeing the recommendations of the Fracking Inquiry:

Consultation on the proposed cost recovery system is scheduled with industry and key stakeholders in the second half of 2021. A discussion paper for consultation on

¹⁴⁵ Resourcing the Territory (2020) *About Resourcing the Territory*, <https://resourcingtheterritory.nt.gov.au/about>

¹⁴⁶ Resourcing the Territory (2019) *Previous initiatives*, <https://resourcingtheterritory.nt.gov.au/about/previous-initiatives>

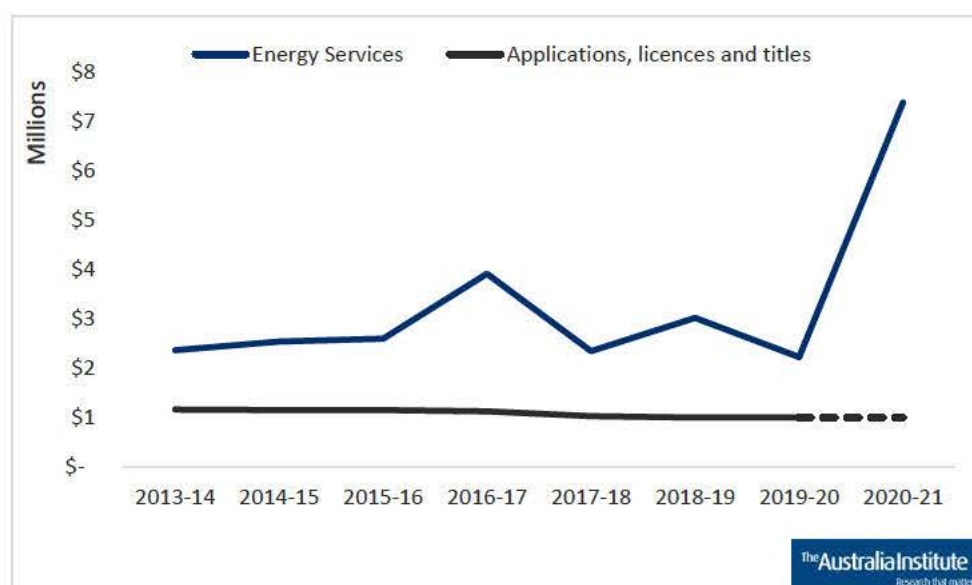
¹⁴⁷ See for example NT Government (2020) Northern Territory gas strategy: five point plan, <https://cmc.nt.gov.au/advancing-industry/northern-territory-gas-strategy>. The NT-based processing and manufacturing discussion is unlikely to eventuate, see Campbell (2020) *Why onshore gas will not help manufacturing in the NT*, <https://australiainstitute.org.au/post/fracking-cant-fire-up-nt-manufacturing/>

¹⁴⁸ NT Government (2020) Budget Paper 2, p78

the proposed cost recovery system is now being prepared by the Department of Treasury and Finance (DTF) for consideration by Cabinet.¹⁴⁹

With discussion paper documents still being prepared, the under-recovery of costs looks set to continue. This coincides with a major increase in the budget of this program, as shown in Figure 8 below:

Figure 8: Energy Services budget



Source: NT Budget papers, various years

As shown in Figure 8 above, the amount allocated to Energy Services has more than tripled in this budget, with no justification given. Revenue from applications, licence and title fees is no longer reported separately in the NT budget papers, reducing transparency, and there is no reason to expect a major increase in this revenue given the impact of the pandemic on the NT onshore gas industry.¹⁵⁰ Table 8 includes this estimated \$6.9 million gap in cost recovery as an annual, wholly-devoted subsidy to the export gas industry.

¹⁴⁹ Ritchie (2020) *Progress on the implementation of recommendations from the final report of the hydraulic fracturing inquiry-1 May to 31 October 2020*, https://cmsexternal.nt.gov.au/__data/assets/pdf_file/0006/956049/dr-ritchie-update-oct-2020.pdf

¹⁵⁰ Claughton et al (2020) *Mining exploration and service companies hit by coronavirus restrictions*,

Victoria

Victoria's fossil fuel industry consists primarily of brown coal mines and power stations in the Gippsland region. Fossil fuel subsidies related to the brown coal industry are primarily provided to fund mining site rehabilitation and the Victorian Government's Earth Resources Regulator. As the moratorium on onshore conventional gas exploration in Victoria has been overturned, the Victorian Government's *Budget 2020-21* also includes funding to support and regulate the recommencement of exploration. A significant portion of fossil fuel spending in the *Budget 2020-21* supports the development of hydrogen pilot projects and carbon capture and storage (CCS) projects, both of which are intended to complement existing fossil fuel projects in the State.

