



The cost to Queensland of closing down the coal & gas industries

A report prepared for the Australian Institute for Progress

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Adept Economics

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Contact

Gene Tunny – Director, Adept Economics
76 Brunswick St, Fortitude Valley QLD 4006
AUSTRALIA
e: contact@adepeteconomics.com.au
p: 1300 169 870

About the author

The author of this report is Gene Tunny, Director of Adept Economics, with research assistance provided by Arturo Espinoza Bocangel. Gene is the Founder and Director of Adept Economics. He is also a Director of Reimagine Australia. He is a former Australian Treasury official with experience in domestic and international issues. While at Treasury, Gene developed the program for a G20 workshop on international labour mobility and he also played a role in Australia's response to the global financial crisis, advising on debt policy and cash management. Gene regularly consults to a range of private and public sector clients, including Commonwealth and state government agencies, such as the Asbestos Safety and Eradication Agency (Commonwealth) and the Office of Industrial Relations (Queensland Government). Other recent clients have included the Active Queenslanders Industry Alliance, the Beenleigh Housing Development Company, and Urban Turf Solutions. Gene has a first-class honours degree in economics from the University of Queensland and was a University Medallist. He has also lectured in UQ's School of Economics.

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Key points

- Closing down the coal and gas industries in Queensland would:
 - lower Queensland's Gross State Product (GSP) in the long-run relative to the baseline by 4.2% to 7.3% (\$15 billion to \$27 billion yearly), given mining is a highly productive sector with well-paid workers on average, all else equal; and
 - impose large short-run adjustment costs, particularly on QLD's resource regions, with some regions experiencing unemployment rates of around 40% in a worst case scenario (e.g. 42% in Isaac, 38% in Central Highlands, 26% in Mackay, 26% in Gladstone, 17% in Rockhampton and 10% in Townsville);
 - worsen Australia's balance of trade, exchange rate, and real gross domestic income.
- Coal and CSG/LNG directly contributed \$31 billion to the Queensland economy in 2020-21. They paid approximately \$5 billion in wages to around 39,000 FTE workers and contractors, according to Lawrence Consulting estimates for QRC.
- Coal and gas are major contributors to state and federal budgets and their shutdown would require spending cuts or tax increases to compensate for the revenue losses.
- The loss of coal and gas-related revenues would wipe out future Queensland Government net operating surpluses and would require spending cuts or tax increases to ensure the government was not borrowing just to pay wages and on a path of unsustainable debt accumulation.
- Coal and gas royalties paid to Queensland can range from \$2-8 billion per year depending on commodity prices. The state government also receives over \$200 million in payroll tax, and the federal government receives approx. \$1.4 billion in income tax from coal and gas workers.
- With the loss of \$8.5 billion of revenue from the budget over four years, budget aggregates would deteriorate substantially and Queensland would have no hope of generating operating surpluses in future years. This would necessitate large spending cuts or tax increases for the government to restore the net operating balance to balance or surplus.
- Without coal and gas, total Queensland general government operating deficits over 2022-23 to 2025-26 would be 6 times larger (\$10.8 billion versus \$1.8 billion) and net debt in 2025-26 would be \$9 billion higher (or 23 percent higher).
- Around 15% of Queensland's physical capital stock is in the coal and gas industries, and shutting them down would mean scrapping nearly \$190 billion of currently productive capital.

- Finally, for the foreseeable future, our electricity system will need to rely on coal and gas if we are to avoid power shortfalls which would come at a high cost to households and industry.

1. Introduction

The Australian Institute for Progress has commissioned a report from Adept Economics on the cost to Queensland of closing down the coal and gas industries. Concerns over climate change mean that there are calls for Australia to cease the production of fossil fuels. For instance, Australian Greens policies include 100% renewable energy by 2030, a moratorium on new fossil fuel projects, and ending thermal coal exports by 2030 and coking or metallurgical exports by 2040.¹

The report is focused on the economic implications of closing down the coal and gas industries. This is important information in a policy debate over the future of these industries. It is not a comprehensive cost-benefit analysis of a closure, however. That would need to consider any environmental benefits (i.e. any mitigation of climate change) associated with such a closure. Furthermore, so much is unknown about future technological developments, and the prospects for a hydrogen sector in Queensland, which would need to be incorporated into the analysis. That said, the economic costs of closing down coal and gas would very likely be large and disproportionately felt in some of Queensland's regional economies.

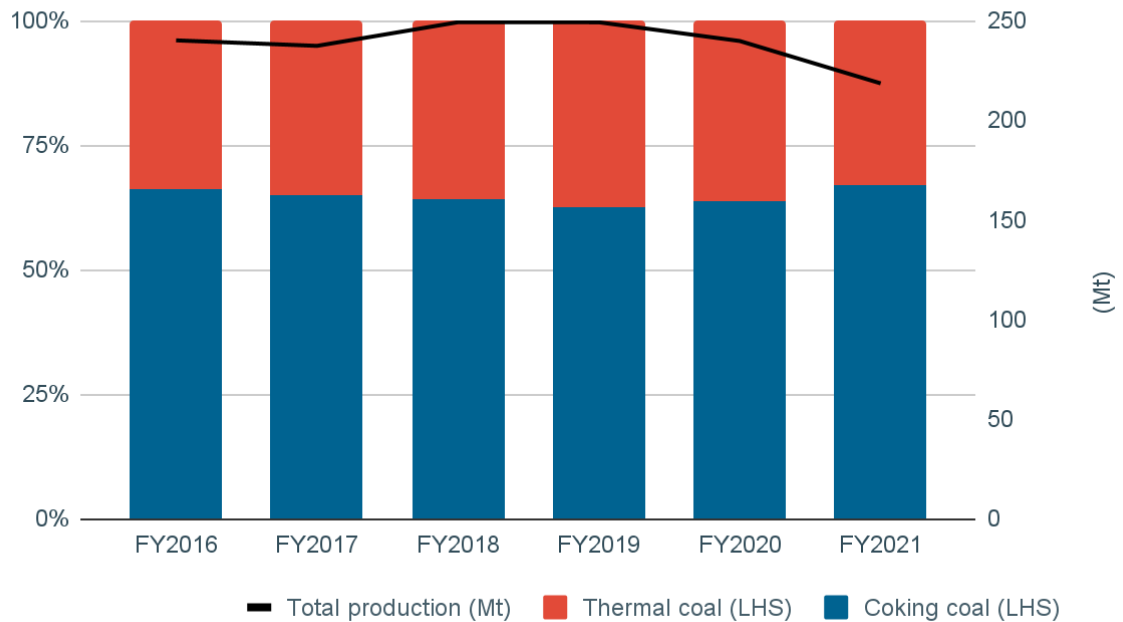
2. Queensland's coal and gas industry

2.1. Coal

Queensland is a major coal producer with 219 million tonnes or mega-tonnes (Mt) produced in 2020-21. The more valuable coking or metallurgical coal, used in steel production, accounts for around two-thirds of production (Figure 1).

