

The Extraordinarily Profitable Gas Market Should Bring Billions More Royalties for Queenslanders

Aligning the Gas Royalty Structure With Coal's Would Maximise Return

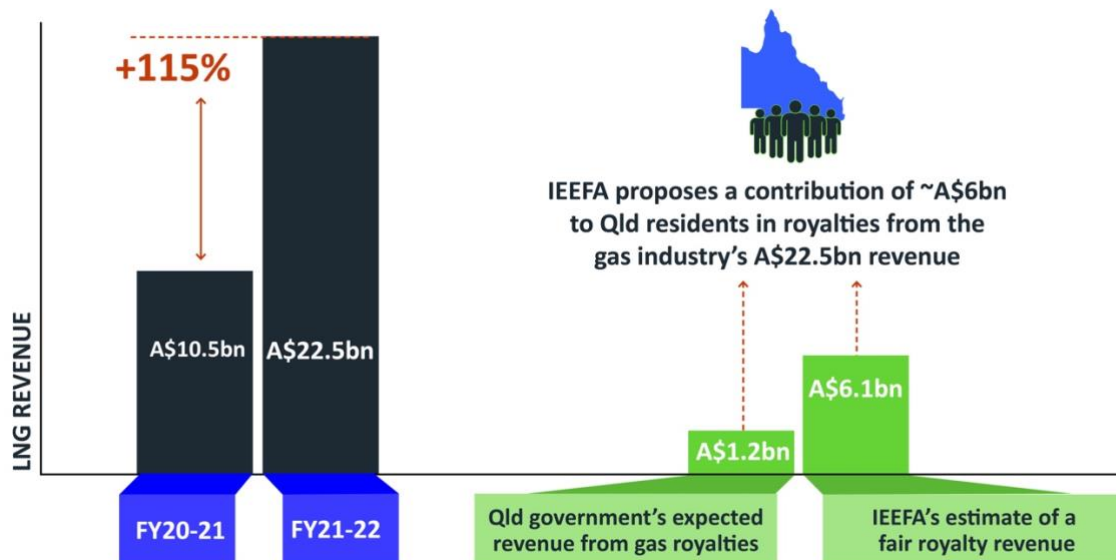
Overview

With recent record prices for coal, the Queensland government in Australia introduced a new royalty scheme to garner some of the windfall profits from the industry.

The gas industry has experienced similar windfall profits to the coal industry. However, the Queensland government hasn't reformed its royalty structure accordingly to take account of windfall profits in the gas and liquefied natural gas (LNG) industries.

IEEFA estimates that the Queensland government will gain nearly A\$5 billion in extra royalty revenue annually from the gas/LNG industry if it adopts a similar royalty scheme as designed for the coal industry.

Queensland's LNG Plants' Windfall Gain



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The Queensland government may wish to increase petroleum (gas) royalties in line with those of the coal industry or, alternatively, leave it to the Federal government to introduce an LNG export windfall profit tax.

In either case, there is substantial revenue to be gained from the LNG/gas industry in these times of stretched Federal and State budgets.

Queensland Government Wants a Fair Share From the Extraordinary Profit-Making Coal Industry

In response to the current energy and fiscal crisis in Queensland, the State government recently introduced a new graduated royalty rate structure for the coal industry.¹ From the beginning of Australia's financial year in July 2022, the State's share of the coal industry's windfall gains will substantially increase when coal prices are extraordinarily high, such as in the current market.

According to the new royalty structure, in financial year (FY)2022-2023, the coal industry will pay 7% of its revenues to the Queensland government in royalties when the price is less than A\$100/tonne, and for prices over that, it will progress via six tiers (see Table 1) up to 40% for prices exceeding A\$300/tonne.^{2,3}