Table 9: VIC Government 2020-21 Budget fossil fuel subsidies

VIC budget fossil fuel assistance	Total/capital value	2020-21 expenditure
Wholly	\$140,220,000	\$19,720,000
Primarily	\$0	\$6,900,000
Partly	\$0	\$73,200,000
Total	\$140,220,000	\$99,820,000
Coal	\$131,400,000	\$19,900,000
Gas	\$8,820,000	\$6,720,000
Various	\$0	\$73,200,000
Total	\$140,220,000	\$99,820,000

Source: VIC Government (2020) *Budget Papers 2020-21*

RESOURCES OUTPUTS

The Department of Jobs, Precincts and Regions' "Resources Output" funds and administers exploration and mining licenses, provides industry geoscience data packages for petroleum, and has carriage of the CarbonNet CCS Project. 'Resources outputs' is the largest fossil fuel-related budget item. While part of the program's activity is related to administration that may be funded by industry levies, little information is available as to the extent of resources devoted to industry support and assistance. Some programs make it clear that assistance is significant.

The key example of this program working to assist, rather than just regulate, the fossil fuel industry is CarbonNet. This CCS network project in Gippsland was established in 2010 as part of the Australian Government's Carbon Storage Taskforce and National Low Emissions Coal Initiative. This initiative identified the Gippsland Basin as the most appropriate choice for a long-term carbon storage project in Victoria, due to both technical requirements and

the region's close proximity to major coalfields, electricity generators and industrial processors, along with and suitable offshore and onshore storage sites: "[Victoria's] largest sources of CO₂ are all located within a 15km radius...It offers an opportunity for shared infrastructure and a multi user CCS network".¹⁵¹

More than a decade later, CarbonNet is not operational and currently claims to be in "Stage Three (Project Development and Commercial Establishment)".¹⁵² The project site claims to have the capacity to store five million tonnes (Mt) of CO₂ per year for 25 years.¹⁵³ This is a fraction of the emissions from Victoria's coal-fired generators Loy Yang, Loy Yang B and Yallourn, which in 2016 emitted 43 Mt CO₂ equivalent, representing 38% of Victoria's total greenhouse gas emissions.¹⁵⁴

The CarbonNet Project identifies opportunities to align with fossil fuel projects.¹⁵⁵ These include *Gas Vision 2050*, promoting the continued use of gas as a major energy source in Australia (with emissions reductions achieved through the use of CCS);¹⁵⁶ a proposed Gippsland Hydrogen Cluster with National Energy Resources Australia;¹⁵⁷ Carbon Capture, Utilisation and Storage and Enhanced Oil Recovery projects;¹⁵⁸ and a possible future partnership with the Hydrogen Energy Supply Chain project, which includes blue (fossil fuel and CCS) hydrogen.¹⁵⁹

In May 2020, the Australian Government passed new legislation — the *Offshore Petroleum and Greenhouse Gas Storage Amendment Bills* — to allow the drilling and injection of CO₂ into underground reservoirs.¹⁶⁰

¹⁵¹ Global CCS Institute (2015) *The CarbonNet Project: A Historical Perspective*, <https://www.globalccsinstitute.com/archive/hub/publications/155928/carbonnet-project-historical-perspective.pdf>, p. 9.

¹⁵² Victorian Government (2020) *The CarbonNet Project*, <https://earthresources.vic.gov.au/projects/carbonnet-project/about-the-project>

¹⁵³ Ibid.

¹⁵⁴ Victorian Government (2018) *Victorian Greenhouse Gas Emissions Report*, https://www.climatechange.vic.gov.au/__data/assets/pdf_file/0033/395079/Victorian-Greenhouse-Gas-Emissions-Report-2018.pdf

¹⁵⁵ Victorian Government (2020) *CarbonNet* newsletter, <https://earthresources.vic.gov.au/projects/carbonnet-project/news-and-events>

¹⁵⁶ Energy Networks Australia (2020) *Gas Vision 2050*, <https://www.energynetworks.com.au/resources/reports/2020-reports-and-publications/gas-vision-2050-delivering-a-clean-energy-future/>

¹⁵⁷ CarbonNet Project (2020) *29 October 2020 Newsletter*, <https://earthresources.createsend1.com/t/ViewEmail/r/4141A4FA4C8668742540EF23F30FEDED>

¹⁵⁸ CarbonNet Project (2020) *28 August 2020 Newsletter*, <https://earthresources.createsend1.com/t/ViewEmail/r/142F64CEDD110B4A2540EF23F30FEDED>

¹⁵⁹ CarbonNet Project (2020) *30 January 2020 Newsletter*, <http://createsend.com/t/r-78D6A8BB92CE89B82540EF23F30FEDED>

¹⁶⁰ Maisch (2020) *Morrison government paves the way for brown hydrogen industry*, <https://www.pv-magazine-australia.com/2020/05/15/morrison-government-paves-the-way-for-brown-hydrogen-industry/>

Resources output is an ongoing program with \$73.2 million budgeted in 2020-21, dedicated partly to fossil fuels. The capital value of CarbonNet to date is \$177 million with funding from the Victorian Government, but mainly \$95.2 million from the Federal Government, considered wholly dedicated to fossil fuels.¹⁶¹