¹ See <https://greens.org.au/beyond-coal-gas> and <https://greens.org.au/news/media-release/greens-launch-full-climate-and-energy-plan-powering-past-coal-and-gas-0>

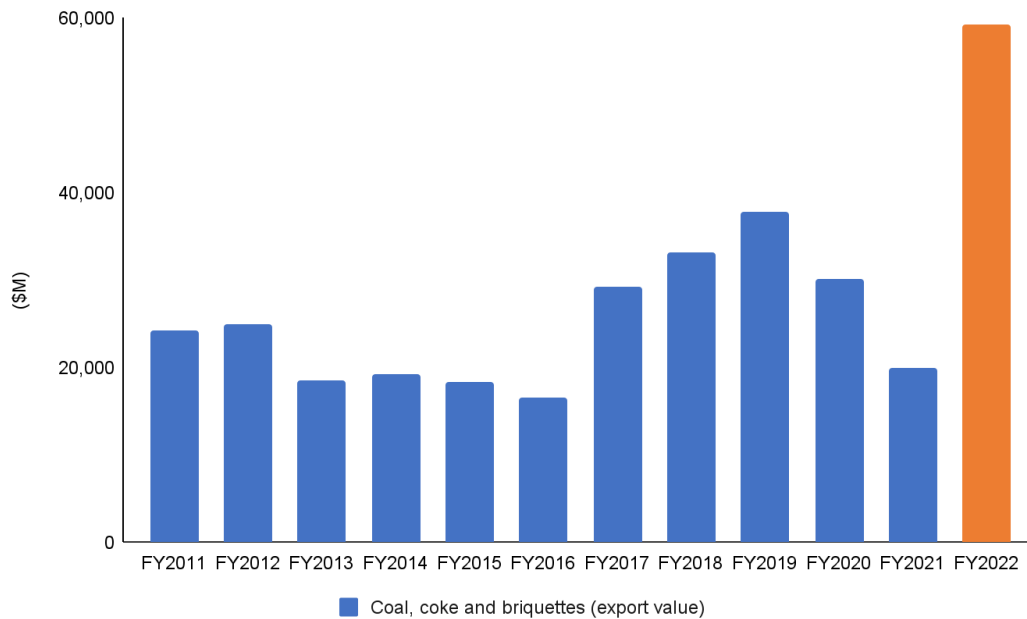
Figure 1. Coal production in Queensland



Source: Queensland Government Department of Resources.

The bulk of Queensland’s coal is exported, generally around 200-230 Mt compared with domestic use, largely for power generation, of 20-30 Mt. The value of our coal exports is determined in the global coal market, and this value can fluctuate widely (Figure 2). Indeed in the twelve months to the end of May 2022, the value of Queensland coal exports was over \$59 billion as a result of super-high commodity prices related to the Russian invasion of Ukraine.

Figure 2. Value of Queensland export coal production (\$ million)



Source: Queensland Treasury. Note: Coal export value for FY2022 is for the 12 months to 31 May 2022 and is sourced from Queensland Government Statistician’s Office.

Queensland coal is largely produced in central Queensland in the Bowen basin, but some production also occurs in Southern Queensland, particularly on the Darling Downs. The location of coal production has implications for where workers are sourced from and where businesses in the supply chain are located. Regional cities such as Mackay have established prominent Mining Equipment Technology and Services (METS) industries.²

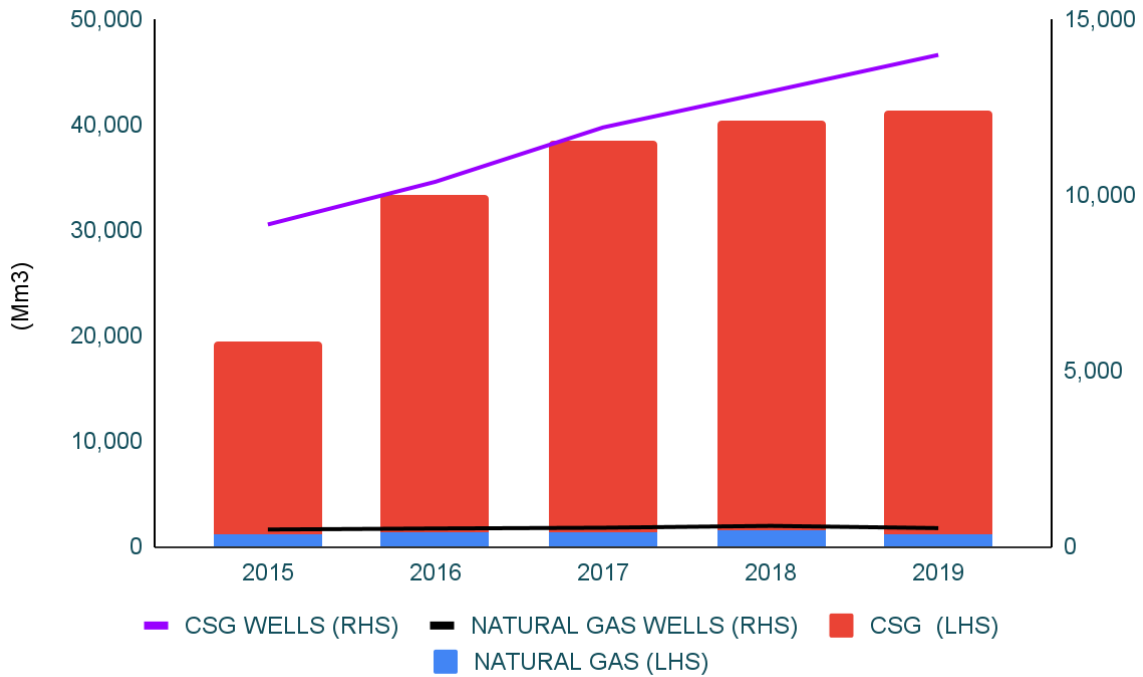
2.2. Gas

Queensland is a major producer of natural gas, much of it liquefied and exported overseas from the terminals at Curtis Island off Gladstone, which have positioned Australia as the world’s number one Liquid Natural Gas (LNG) exporter (Figure 3). This has been enabled by the development of hydraulic fracturing technology which has seen the development of nearly 14,000 coal seam gas (CSG) wells in Queensland. With the liquefaction facilities

² See Lytton Advisory (2020).

having come on line around the middle of last decade there was a big step up in CSG production.

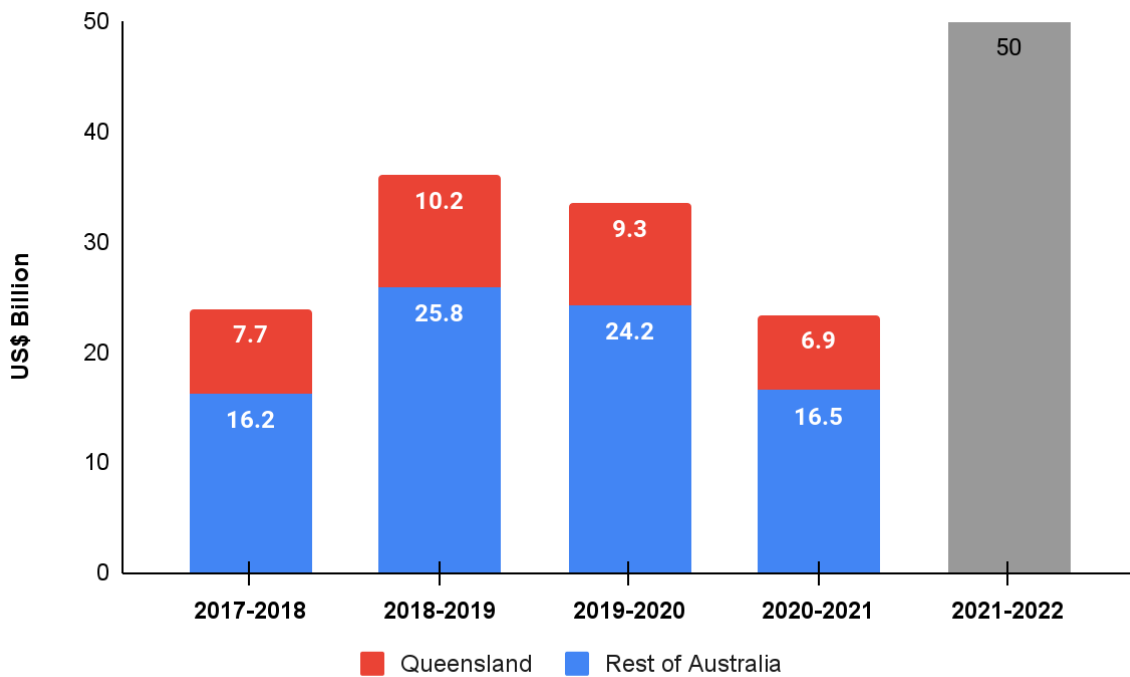
Figure 3. Queensland gas production



Source: Queensland Government Department of Resources.