Table 1: Queensland Coal Royalty Structure FY2022-2023⁴

1	Up to and including A\$100 – 7% of value	Thermal coal	Rate	\$/t	%
2	Over \$100 and up to and including \$150 <ul style="list-style-type: none"> • First \$100 – 7% of value • Balance – 15% of value 	Current price US\$/t		386.00	
		AUD/USD		0.71	
		Current price A\$/t		543.66	
QLD Coal Royalty					
3	Over \$150 and up to and including \$175 <ul style="list-style-type: none"> • Balance – 15% of value 	First \$100	7.0%	7.00	5%
4	Over \$175 and up to and including \$225 <ul style="list-style-type: none"> • Balance – 20% of value 	Next \$50	12.5%	6.25	4%
5	Over \$225 and up to and including \$300 <ul style="list-style-type: none"> • Balance – 30% of value 	Next \$25	15.0%	3.75	3%
		Next \$50	20.0%	10.00	7%
6	Over \$300 <ul style="list-style-type: none"> • Balance – 40% of value 	Next \$75	30.0%	22.50	15%
		Beyond \$300	40.0%	97.46	66%
		Total Royalty	27.0%	146.96	100%

Source: *Queensland Government Budget 2022-23 – Budget Paper No. 2. Page 104, Tim Buckley, Renew Economy, June 2022.*

¹ The Queensland Cabinet and Ministerial Directory. [New progressive royalties for record Queensland coal prices](#). June 2022.

² Queensland Budget 2022-23. [Budget Strategy and Outlook, Budget Paper No.2. Page 86.](#)

³ Essentially, compared to the previous royalty scheme, the new scheme has three additional tiers associated with high prices.

⁴ Renew Economy. [Coal royalties: Queensland wins where NSW's renewable energy superstar fears to tread](#). June 2022.

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At the June 2022 price of more than A\$543/tonne for coal⁵, Queensland Treasurer Cameron Dick's "progressive new royalty scheme"⁶ means that the government would have taken about 27% of the revenue made by the coal industry in FY2021-22 if the scheme had been in place (Table 1).

This substantial change has come after the 10-year freeze on Queensland's coal royalty structure expired in June 2022.⁷

Why Is Such a Royalty Structure Fair?

Such a dynamic and graduated structure, as laid out in the new royalty structure Queensland is putting into place for coal, seems fair. High royalties will apply only in extraordinary boom periods, such as at present. They will return to just A\$7/tonne when coal prices ease. In context, including current prices, the coal market has only twice recorded average prices above A\$300/tonne for coking coal (Figure 1).

It is also important to note that coal companies have enjoyed a long period of stability in terms of royalties, with no changes to royalty rates or price tiers in Queensland since October 2012, despite some significant price spikes during that time.

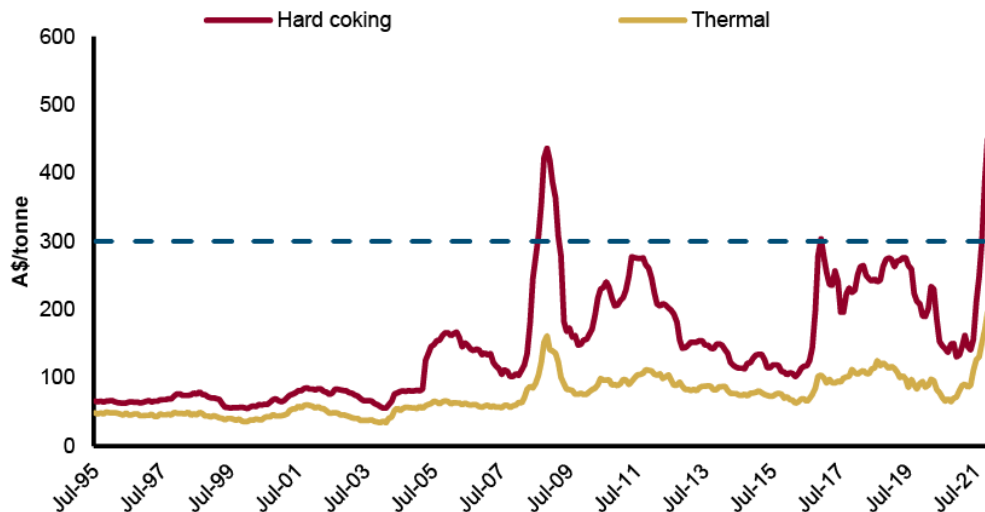
Coal companies have enjoyed a long period of stability in terms of royalties in Queensland.