HYDROGEN ENERGY SUPPLY CHAIN PILOT PROJECT

The Hydrogen Energy Supply Chain (HESC) Pilot Project in Gippsland's Latrobe Valley was announced with joint State, Federal and foreign funding in April 2018.¹⁶² The project will produce hydrogen from brown coal: 160 tonnes of brown coal will be used in a system specifically designed for Victorian brown coal, producing up to three tonnes of hydrogen gas in one year.¹⁶³ The pilot will run from 2018-2021 and successful completion of the pilot-phase could allow commercial production and operations to be established in the 2020s/2030s.¹⁶⁴

The HESC Project does not intend to use CCS to capture emissions produced during the pilot phase of the project; instead, it is "considering carbon offsets to mitigate the CO₂ produced by gasification and gas refining process". It identifies CarbonNet, which may or may not be functioning by the 2030s, as a potential solution for the emissions of the HESC commercial phase.¹⁶⁵

Victorian Government funding for HESC is \$13 million in 2020-21, dedicated wholly to fossil fuels, with a total \$50 million each from the Victorian and Federal Governments over the life of the project. Contributions from the Japanese Government and Kawasaki Heavy Industries consortium take the total estimated value of the project to \$496 million.¹⁶⁶ Only the Victorian and Australian Government spending is included in our calculations, considered wholly dedicated to fossil fuels.

¹⁶¹ Global CCS Institute (2015) *The CarbonNet Project: A Historical Perspective*, <https://www.globalccsinstitute.com/archive/hub/publications/155928/carbonnet-project-historical-perspective.pdf>

¹⁶² Parkinson (2018) *Turnbull's brown coal hydrogen horror show: \$500m for 3 tonnes*, <https://reneweconomy.com.au/turnbulls-brown-coal-hydrogen-horror-show-500m-for-3-tonnes-70932/>

¹⁶³ Hydrogen Energy Supply Chain (n.d.) *Latrobe Valley*, <https://hydrogenenergysupplychain.com/latrobe-valley/>

¹⁶⁴ Australian Government (2018) *Hydrogen Energy Supply Chain Pilot Project*, <https://www.industry.gov.au/funding-and-incentives/low-emissions-technologies-for-fossil-fuels/hydrogen-energy-supply-chain-pilot-project>

¹⁶⁵ Hydrogen Energy Supply Chain (n.d.) *Community and sustainability*, <https://hydrogenenergysupplychain.com/community-and-sustainability/>

¹⁶⁶ Australian Government (2018) *Local jobs and a new energy industry for the LaTrobe valley*, <https://www.minister.industry.gov.au/ministers/cash/media-releases/local-jobs-and-new-energy-industry-latrobe-valley>

ONSHORE GAS EXPLORATION RESTART

The Victorian Government announced in March 2020 that it would overturn a moratorium on the exploration of onshore conventional gas reserves, which had been in place since 2017, allowing exploration to restart from 1 July 2021.¹⁶⁷ The Victorian *Budget 2020-21* allocates funding to “develop, implement and enforce” a new regulatory regime for Victorian onshore conventional gas exploration. The overturned restrictions and funding follow findings from the Victorian Gas Program that an onshore conventional gas industry would not compromise Victorian environmental and agricultural credentials.¹⁶⁸ Emissions from extracting gas are estimated to be 122,000 to 329,000 CO₂-e annually.¹⁶⁹

Funding for the restart of onshore gas exploration is \$5.1 million in total, with \$3 million in 2020-21, dedicated wholly to fossil fuels.

GAS ROADMAP

The 2020-21 Budget includes funding for a “gas roadmap” to support the efficient use of gas, assessing the viability of gas as an industrial feedstock, developing renewable gas resources (hydrogen or biogas), and substituting gas with hydrogen, biogas or electrification.¹⁷⁰ There is no publicly available information on the developmental progress of the gas roadmap and the initiative’s description does not specify the intention to move away from fossil gas as an energy source. Additionally, transitioning towards hydrogen fuel in Victoria is likely to support the fossil fuel industry, given that the Victorian Government is also funding a brown hydrogen pilot project and CCS technology.

Funding for developing a gas roadmap is \$3.7 million¹⁷¹ in 2020-21 and is classified as wholly dedicated to fossil fuels.

REHABILITATION OF MINES AND QUARRIES

Additional funding for mine site rehabilitation was granted through expanded functions for the Earth Resources Regulator and the establishment of the Mine Land Rehabilitation Authority (MLRA). The MLRA replaces the Latrobe Valley Mine Rehabilitation Commissioner,

¹⁶⁷ Mazengarb (2020) *Victoria lifts moratorium on onshore gas, but permanently bans fracking*, <https://reneweconomy.com.au/victoria-lifts-moratorium-on-onshore-gas-but-permanently-bans-fracking-91726/>

¹⁶⁸ Victorian Government (2020) *Restrictions on onshore gas*, <https://earthresources.vic.gov.au/geology-exploration/oil-gas/restrictions-on-onshore-gas>

¹⁶⁹ Earth Resources (2020) *Victorian Gas Program: Progress Report #5*, https://earthresources.vic.gov.au/__data/assets/pdf_file/0020/613091/VGP_PR05-161926-Low-res.pdf

¹⁷⁰ Victorian Government (2020) *Budget Paper 3: Service Delivery*, <https://www.budget.vic.gov.au/budget-papers>