LNG exports earn billions of dollars of revenue (Figure 4). As with coal, export earnings are dependent on global commodity prices which were super-high in 2021-22 (for which official data on export values are not yet available). Incidentally, the connection of Australia’s east coast gas market to the international market has led to higher gas prices domestically, threatening the viability of some gas-reliant manufacturers. This is an important policy issue, but it is outside the scope of this report to consider this fully.

Figure 4. Value of Australia’s gas exports



Source: Trade Map for Australian LNG trade data. QLD LNG export values were approximated using the total export volume provided by the QLD Department of Transport and Main Roads. Australian LNG exports in 2021-2022 was estimated by Natural Gas World (2022).

2.3. Oil and other petroleum products

Queensland also produces some oil, but it is much less significant than coal and CSG in volume and value terms. Over 2015-2019, Queensland extracted about 453 ML of oil (or only 2.9 million barrels), on average per year (i.e. a bit over \$200 million in value given international oil prices at the time). Australia exported 80% of its total oil production in 2018-19. Australian oil is light and needs to be blended with heavier crude oils to produce refined fuel products. Australian oil exports are mostly processed in the Asian region³.

³ <https://www.ga.gov.au/digital-publication/aecr2021/oil>

3. Economic contribution of coal and gas

Coal and gas are major contributors to Queensland's economy, with value added of approximately \$31 billion or nearly 9% of GSP in 2020-21, according to Lawrence Consulting (2021, p. 12) estimates for the Queensland Resources Council. This figure would be much higher if it were based on the unusually high prices in 2021-22 of course.⁴ The coal and gas industries paid approximately \$5 billion in wages to around 39,000 full-time equivalent (FTE) workers and contractors.

Those direct contribution figures are estimates of direct economic contribution, for businesses and people directly employed in producing coal, gas, and LNG. They do not include the indirect contributions. Indirect contributions or impacts are either:

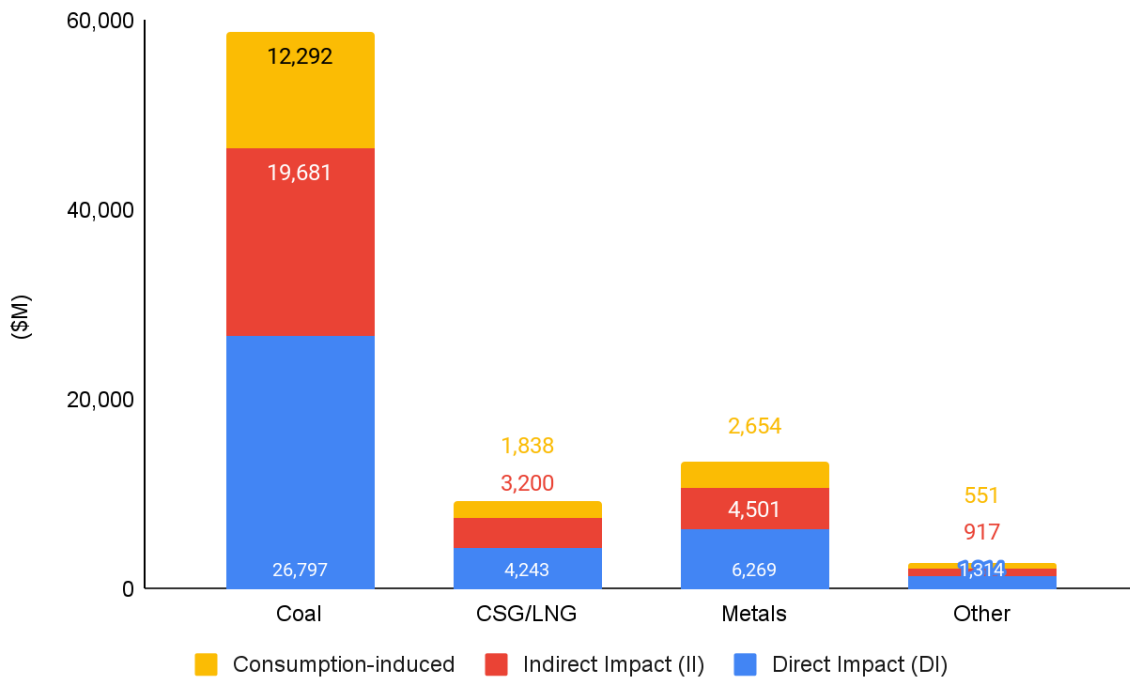
- *Supply-chain related*: because businesses in an industry buys inputs from other businesses in the economy, stimulating production across other industries; or
- *Consumption-induced*: income generated via undertaking the activity directly and in the supply-chain provides income for households which then spend it, encouraging further activity, and so on.

If you take into supply-chain impacts you end up with what are called Type I multiplier effects, and if you include consumption-induced impacts you end up with Type II multiplier effects. Calculating these multipliers relies on Input Output tables detailing inter-industry and final transactions in an economy.

Lawrence Consulting has produced some estimates of indirect impacts, but it needs to be recognised that indirect impacts can be controversial (e.g. see Gretton, 2013). These figures suggest very large contributions from coal and gas to the Queensland economy (i.e. 19% of GSP) if one includes indirect impacts (Figure 5).

⁴ Indeed, the 2022-23 Queensland State Budget reported a Queensland Treasury (2022, p. 60) estimate that Queensland's nominal GSP was 22% higher than the previous year. This was largely due to the impact of coal prices on state exports, one of the components of GSP.