⁵ Renew Economy. [Coal royalties: Queensland wins where NSW's renewable energy superstar fears to tread](#). June 2022.

⁶ ABC. [Queensland budget handed down by Treasurer Cameron Dick, health the big winner with coal royalties increasing](#). June 2022.

⁷ The Guardian. [Coal royalties set to change in Queensland after 10-year freeze](#). June 2022.

Figure 1: Historical Average Coal Prices (1995-2021)



Source: Queensland Budget 2022-23, *Budget Strategy and Outlook, Budget Paper No.2.*

The Queensland Government’s Budget Strategy and Outlook 2022-23 states these changes are “To ensure that during future periods of high coal prices the royalty return to the state is appropriate in line with the usage of the state’s valuable natural resources and to ensure that all Queenslanders receive a fair and appropriate return on the state’s limited natural resources”.⁸

Queensland Could Impose an Ambitious Royalty Scheme on the Gas Industry, Which Is Also Experiencing an Exceptional Boom

The inflationary effects of the economic rebound from the COVID-19 pandemic, and the upheaval of Russia’s invasion of Ukraine, have created exceptional profits for the gas/LNG industry.

The Queensland government’s estimate of petroleum (gas) royalties has considerably increased for FY2021-22, but it is still far from what could be considered a “fair” share.

Looking back, the Queensland government has regularly overestimated the expected petroleum (gas) royalty revenues from the gas industry in the state. In turn, the gas industry has consistently spruiked its ability to pay taxes and royalties, and yet failed to deliver.

⁸ Queensland Budget 2022-23. *Budget Strategy and Outlook, Budget Paper No.2.* Pages 64 & 86.

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Catherine Tanner, Chief Executive Officer of BG Group, the developer of the Queensland Curtis LNG (QCLNG) project now owned by Shell, stated in October 2010: "We also expect to pay about \$1 billion a year in federal taxes and a further \$300 million or so each year in royalties to the Queensland government."⁹

The three export LNG plants at Gladstone in Queensland – Gladstone LNG (GLNG), Australia Pacific LNG (APLNG) and Queensland Curtis LNG (QCLNG) – started production between December 2014 and October 2016.¹⁰

The FY2014-15 Queensland budget expected petroleum (gas) royalties to rise from A\$68 million in 2013-2014 to A\$660 million by 2016-2017 due to the boom in coal seam gas (CSG).¹¹ The resultant royalties however were a fraction of that, at just A\$98 million in 2016-17.¹²

For FY2020-21¹³, petroleum (gas) royalties were initially forecast to be A\$620 million, yet the eventual royalties were just A\$298 million. (See the red-annotated figures in Tables 2 and 3.)

Table 2: Actual and Estimated Queensland Royalty Revenue in Budget 2019-2020

	2017-18 Actual \$ million	2018-19 Est. Act. \$ million	2019-20 Budget \$ million	2020-21 Projection \$ million	2021-22 Projection \$ million	2022-23 Projection \$ million
Coal	3,737	4,363	4,339	3,461	3,468	3,604
Petroleum ²	187	450	577	620	638	630
Other royalties ³	372	389	538	520	522	510
Land rents	162	163	168	169	172	174
Total royalties and land rents	4,457	5,364	5,621	4,770	4,799	4,918
Notes:						
1. Numbers may not add due to rounding.						
2. Includes impact of liquefied natural gas (LNG).						
3. Includes base and precious metals.						

Source: Queensland State Budget 2018-19. *Budget Strategy and Outlook. Budget paper No. 2.*

⁹ News Ltd. *BG Group announces \$15bn LNG project.* 31 October 2010.

¹⁰ IEEFA. *Australia's Export LNG Plants at Gladstone: The Risks Mount.* June 2017.

¹¹ Queensland State Budget 2014-15. *Budget Strategy and Outlook. Budget paper No. 2.* Page 176.