¹⁷¹ Victorian Government (2020) *Budget 2020-21*, <https://www.delwp.vic.gov.au/our-department/budget-2020-21>

taking responsibility for managing the Latrobe Valley Regional Rehabilitation Strategy.¹⁷² This includes overseeing the rehabilitation of Latrobe Valley coal mines, other coal mines that pose risk to community, environment or infrastructure and “promoting the sustainable and beneficial use of coal mine land in the region”.¹⁷³ The MLRA currently monitors three brown coal mines in Victoria: Loy Yang (scheduled for closure in 2048), Yallourn (scheduled for closure in 2028) and Hazelwood (closed in 2017), all of which are on privately owned land.¹⁷⁴

This ongoing funding for mine rehabilitation management is \$6.9 million in 2020-21, dedicated primarily to fossil fuels.

¹⁷² Victorian Government (2020) *Latrobe Valley Regional Rehabilitation Strategy*, https://earthresources.vic.gov.au/__data/assets/pdf_file/0010/558802/LVRRS-What-is-the-Mine-Land-Rehabilitation-Authority-factsheet.pdf

¹⁷³ Victorian Government (2020) *Latrobe Valley Regional Rehabilitation Strategy*, https://earthresources.vic.gov.au/__data/assets/pdf_file/0010/558802/LVRRS-What-is-the-Mine-Land-Rehabilitation-Authority-factsheet.pdf

¹⁷⁴ Mine Land Rehabilitation Authority (n.d.) *Declared mines*, <https://www.mineland.vic.gov.au/declared-mines/>
Victorian Government (2020) *Latrobe Valley Regional Rehabilitation Strategy*, https://earthresources.vic.gov.au/__data/assets/pdf_file/0011/558884/Latrobe-Valley-Regional-Rehabilitation-Strategy.pdf

South Australia

South Australia is one of the few states in Australia with a commitment to achieving 100% renewable energy. Approximately half of the electricity generated in the state currently comes from gas, with the remaining majority derived from renewable sources, wind and solar.¹⁷⁵ In its 2020-21 budget, the SA Government committed to funding a range of measures to reduce emissions, including a household battery scheme, electric vehicles, accelerating green hydrogen and improving the energy efficiency of buildings.¹⁷⁶

The state no longer has coal-fired power stations, so the fossil fuel sector in South Australia is mostly dedicated to the oil and gas industry.

The largest component of 2020-21 fossil fuel funding goes to the Mineral Resources and Energy Agency, situated within the Department of Energy and Mining. The agency is responsible for regulating, managing and supporting the development of South Australia's mineral, petroleum and renewable energy assets.¹⁷⁷ To this end, the agency oversees a range of subprograms that assist the gas and oil sectors in South Australia.

Table 10: Government of South Australia 2020-21 Budget fossil fuel subsidies

SA budget fossil fuel assistance	Total capital value	2020-21 expenditure
Wholly	\$37,000,000	\$15,565,000
Primarily	\$0	\$0
Partly	\$1,800,000	\$6,929,000
Total	\$38,800,000	\$22,494,000

Source: Government of South Australia (2020) *Budget Papers 2020-21*

ENERGY RESOURCES SUBPROGRAM

The ongoing Energy Resources subprogram received \$10.5 million in the 2020-21 Budget which is wholly dedicated to the oil and gas industry. The subprogram is responsible for compliance and monitoring, but also supports oil and gas companies by providing data and advice on investment decisions and "delivering energy resource initiatives".¹⁷⁸ This includes support in negotiating project agreements and development of Carbon Capture Utilisation and Storage technology. The subprogram also champions the Government's Plan for

¹⁷⁵ Australian Government (2020) *Australian Energy Update 2020*,
<https://www.energy.gov.au/publications/australian-energy-update-2020>

¹⁷⁶ Steven Marshall (2020) *South Australia's Climate Change Action Plan launched*,
<https://www.premier.sa.gov.au/news/media-releases/news/south-australias-climate-change-action-plan-launched>

¹⁷⁷ Government of South Australian (2020) Budget Paper 4, Volume 2, p 112,
https://www.statebudget.sa.gov.au/#Budget_Papers

¹⁷⁸ Government of South Australian (2020) Budget Paper 4, Volume 2, p 114,

Accelerating Exploration Gas, which funds companies to extract and supply more gas to the South Australian market.¹⁷⁹

ELECTRICITY AND GAS TECHNICAL AND SAFETY REGULATION SUBPROGRAM

This ongoing subprogram was allocated \$6.2 million in the Budget, and partly assists the gas industry through involvement with gas mains replacement, other aspects of the gas network, and development of hydrogen as a fuel without specific commitment to green hydrogen.¹⁸⁰

PORT BONYTHON JETTY REFURBISHMENT

The only capital works identified as relevant to the fossil fuel industry in the South Australian budget papers is the Port Bonython Jetty Refurbishment.