Figure 5. Economic contribution of coal and gas to Queensland economy, 2020-21



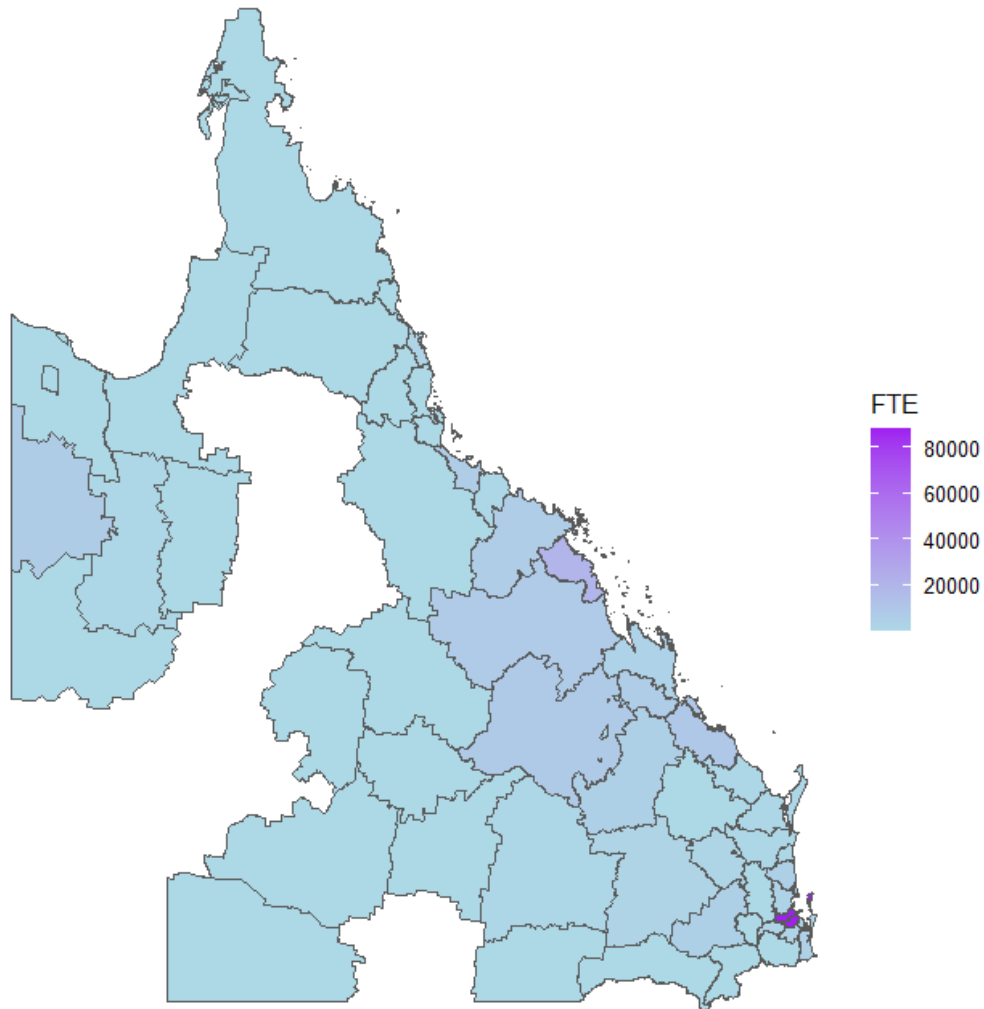
Source: Lawrence Consulting, 2021.

Due to the concerns over the use of IO model estimates, they should be treated as upper bounds of the potential contributions of the sectors rather than as precise impacts. They ignore the fact that resources could be otherwise deployed, and if they shifted out of one sector they could be employed in another. So IO estimates should be used in economic impact analysis with caution.

There are around 31,200 people directly employed (i.e. excluding contractors) in coal and gas in FTE terms. According to Lawrence Consulting’s estimates, there are an additional 173,300 FTEs supported in the supply chain, meaning once the supply-chain impact is accounted for coal and gas support around 204,500 or 8.1% of jobs in Queensland. Jobs are supported across Queensland, both in mining regions and notably in Brisbane, due to the provision of professional and financial services to mining companies (Figure 6).

Figure 6. FTE jobs supported directly or indirectly (via supply-chain) by the resources sector

FTE by QLD LGA (Type I)
QLD minerals and energy sector



Source: Based on Lawrence Consulting, 2021. Source: Lawrence Consulting estimates.

We have no way of verifying Lawrence Consulting’s estimates as they are based on survey data provided by QRC members. Whatever the exact indirect contribution, there is no doubt it is substantial and that a wide range of other industries, including transport, professional services, and construction are participants in the coal and gas value chains. According to Lawrence Consulting (2021, p. 59), Brisbane has the largest total jobs supported directly by Queensland’s resources sector (i.e. principally coal and gas which are 80% of the whole industry in value added and 70% in FTE terms) or via the supply-chain, with 88,000 FTEs supported, representing 13% of total employment. There were six LGAs whose total jobs

supported by the resources sector exceeded 50% of their respective regional employment: Mount Isa (63%), Isaac (59%), Banana (59%), Napranum (58%), Cloncurry (52%), and Central Highlands (51%). Obviously, a shutdown of coal and gas production in Queensland would have very severe consequences for these LGAs, as we estimate in the next section.

4. Economic impact of closing down coal and gas

4.1. Overview of potential economic impacts

In thinking about the economic impact of shutting down coal and gas operations in Queensland, we need to distinguish between the short-run and long-run. In the short-run, the shock of a shutdown would result in unemployed resources, but in the long-run we would expect the economy to adjust (e.g. people would find other jobs, possibly by moving to other areas, and new physical capital would be invested in, etc.).

We do not pretend to undertake a comprehensive economic modelling exercise in this report. Ideally, the impact of a closure of coal and gas operations in Queensland would be assessed using a detailed econometric model which would model the short and long-run responses, and take account of the movement of labour and capital resources to other industries. Such an exercise was outside the scope of this project, but it should be adopted as a priority by Queensland Treasury.

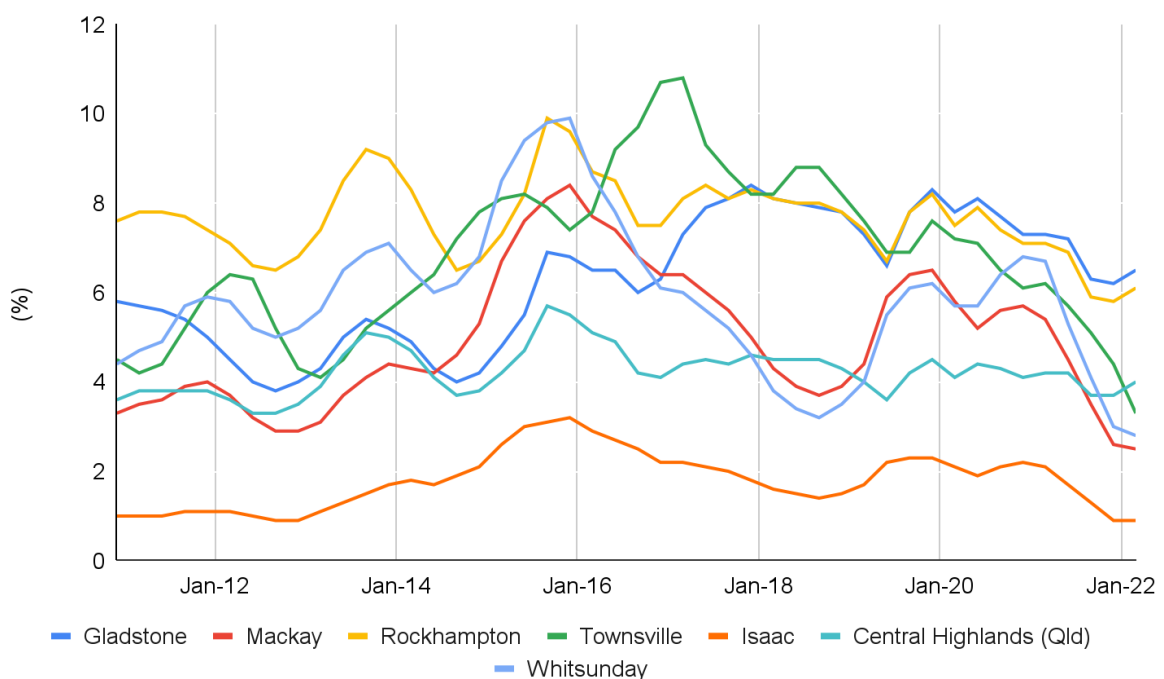
That said, based on available data and research, it is possible to get a sense of the potential economic impacts from a coal and gas shutdown, and this is what we endeavour to do in this section.