¹² Queensland State Budget 2018-19. *Budget Strategy and Outlook. Budget paper No. 2.* Page 181.

¹³ Queensland Budget 2022-23. *Budget Strategy and Outlook, Budget Paper No.2.* Page 86.

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Table 3: Actual and Estimated Queensland Royalty Revenue in Budget 2022-23¹⁴

	2020-21 Actual \$ million	2021-22 Est. Act. \$ million	2022-23 Budget \$ million	2023-24 Projection \$ million	2024-25 Projection \$ million	2025-26 Projection \$ million
Coal	1,740	7,290	5,480	3,297	3,539	3,699
Petroleum ²	298	1,185	1,626	1,116	1,025	996
Other royalties ³	499	483	538	505	488	494
Land rents	126	176	190	193	198	203
Total royalties and land rents	2,662	9,135	7,832	5,112	5,251	5,392
Notes:						
1. Numbers may not add due to rounding.						
2. Includes impact of liquefied natural gas (LNG).						
3. Includes base and precious metal and other mineral royalties.						

Source: Queensland Budget 2022-23, *Budget Strategy and Outlook, Budget Paper No.2.*

Formerly, Queensland measured royalties at 12.5% of the determined “wellhead value”. The government calculated this by determining the monetary amount the petroleum (or gas) could earn if sold on a commercial basis, less permitted deductions. Historically, realised royalty revenues showed the inefficiency of this method.¹⁵

The Working Group delivering the Queensland Petroleum Royalty Review, set up to “ensure greater certainty and equity for all parties and to identify opportunities to simplify the current royalty regime”¹⁶, recommended alternative royalty calculation models in reports tabled in December 2019 and February 2020. From these, and after consultation with industry partners,¹⁷ the government chose the “Volume Model” as its preferred royalty calculation method.

From 1 October 2020, the volume of petroleum (gas) products produced formed the basis for Queensland’s petroleum (gas) royalties. As a result of these changes, and based on the volume of gas produced in the last financial year, the estimated petroleum (gas) royalty revenue jumped to A\$1.185 billion in Budget 2022-23 (see the yellow-annotated figure in Table 3).

This is a considerable increase compared to historical royalty revenue, but the figure could be almost A\$5 billion higher, as discussed in this report.

¹⁴ Queensland Budget 2022-23, *Budget Strategy and Outlook, Budget Paper No.2.* Page 103.

¹⁵ Allens Linklaters. *Major changes to Queensland petroleum royalties scheme.* June 2020.

¹⁶ Queensland Treasury. *Queensland Petroleum Royalty Review.* June 2020.

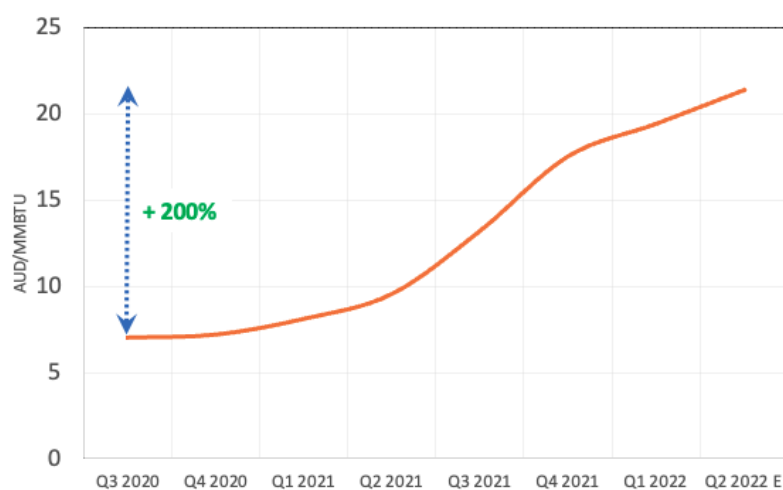
¹⁷ Allens Linklaters. *Major changes to Queensland petroleum royalties scheme.* June 2020.