Port Bonython is the site of a gas and diesel importation and distribution hub; its jetty is leased by the state to Santos, who use it to export LPG, crude oil and naphtha. In the budget, \$30 million was dedicated, over three years, to the refurbishment of the jetty, including the cost of upgrades to lighting, handrails, winches and a fire tower. Some \$7 million over four years was also announced for operating expenses.¹⁸¹ In 2020-21, \$5 million will be spent on upgrades to, and operation of, the jetty.

In 2020, the South Australian Premier, Steven Marshall, announced that investment in Port Bonython would be part of the state's plan to export green hydrogen.¹⁸² However, according to a budget statement, the \$37 million earmarked for investment was in fact "to carry out critical maintenance works on the jetty to ensure the ongoing use of the port for oil and gas exports."¹⁸³ As a result, this funding has been classified as wholly dedicated to fossil fuels.

¹⁷⁹ Government of South Australian (2020) Budget Paper 4, Volume 2, p 115,

¹⁸⁰ Government of South Australian (2020) Budget Paper 4, Volume 2, p 120

¹⁸¹ Government of South Australia (2020) Budget Paper 5: Budget Measures Statement, p 91,
https://statebudget.sa.gov.au/#Budget_Papers

¹⁸² Steven Marshall MP (2020) *World-leading \$240 million hydrogen project launched, supported by \$37 million upgrade to Pt Bonython jetty*, [https://www.premier.sa.gov.au/news/media-releases/news/world-leading-\\$240-million-hydrogen-project-launched,-supported-by-\\$37-million-upgrade-to-pt-bonython-jetty](https://www.premier.sa.gov.au/news/media-releases/news/world-leading-$240-million-hydrogen-project-launched,-supported-by-$37-million-upgrade-to-pt-bonython-jetty)

¹⁸³ Government of South Australian (2020) *State Budget 2020-21: supporting small business in regions*,
<https://www.statebudget.sa.gov.au/#Regions>

CORE SOUTH AUSTRALIAN ENERGY AND MINING INNOVATION

This initiative aims to establish an “innovation hub where... key stakeholders in the energy and mining sectors can develop strategic partnerships to address industry challenges and create economic development opportunities”.¹⁸⁴ The partners include BHP, Anglo America, Woodside and Minerals Council of Australia. Its total funding is \$1.8 million, with a 2020-21 budget allocation of \$700,000.

¹⁸⁴ Government of South Australian (2020) *Budget Paper 5: Budget Measures Statement*, https://www.statebudget.sa.gov.au/#Budget_Papers

New South Wales

New South Wales (NSW) has a long history of mining coal — mainly in the Hunter Valley region — and, to a lesser extent, producing oil and gas.¹⁸⁵ It is the second largest coal producing state in Australia, behind Queensland; the oil and gas industries are smaller, but there are plans to expand the latter with the major Narrabri Gas project.¹⁸⁶

Accordingly, the coal industry receives the vast majority of government fossil fuel assistance in NSW. The largest component of NSW fossil fuel subsidy estimates for 2020-21 is funding committed to the Mining, Exploration and Geoscience agency, which help to secure a future for coal in NSW, particularly through investment in carbon capture and storage.

Table 11: NSW Government 2020-21 Budget fossil fuel subsidies

NSW budget fossil fuel assistance	Total/capital value	2020-21 expenditure
Wholly	\$100,000,000	\$12,095,000
Primarily	\$0	\$0
Partly	\$0	\$4,744,000
Total	\$100,000,000	\$16,839,000

Source: NSW Government (2020) *Budget Papers 2020-21*

COAL INNOVATION NSW

Coal Innovation NSW, an advisory council, was set up to research, develop and demonstrate low emission coal technologies, with the aim of reducing carbon emissions associated with mining and use of coal.¹⁸⁷ This research and development is funded by a government body because the NSW Government considers there is currently not a “socially optimal” amount of private investment in this area.¹⁸⁸

One of Coal Innovation NSW's main roles is the provision of advice to the Minister concerning the expenditure of the Coal Innovation Fund, which was set up in 2008 and was

¹⁸⁵ NSW Government (no date) *Exploration and production in NSW: History of mining, oil and gas production*, <https://www.resourcesandgeoscience.nsw.gov.au/landholders-and-community/coal-seam-gas/the-facts/exploration-and-production>

¹⁸⁶ Morton (2020) *Santos \$3.6bn Narrabri gas project formally backed by NSW government*, <https://www.theguardian.com/australia-news/2020/jun/12/santos-narrabri-gas-project-formally-backed-by-nsw-government>

¹⁸⁷ NSW Government (2020) *Coal Innovation NSW: Income, expenditure and project evaluation*, <https://www.parliament.nsw.gov.au/tp/files/78882/2019-20%20Annual%20Report%20of%20the%20Coal%20Innovation%20NSW%20Fund.pdf>

¹⁸⁸ NSW Government (2017) *Evaluation of the Coal Innovation NSW Program*, https://www.industry.nsw.gov.au/__data/assets/pdf_file/0013/102073/evaluation-of-the-coal-innovation-nsw-program.pdf

initially worth \$100 million. Now, after more than a decade, it has a balance of just over \$71 million, with \$4.5 million spent in 2019-20. The 2020-21 Budget claims \$45.2 million will be spent over the next four years, an average of \$11.3 million per year.