4.2. Short-run impacts

The short-run impacts would depend on the pace with which any shutdown occurred. Immediate impacts would include a substantial drop in economic activity and an increase in unemployment in those regions highly dependent on coal and gas mining, either as a source of employment for resident workers or as source of business for resident firms in the supply-chain. The Lawrence Consulting (2021) estimates for QRC we discussed in the previous section are useful in quantifying these impacts, although we should note the multiplier effects need to be viewed with caution (i.e. because some unemployed workers will quickly move to other jobs and some firms will find other customers, possibly interstate or overseas).

A closure of coal and gas operations would be most noticeable in regional unemployment rates. For regional economies disproportionately dependent on the resources sector (e.g. Rockhampton, Mackay, Gladstone, and Townsville), the regional unemployment rate is already heavily influenced by the health of the sector. Consider the increase in unemployment rates that occurred at the end of the early-2010s mining boom in 2013-14 (Figure 7). These regions typically had higher unemployment rates than average for several years after the end of the mining boom.

Figure 7. Regional unemployment rates, selected regions



Source: National Skills Commission Small Area Labour Market estimates.

We can get a sense of the immediate maximum impact on regional unemployment rates by taking Lawrence Consulting estimates of residing regional employment associated with coal and gas and adding it to official small area unemployment figures from the National Skills Commission. This tells us that a coal and gas shutdown would likely have a massive immediate adverse effect on coal-and-gas-dependent regional economies, sending many regional unemployment rates into double digits, depending on the extent to which people can find other jobs, move out of the area, or local business in the supply-chain can find customers in other industries (Table 1). Performing this calculation for the whole state of Queensland gives hypothetical unemployment rates of 6.3% (for direct job losses) and

12.4% for (direct and supply-chain job losses) compared with the June 2021 seasonally adjusted Queensland unemployment rate of 5.2%.

Table 1. Hypothetical unemployment rates if coal and gas were immediately shutdown

Coal and gas intensive LGAs	Unemployed persons			Unemployment rate (%)		
	Actual June 2021	Plus direct job losses	Plus direct & supply chain losses	Actual June 2021	Plus direct job losses	Plus direct & supply chain losses
Gladstone	2,541	4,341	9,187	7.2%	12.3%	26.1%
Mackay	2,983	5,964	17,101	4.5%	8.9%	25.6%
Rockhampton	3,043	3,956	7,599	6.9%	9.0%	17.3%
Townsville	5,856	7,255	10,349	5.7%	7.1%	10.1%
Isaac	222	2,816	5,469	1.7%	21.6%	41.9%
Central Highlands	723	3,023	6,546	4.2%	17.7%	38.3%
Whitsunday	1,158	2,072	5,469	5.3%	9.6%	25.3%

Source: Adept Economics calculations based on Lawrence Consulting (2021) and National Skills Commission Small Area Labour Markets data.

4.3. Long-run impacts

The longer-term impacts (i.e. beyond a few years) of a coal and gas shutdown are much more difficult to assess and would depend on a range of factors including the willingness of people to migrate out regions which have lost jobs, the prospects for other industries (e.g. renewables, hydrogen), etc. We expect the economy will adjust eventually and overall state unemployment will return to what could be considered a natural rate. In the long-run, however, we could see a permanently lower GSP relative to the baseline if we did close coal and gas because mining sector employment is so much more productive than that of other industries, primarily because it is so capital intensive.

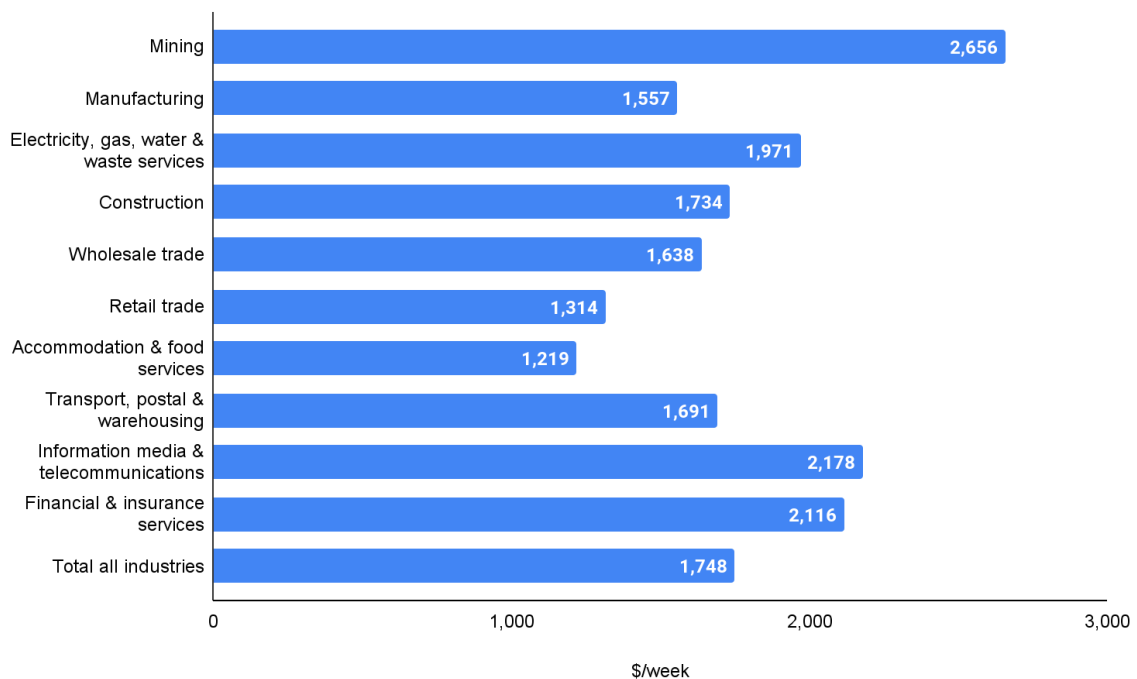
The ABS has produced experimental estimates of Queensland's net capital stock. It estimated the value of the mining sector net capital stock for 2015-16 at \$233 billion (in current prices).⁵ Coal and gas represent around 80% of mining industry value added, so applying this percentage to the net capital stock gives us an estimate of a net capital stock

⁵ This had grown enormously from around \$36 billion at the start of the China-driven mining boom in 2003-04. For the data, see the ABS publication [5220.0.55.005 Emphasising the State perspective: Experimental estimates of State capital stock](#).

for coal and gas of \$186 billion in 2015-16, which represented 15.3% of Queensland’s total physical capital stock.⁶ Incidentally, if we valued this net capital stock in terms of the income it generated, rather than the accumulated capital expenditure (appropriately depreciated), the value of the capital stock would be approximately \$193 billion. This calculation uses a) a net operating surplus estimate of \$16.8 billion for the Queensland coal and gas industry in 2020-21 based on the Lawrence Consulting figures b) a 20-year useful life for coal and gas capital equipment, on average, and c) a real discount rate of 6%.

As a result of the industry’s large capital stock, mining workers are highly productive and earn high wages. Indeed, mining is the highest paid industry in Australia. Mining workers earned \$2,656/week compared with an average of approx. \$1,748/week. That is mining workers earn around 52% more on average than typical workers. If Queensland coal and gas mining workers had to move to average-earning jobs, that would imply a reduction in direct wages and salaries of \$1.7 billion/year (i.e. nearly half of one percent of GSP).