Gas Prices Are at Record Highs and Queensland's LNG Plants Have Record Revenues

Skyrocketing gas prices are evidence that the Queensland gas industry is reaping extraordinary benefits. Figure 2 demonstrates how gas prices have jumped about three times since the beginning of FY2020-2021.

The near tripling of gas price growth in the past two financial years, from about A\$7/metric million British thermal units (mmBtu) to A\$21/mmBtu, is unprecedented and reflects the extraordinary market conditions.

Figure 2: Average LNG Price FY2020-21 to FY2021-22 in Queensland LNG Plants ^{18, 19}



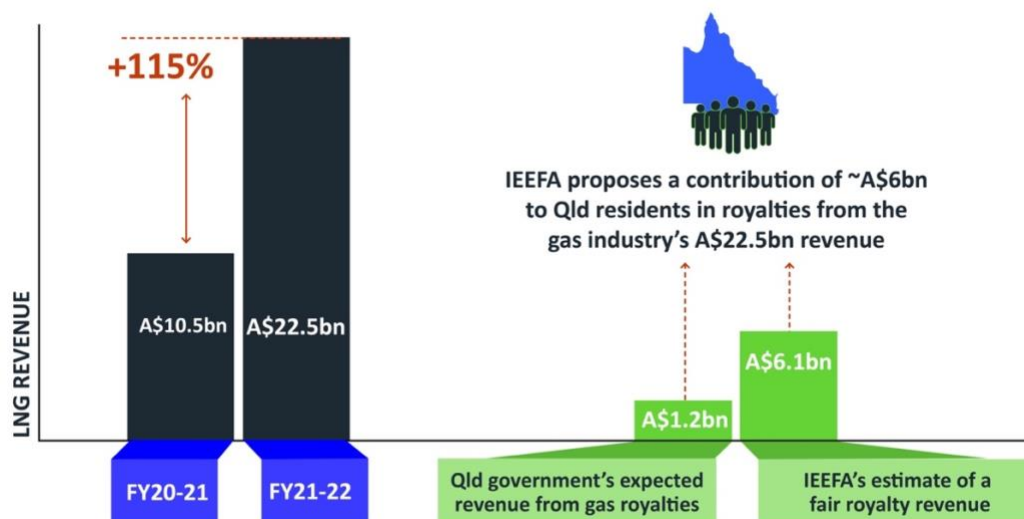
Sources: Quarterly Reports of Santos and Origin Energy (during FY2020-21 and FY2021-22), IEEFA Analysis, Reserve Bank of Australia (RBA), Bulletin of March Quarter 2015.

IEEFA estimates that all three Gladstone LNG plants – GLNG, APLNG, and QCLNG – have at least doubled their revenue in FY2021-2022. As depicted in Figure 3, the estimated increase in revenue of these three LNG exporters was about 115% year-on-year, from roughly A\$10.5 billion in FY2020-21 to nearly A\$22.5 billion in FY2021-22.

¹⁸ The prices are predominantly estimated based on the quarterly reports of Origin Energy and Santos. More than 90% of the capacity of the three LNG plants at Gladstone is used to fulfil long-term contracts, and a small proportion of the produced gas is sold on the spot market, or flows into the domestic market. The Asia spot price has increased by more than 1200% in the same period, according to IHS Markit data. As the largest proportion of the produced LNG has been sold under contracts with oil-linked prices, the average realised price for Queensland exporters has increased by 200%.

¹⁹ Price for the Q2 2022 (Q2/2022 e) has been estimated based on RBA formula in RBA Bulletin of March Quarter 2015 with the slope of 0.135 to the oil price and the U\$0.75/mmBtu transport cost.

Figure 3: Queensland's LNG Plants' Windfall Gain



Source: Quarterly Reports of Santos and Origin Energy (During FY2020-21 and FY2021-22), IEEFA Analysis, RBA Bulletin of March Quarter 2015. RBA Exchange Rates. IHS Markit LNG Analytics.

What Happens if the Queensland Government Treats Gas and Coal Equally?