The expenditure of this fund is guided by the council, consisting of coal company executives, senior NSW public servants and some academics. The fund is spent supporting the administration of the advisory council itself, as well as on a range of projects, particularly research and development of carbon capture and storage (CCS) methods, which make up 68% of projects funded.¹⁸⁹

Despite being publicly funded, reports on the various projects backed by the fund are not all publicly available, and those that are can be of low quality. For example, the advisory council commissioned a \$30,000 hydrogen study, which reflected the NSW Government's "technology-neutral" stance on hydrogen development.¹⁹⁰ The study concludes that "blue hydrogen" (fossil fuels coupled with CCS) could offer significant cost and emissions reduction advantages. The MEG reports that "the study highlights the importance of the council's work in making NSW CO₂ storage ready".¹⁹¹ However, the study fails to even mention that no CCS exists in NSW and by its own admission the state is far from storage ready.

A study by Deloitte was also commissioned for \$245,821 to assess the feasibility of carbon capture, transport and storage in NSW.¹⁹² This report has not been released and the latter stages of the project have been cancelled after early stages suggested a \$16 billion net cost to CCS development.

RAIL SPENDING

The key coal railways in the Hunter Valley are managed by the Australian Rail Track Corporation (ARTC), owned by the Federal Government. According to its latest annual report, the ARTC spent \$130.2 million on capital investment in the Hunter Valley network in 2019-20. This network moved 179 million tonnes of coal in 2019-20, so new capital

¹⁸⁹ NSW Government (2020) *Coal Innovation NSW: Income, expenditure and project evaluation*, <https://www.parliament.nsw.gov.au/tp/files/78882/2019-20%20Annual%20Report%20of%20the%20Coal%20Innovation%20NSW%20Fund.pdf>

¹⁹⁰ NSW Government (2020) *Coal Innovation NSW: Income, expenditure and project evaluation*, p 9, <https://www.parliament.nsw.gov.au/tp/files/78882/2019-20%20Annual%20Report%20of%20the%20Coal%20Innovation%20NSW%20Fund.pdf>

¹⁹¹ NSW Government (2020) *Clean Hydrogen Report*, <https://www.resourcesandgeoscience.nsw.gov.au/investors/coal-innovation-nsw/clean-hydrogen-report>

¹⁹² NSW Government (2020) *Coal Innovation NSW: Income, expenditure and project evaluation*, p 5-7, <https://www.parliament.nsw.gov.au/tp/files/78882/2019-20%20Annual%20Report%20of%20the%20Coal%20Innovation%20NSW%20Fund.pdf>

investment is at least primarily attributable to fossil fuels.¹⁹³ This spending is included as federal capital spending in 2020-21, primarily dedicated to coal.

The ARTC annual report also highlights the NSW Government's Fixing Country Rail program as bringing benefit to its customers, primarily coal companies. Parts of the program will "help improve regional rail traffic movements to export terminals in Newcastle and Port Kembla, increasing train payload capacity and decreasing cycle times." It is not clear how much these investments cost; they seem to be a minor part of a \$400 million program coordinated by Transport for NSW to upgrade regional freight rail infrastructure.¹⁹⁴ No amount of the Fixing Country Rail program has been included in our figures.

MINING, EXPLORATION & GEOSCIENCE AND NSW RESOURCES REGULATOR

The Department of Regional NSW oversees two agencies — Mining, Exploration and Geoscience (MEG) and NSW Resources Regulator — that coordinate support for the fossil fuel industry in NSW.¹⁹⁵ While many of these bodies' activities are administrative and funded by industry levies, others relate to subsidised provision of geoscience information and industry promotion, which aims to "to stimulate mineral and petroleum investment" and to "reduce risk for the exploration sector".¹⁹⁶ In the last reported year this expenditure included:

- \$1.6 million on general geoscience information that included the Newcastle Coal Measures and a wide range of other mining activities;¹⁹⁷
- \$795,000 on wholly petroleum-specific studies;
- \$3 million on legacy mine rehabilitation that may partly address old coal mines; and
- \$71,000 on promotion activities that partly assist fossil fuel development, particularly petroleum.

¹⁹³ ARTC (2020) *2020 Annual report*, https://www.artc.com.au/uploads/Annual-Report-2019-20_final_191020.pdf

¹⁹⁴ NSW Government (2021) *Fixing Country Rail*, <https://www.transport.nsw.gov.au/projects/programs/fixing-country-rail>

¹⁹⁵ NSW Government (2020) *Annual Report 2019-20*, <https://www.regional.nsw.gov.au/about-us/Reports-and-publications>

¹⁹⁶ MEG (2020) *Minerals and Petroleum Administrative Fund and Investment Fund: Annual utilization report 2019/20*, https://www.resourcesandgeoscience.nsw.gov.au/__data/assets/pdf_file/0003/1258311/Minerals-and-Petroleum-Administrative-Fund-and-the-Investment-Fund-Annual-Utilisation-Report-2020.pdf