Figure 8. Average weekly earnings by industry, Australia



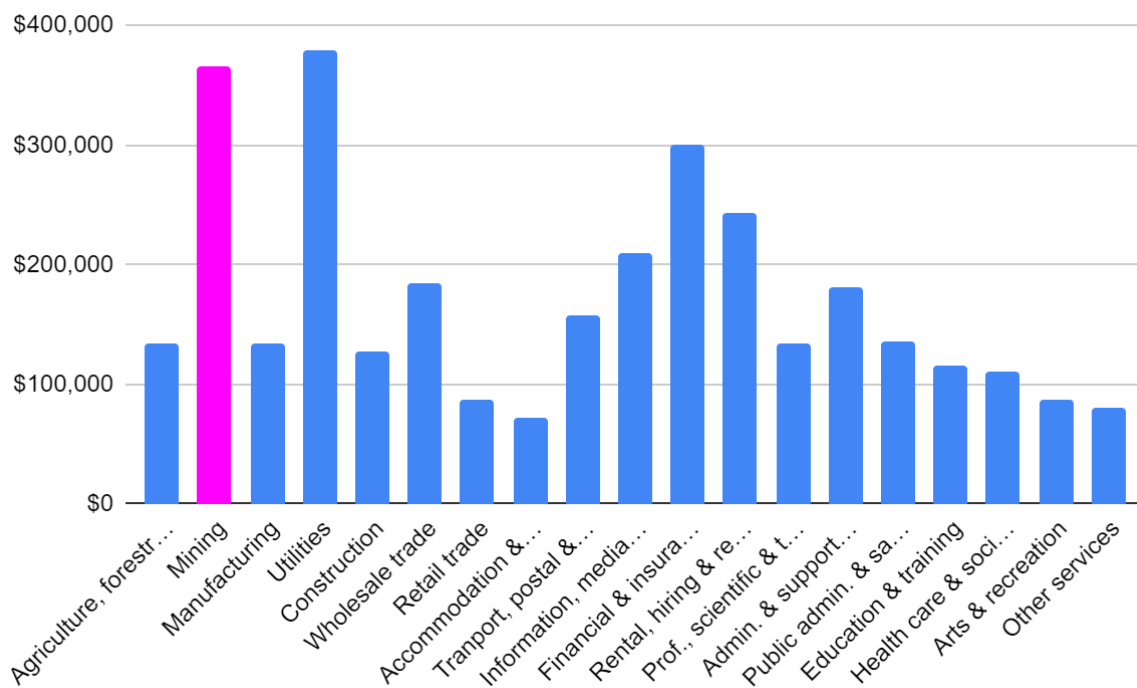
Source: ABS.

Let’s consider the impact on Queensland GSP if mining sector workers had to relocate to other industries. In our simulation, we assume the average mining worker moves to another

⁶ For clarity, this does not include the capital value of coal-fired and gas-fired power generators.

industry and their productivity is now the same as the average of other industries. Depending on the data source, this could result in a permanent reduction (at least until another highly productive industry replaces coal and gas mining) of around 7.3% of GSP or nearly \$27 billion, although that could be considered a worst case scenario.⁷ This calculation is based on the extraordinary productivity per worker estimates suggested by the Lawrence Consulting (2021) estimates of average gross value added per FTE in coal and gas of nearly \$1 million. If we instead use estimates of total Queensland mining sector productivity in the ABS State Accounts we would end up with a smaller but still hefty GSP loss of 4.2% or \$15 billion. This is based on Queensland mining productivity of around \$365,600 per FTE worker compared with the average across all other industries of \$134,300 (Figure 9).

Figure 9. Gross Value Added (GVA) per FTE worker



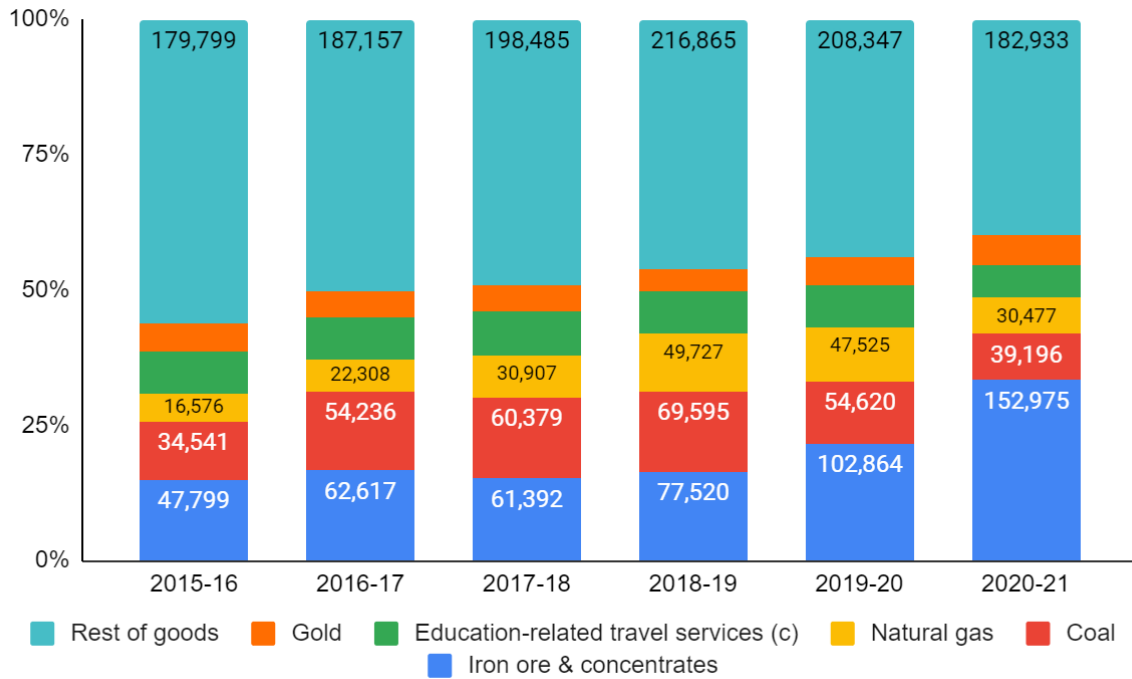
Source: Adept Economics calculations based on ABS State Accounts and Labour Force data. N.B. FTEs estimated by assuming one part-time worker is half an FTE.

Another relevant consideration for community wellbeing is the impact of a coal and gas shutdown on the exchange rate. This is difficult to speculate on, but we know that it would

⁷ Also, in terms of losses to the incomes of Queenslanders, you would need to take into account how much of that GSP and income loss is borne by foreign shareholders in mining companies which we have not done.

permanently worsen Australia’s exchange rate, given the importance of coal and gas to our total exports (Figure 10) and trade balance.

Figure 10. Australian exports by types of goods and services



Source: DFAT based on ABS.

Without coal and gas exports, Australia would have had negative trade balances over the last half of the 2010s instead of positive balances, and trade balances this decade would have been much smaller (Table 2). We acknowledge that the trade balance deterioration may be slightly overstated because, if Australia did stop coal and gas mining, we would no longer need to import capital equipment for the industry, as noted by Quiggin (2020). However, coal-and-gas-related capital goods imports would only be a small fraction of the value of coal and gas exports, and would not reverse the conclusion that stopping coal and gas mining would have a substantial adverse effect on the trade balance.

Table 2. Contribution of coal and gas exports to the trade balance

	2015-16	2016-17	2017-28	2018-19	2019-20	2020-21
Total exports	319,445	373,420	403,047	470,398	475,088	459,239
Coal exports	34,541	54,236	60,379	69,595	54,620	39,196
Natural gas exports	16,576	22,308	30,907	49,727	47,525	30,477
<i>less Imports</i>	<i>357,209</i>	<i>364,432</i>	<i>396,464</i>	<i>421,851</i>	<i>397,276</i>	<i>369,194</i>
Trade balance	-37,764	8,988	6,583	48,547	77,812	90,045
Trade balance excl. coal & gas	-88,881	-67,556	-84,702	-70,776	-24,333	20,372

Source: DFAT based on ABS data.