¹⁹⁷ Ibid. See also Department of Regional NSW (2020) *Annual report 2019-20*, https://www.regional.nsw.gov.au/__data/assets/pdf_file/0009/1277892/Department-of-Regional-NSW-Annual-Report-2019-2020.pdf

Tasmania

Tasmania's fossil fuel subsidies are significantly smaller than those elsewhere in Australia due to the nature of Tasmania's electricity system, which has been dominated for over a century by hydroelectricity. In November 2020, Tasmania met its 100% renewable energy target two years early,¹⁹⁸ and in fact exceeded the 100% renewable generation milestone when the Granville Harbour wind farm came online, allowing the state's renewable generation to exceed demand.¹⁹⁹ Tasmania now aims to reach 200% renewable energy generation, with the surplus exported to other states.²⁰⁰ The Tasmanian Government's *Budget 2020-21* also provides for investment in large-scale, entirely renewable hydrogen projects.²⁰¹

Fossil fuel projects in Tasmania include:

- The Tasmanian Gas Pipeline, which supplies natural gas to Tasmania from Victoria. It is part of a larger network of underground gas pipelines that span Australia.²⁰²
- The Bell Bay and Tamar Valley Power Station, which are both gas-fired generators, operated by TW Power Services and Hydro Tasmania.²⁰³
- A small operating coal company, Cornwall Coal, that supplies to industrial users and various speculative export coal proposals.

In 2019 subsidies to two coal ventures made headlines in Tasmania, with government grants of \$23,000 and \$50,000 used for coal exploration.²⁰⁴ While both these companies appear to have stalled, another, Hardrock Coal Mining, claims it will begin operation of its Fingal Tier Coal Project in 2021.²⁰⁵

¹⁹⁸ Marchant (2020) *Tasmania is now powered entirely by renewable energy*,

<https://www.weforum.org/agenda/2020/12/tasmania-renewable-energy-sustainable-hydropower/>

¹⁹⁹ Mazengarb (2020) *Tasmania declares itself 100 per cent powered by renewable electricity*,

<https://reneweconomy.com.au/tasmania-declares-itself-100-per-cent-powered-by-renewable-electricity-25119/>

²⁰⁰ Marchant (2020) *Tasmania is now powered entirely by renewable energy*,

<https://www.weforum.org/agenda/2020/12/tasmania-renewable-energy-sustainable-hydropower/>

²⁰¹ Marchant (2020) *Tasmania is now powered entirely by renewable energy*,

<https://www.weforum.org/agenda/2020/12/tasmania-renewable-energy-sustainable-hydropower/>

²⁰² Tasmanian Gas Pipeline (n.d.) *Home*, <https://www.tasmaniangaspipeline.com.au/>

²⁰³ Hydro Tasmania (n.d.) *Gas generation*, <https://www.hydro.com.au/clean-energy/our-power-stations/gas-generation>

TW Power Services (n.d.) *Bell Bay Power Station*, <https://www.twps.com.au/project/bell-bay-power-station/>

²⁰⁴ Coulter (2019) *Coal mining's potential resurgence in Tasmania prompts concerns from farmers*, <https://www.abc.net.au/news/2019-10-10/tasmania-mining-future-raises-farmers-concerns/11590340>;

Minshull et al (2019) *Coal calling: Selling new coal mines to Tasmania*, <https://australiainstitute.org.au/report/coal-calling/>

²⁰⁵ Hardrock Coal Mining (n.d.) *About Us*, <https://hardrockcoal.com/about-us/>

Subsidies for fossil fuels were not identified in the Tasmanian *Budget 2020-21*, but it is likely that some government assistance is still provided for fossil fuel industries, via grants, unrecovered regulation expenses, license management, data provision, geological mapping, etc. Government agencies provide these services to the wider minerals sector, but it is unclear in the Budget Papers whether any assistance to fossil fuels occurred in the latest budget year. These programs are described below, but no funding is included in final subsidy calculations.

MINERAL EXPLORATION – EXPLORER SUPPORT PACKAGE

Assistance for minerals exploration is provided in the *Budget 2020-21* through a support package providing work and license condition exemptions and fee waivers. The package is provided through Mineral Resources Tasmania, which grants exploration licenses for mineral categories including coal, peat, lignite, oil shale, coal seam gas and other petroleum products.²⁰⁶

The Mineral Exploration Explorer Support Package is not costed in the *Budget 2020-21*, but is indicated as an unspecified amount of lost revenue through reduced rental and other fee revenue.

GEOSCIENCE INITIATIVE

The Geoscience Initiative program is funded to increase investment attractiveness through improved geoscience information and reducing the risk of minerals exploration. The Geoscience Initiative allows Minerals Resources Tasmania “to provide new data and refine data sets to underpin the next generation of mineral exploration” and support initiatives that include mine rehabilitation.²⁰⁷ While fossil fuels are included within the scope of Minerals Resources Tasmania this initiative does not specify that coal, gas or petroleum reserves will be targeted for development.

The Geosciences Initiative received \$150,000 funding in the *Budget 2020-21*.

RESOURCES POLICY AND REGULATORY SERVICES - MINERAL RESOURCES

Funding to Mineral Resources Tasmania is for resource identification, data collection, marketing and promotion, mine rehabilitation and royalty, fee and rent collection.

²⁰⁶ Tasmanian Government (n.d.) *Exploration licences / Mineral Resources Tasmania*, https://www.mrt.tas.gov.au/exploration/exploration_licences

²⁰⁷ Tasmanian Government (n.d.) *Tasmanian Budget 2019-20*, http://www.premier.tas.gov.au/budget_2019

Mineral Resources Tasmania assists “existing and prospective mining companies by providing relevant information on the geology and mineral prospectivity of Tasmania...[and] provide a stimulus for a sustainable mining industry”.²⁰⁸

The *Budget 2020-21* funds Mineral Resources Tasmania \$11 million in 2020-21 and \$34 million over four years.

²⁰⁸ Tasmanian Government (n.d.) *Mineral Resources Tasmania*, https://www.mrt.tas.gov.au/about_us

Conclusion

In 2014, The Australia Institute published a report on state government assistance to the broader mining industry, titled *Mining the age of entitlement*.²⁰⁹ The title was a reference to then-Treasurer Joe Hockey's claim that "the age of entitlement was over", made as he prepared the public for the massive service cuts proposed in the 2014 budget. That budget ended Hockey's political career; he was subsequently given a role as Australia's ambassador to the United States, with seemingly no reflection on whether such an appointment reflected a degree of entitlement.

Like many of his predecessors, both Liberal and Labor, over the past 40 years, Hockey's rhetoric was based in market-rationalist rhetoric — and part of this doctrine is that subsidies are necessarily a bad thing. At the time of his speech, the Federal Government of which he was a part made a point of rejecting subsidies for car manufacturers and seemed to relish the subsequent decline of that industry. Hockey rejected calls for assistance from regional food processors.

But as Hockey called on all Australians to do the "heavy lifting", perhaps by paying more to go to the doctor or just forgoing mental health treatment altogether, our report estimated that assistance worth \$18 billion had gone to the mining industry. That industry had just fought against, and defeated, the Rudd/Gillard Government's mining and carbon taxes, and in doing so, had convinced much of Australia —and, seemingly, even itself — that it was a "lifter not a leaner" in the Australian economy. The peak bodies in every state even managed to commission a report claiming that mining and fossil fuels were not subsidised at all in Australia.²¹⁰

Even before the COVID-19 pandemic made major government assistance to industry (and even the unemployed!) palatable, this pretense had been dispensed with. More than anything, it was made untenable by the very public multi-year battle fought by state and federal governments to subsidise Adani. The death knell, perhaps, came when former Resource Minister Matt Canavan said the quiet part very loudly indeed, admitting that "a leg-up from taxpayers helped get all new mining regions off the ground" and that "we'd done it for every other coal basin in the past".²¹¹ Other debates — around fuel tax credits, PRRT exemptions and CCS programs — also dismantled the "no subsidies for fossil fuels"

²⁰⁹ Peel et al (2014) *Mining the age of entitlement: State government assistance to the mining and fossil fuel sector*, <https://australiainstitute.org.au/report/mining-the-age-of-entitlement/>

²¹⁰ Castalia (2014) *Mining the Age of Entitlement? Report Prepared for the Australian Mining and Resources Sector*, No active links found, available on request.

²¹¹ Ludlow (2017) Matt Canavan, a communist turned economist in a bushie's hat, <http://www.afr.com/news/politics/matt-canavan-a-communist-turned-economist-in-a-bushies-hat-20170515-gw4xrg#ixzz4iSEj0ReF>

arguments. Prominent studies from the OECD and IMF also had a significant impact in Australia.

Given this history, it will be interesting to see what response the fossil fuel industry will make to this report. Can they really claim that the gas-fired recovery money is not a subsidy? Can a friendly consultant be found to defend the NT's losses on Blacktip gas, Chevron's non-functioning CCS, Victoria's brown coal plans, the NSW Coal Innovation Fund, and/or the other fossil fuel boondoggles in almost every jurisdiction?

As we were finalising this report, media reports came through of a billion-dollar deal between the Federal and SA governments to "unlock gas supplies" and "invest in practical technologies [like...] carbon capture and storage."²¹² It seems that governments and industry no longer feign ignorance of fossil fuel subsidies; instead, they publicise them, wrapping them in the language of "innovation" and pie-in-the-sky promises of "clean coal" and magical technologies that will absolutely work...one day.

Beneath these trappings, though, fossil fuels are what they have always been: dirty and polluting. Their continued exploitation serves to enrich those with vested interests at the cost of the rest of us: our money, our health, and ultimately, our planet. There is no reason for Australian governments to be tolerating this, let alone subsidising it.

²¹² AAP (2021) *Scott Morrison signs \$1bn deal to shore up energy reliability in South Australia*, <https://www.theguardian.com/australia-news/2021/apr/18/scott-morrison-signs-1bn-energy-deal-to-shore-up-energy-reliability-in-south-australia>