Since the China-driven mining boom started around 2003-04, the Australian dollar has averaged over 0.80 USD compared with 0.70 USD prior to the boom (Figure 11). As shown above, coal and gas have been important contributors to the export earnings which support the value of the Australian dollar in foreign exchange markets. This means Australians can buy cheaper goods from overseas and can afford to purchase more when they travel overseas, significantly increasing our standard of living. An estimation of the impact of coal and gas on the exchange rate and ultimately real gross domestic income was considered infeasible for this report. It would involve a comprehensive economic modelling exercise.

Figure 11. USD-AUD exchange rate



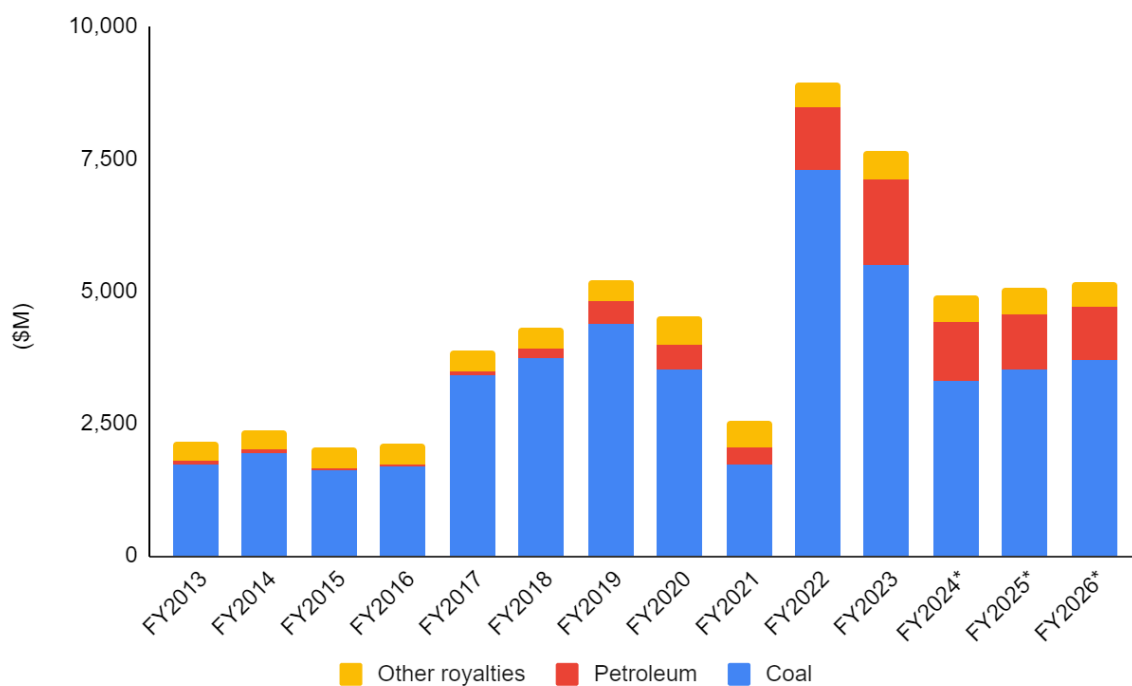
Source: RBA.

5. State budget impact

5.1. Royalty revenue

One of the major beneficiaries of the coal and gas industries in Queensland is the state government. Royalties for coal and gas averaged \$3.7 billion annually over the five years to 2020-21, and in 2021-22, coal and gas royalties amounted to \$8.5 billion (Figure 12).

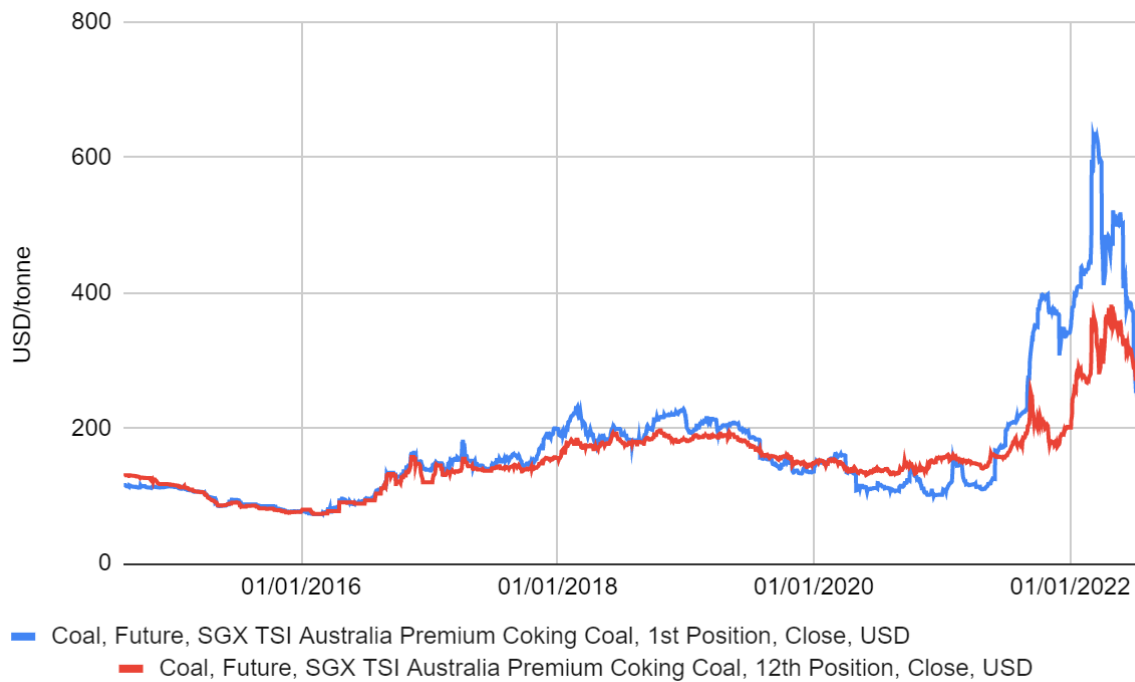
Figure 12. Queensland Government royalty revenue by commodity type



Source: Treasury Queensland. Notes: (*) Budget projections. Petroleum also includes LNG and CSG. Other royalties include base and precious metals and other minerals royalties.

Incidentally, there could be an upside surprise in state government royalty forecasts given coal futures prices remain very high, although they have come off the peaks earlier in the year (Figure 13). The twelve-months' ahead futures price for premium coking coal is currently (as at 21 July 2022) around 280 USD/tonne compared with Queensland Treasury's assumed average over 2022-23 of 206 USD/tonne.

Figure 13. Coal futures prices



Source: Macrobond.

5.2. Payroll tax

Another source of state government revenue is payroll tax. Currently, the Queensland Government levies a payroll tax of 4.75% on businesses with a payroll exceeding the threshold of \$1.3 million and up to \$6.5 million. For employers with larger payrolls, the rate is 4.95%.⁸ It is safe to say the vast majority, if not all, coal and gas miners would be eligible to pay payroll tax. Based on wages and salaries for coal and gas of \$5 billion, and assuming an average payroll tax rate of 4.8%, mining and gas operations in Queensland would contribute \$240 million annually to the state budget in payroll tax. If we consider the supply chain as well, that contribution (based on \$21.2 billion in total wages and salaries), could be up to \$1 billion, although it is probably less than this given proportionately more businesses in the supply chain are likely to be exempt from payroll tax.⁹ Assuming half the wages bill in the

⁸ From 1 January 2023, the state government will apply a new mental health levy on employers with payrolls exceeding \$10 million of 0.25%, jumping up to 0.75% if the payroll exceeds \$100 million. See <https://www.business.qld.gov.au/running-business/employing/payroll-tax/calculating/thresholds>.

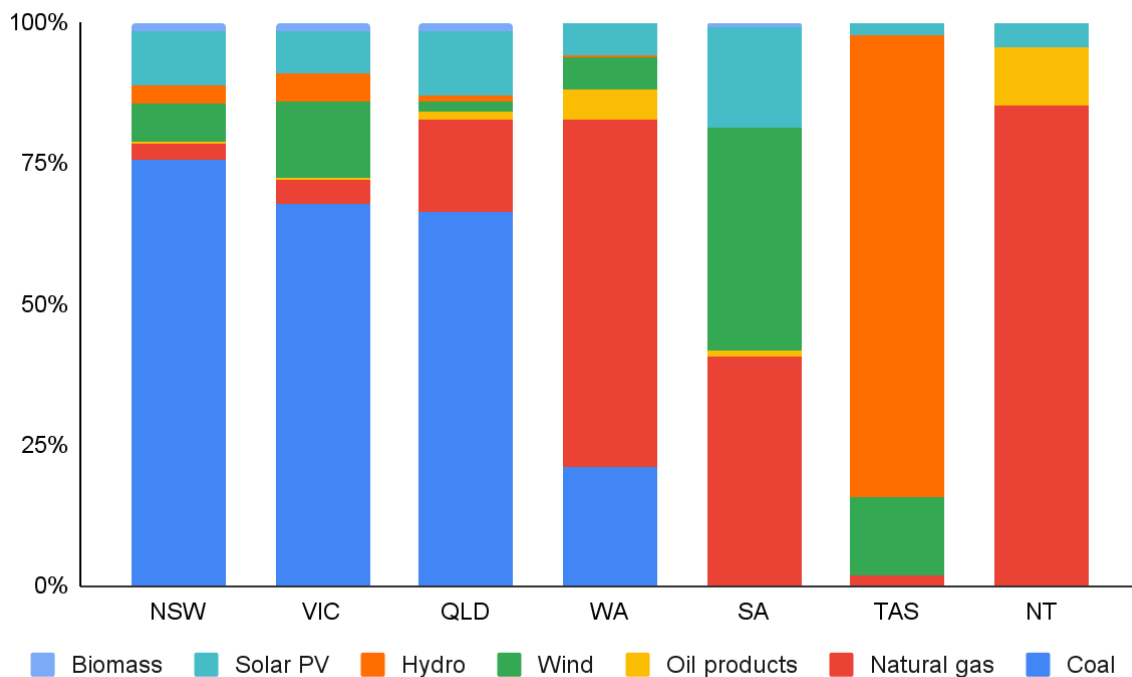
⁹ If we used the consumption-induced wages estimates we would get a much larger number. But, in our view, owing to the controversy over the use of IO multipliers, we believe it is prudent to confine the estimates to the supply chain contributions.

supply-chain are exempt from payroll tax, the shutdown of the coal and gas industries in Queensland would result in a loss of payroll tax revenue of \$630 million.

5.3. Government-owned corporation earnings

The state-government-owned power generators CS Energy and Stanwell own coal-fired and gas-fired power plants across Queensland. One implication of a ban on coal or gas production (and presumably its burning in state power stations) would be a reduction in the earnings of these government-owned corporations (GOCs). Based on available data this cannot be estimated precisely. The energy generators are estimated to bring in around \$500 million in dividends and tax-equivalent payments in 2022-23, rising to over \$700 million in 2023-24 according to state budget estimates. We expect a large share of their earnings are due to coal and gas generation given the heavy reliance Queensland still has on these energy sources (Figure 14).

Figure 14. Australian electricity generation by state and source, 2020



Source: Department of Climate Change, Energy, the Environment and Water.

5.4. Simulated impact on the state budget of a coal and gas shutdown

A shutdown of coal and gas would have a substantial impact on the state budget, largely due to the loss of royalties. Consider the path of Queensland budget deficits and net debt in Table 3 if coal and gas royalties, payroll tax revenues, and energy generation dividends and tax-equivalent payments (largely associated with coal and gas generation) were pulled out of the budget.

Table 3. Simulated Queensland state budget impact of pulling out coal and gas royalties

	2022-23	2023-24	2024-25	2025-26
<i>Current projections</i>				
Net operating balance	-1,029	-1,083	137	183
Fiscal balance	-5,635	-5,631	-5,008	-3,969
Borrowings with QTC	58,853	66,415	73,338	80,622
Net debt	19,772	27,603	33,667	39,214
<i>Without coal and gas royalties</i>				
Net operating balance	-3,614	-3,430	-1,931	-1,845
Fiscal balance	-8,220	-7,978	-7,076	-5,997
Borrowings with QTC	61,438	71,347	80,337	89,650
Net debt	22,357	32,535	40,666	48,242

Source: Adept Economics calculations based on Queensland Treasury budget estimates. For these calculations Queensland's long-run share of the royalty revenues it keeps after Horizontal Fiscal Equalisation is assumed to be 20.43% (Queensland's population share in December 2021). We have also modelled additional public debt interest by assuming average borrowing costs for additional borrowing of 4% (just below 22 July 2022 NSW Government ten-year bond rate reported by the RBA, a similar rate to what QTC would borrow at).

Note the budgetary pain from the loss of coal and gas royalties would be shared over time with other states which currently are sharing in them via the horizontal fiscal equalisation process overseen by the Commonwealth Grants Commission.¹⁰ We have modelled this in a

¹⁰ The redistribution of state royalty revenue was recognised by QRC Chief Executive Ian Macfarlane in his commentary on the recent royalty rate hike in Queensland: "What the government also isn't

straightforward way (i.e. assuming Queensland's royalty revenue loss is 20% of the total) and have not attempted to estimate precisely what it would mean in any specific year, which would be challenging given the Grants Commission's complex methodology for revenue redistribution among states. With the loss of \$8.5 billion from the budget over four years, budget aggregates would deteriorate substantially and Queensland would have no hope of generating operating surpluses in future years. This would necessitate large spending cuts or tax increases for the government to restore the net operating balance to balance or surplus. Without coal and gas, total Queensland general government operating deficits over 2022-23 to 2025-26 would be 6 times larger (\$10.8 billion versus \$1.8 billion) and net debt in 2025-26 would be \$9 billion higher (or 23 percent higher).

6. Conclusions

Closing down Queensland's coal and gas industries would bring large costs to Queensland, including to taxpayers here and in other states (via the loss of revenue which would be redistributed by the Grants Commission). It remains to be seen whether state government plans to replace fossil fuel industry jobs with renewable and hydrogen jobs will be successful. The analysis presented in this report is not to cast judgement on the case for decarbonisation or achieving net zero by 2050, but, for the time being, we need to tread cautiously regarding the coal and gas industries given their importance to Queensland's economy and regions.

telling people is that because of the GST equalisation process, 80 percent of the extra royalties raised will be redirected to Canberra over the next five years anyway." See <https://www.qrc.org.au/media-releases/qld-govt-imposes-worlds-highest-royalty-taxes-on-resources-sector/>.

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