In situations like the current extraordinary market, the Queensland government's revised structure would seek more than a quarter of the coal industry's revenue in royalties. Considering that as a rough benchmark, if the government placed a similar royalty structure on gas, it would translate to revenue for Queensland of A\$6.1 billion in FY2021-22.

The gas industry has different specifications compared to coal that need consideration while designing a new graduated royalty scheme. Still, A\$6.1 billion, which is 27% of the gas industry's windfall revenue, seems a fair share that the industry should pay to increase the health and wellbeing of Queenslanders, and for services and infrastructure.

On levying increased royalties for coal and the royalty revenue, Queensland Treasurer Cameron Dick stated:

*"Importantly, we will be investing all of this money, and more, in delivering better infrastructure for regional Queensland... These changes will mean more money to regional Queensland, instead of flowing interstate or overseas as windfall profits."*²⁰

²⁰ The Queensland Cabinet and Ministerial Directory, [New progressive royalties for record Queensland coal prices](#). June 2022.

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If paying royalties on windfall profits for coal companies in Queensland is considered a good concept, why shouldn't the gas industry pay the same?

According to the Budget Strategy and Outlook 2022-23, the petroleum (gas) royalty is expected to be A\$1.185 billion for FY2021-22 (see Table 4). As discussed, from a historical perspective, this is a huge jump compared to A\$298 million in the previous financial year. However, it is nearly A\$5 billion less than the A\$6.1 billion that the Queensland government could have if it had in place a more ambitious and realistic petroleum (gas) royalty structure for FY2021-22.

Table 4: Royalties and Land rents in Queensland 2022-23 Budget ²¹

	2020-21 Actual \$ million	2021-22 Est. Act. \$ million	2022-23 Budget \$ million	2023-24 Projection \$ million	2024-25 Projection \$ million	2025-26 Projection \$ million
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Source: Queensland Budget 2022-23, *Budget Strategy and Outlook, Budget Paper No.2*.

Conclusion

The three LNG plants in Queensland are making unprecedented profits, thanks to the current energy crisis and soaring energy and commodity prices. They should share the rewards from extracting the state's limited and non-renewable natural resources with its residents.

Interest rates, fuel and other living costs are rising across Australia. In Queensland, the government is earmarking about a quarter of the coal industry's revenue from such an extraordinary booming market to benefit the state's consumers in the industry, power and residential sectors. The yield will improve infrastructure and wellbeing and could also smooth the bumpy road of the energy transition in the current energy market chaos.

An abiding question is why, when the market is hyperinflated, the state does not design a more ambitious petroleum (gas) royalty structure as it has done for coal. IEEFA estimates (using companies' disclosures) that there has been an unprecedented near-tripling of LNG prices since the beginning of FY2020-2021 for the three Queensland plants, and A\$12 billion in additional revenue in the last

²¹ Queensland Budget 2022-23. *Budget Strategy and Outlook, Budget Paper No.2*. Page 103.

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financial year. These figures suggest that a similar major revision in the state's petroleum (gas) royalty structure should be called for.

IEEFA estimates that if the Queensland government had revised its royalty structure for financial year 2021-22, it could have delivered A\$6.1 billion in royalty revenue just from the gas industry. This would be about A\$5 billion more than the Queensland government's current petroleum (gas) royalty revenue estimates for the same financial year.

In not revising its gas royalty structure, the Queensland government is essentially forgoing this money that could deliver game-changing relief for the state's current financial and energy crisis.

There are different ways to tax the fossil industry fairly on its windfall profits. Revising the petroleum (gas) royalty structure is one of them.

There are different ways to tax the fossil industry fairly on its windfall profits.

The windfall debate is not limited to Australia but applies to all fossil fuel exporting nations. For example, in April 2022, the Indonesian government raised the royalty rate for coal miners from a single tariff of 13.5% to a range, rising from 14% to 28%, based on coal benchmark prices.²² In May 2022, the UK imposed a windfall tax of 25% on oil and gas industry profits.²³

Among the latest proposed alternatives in Australia was Dr Ken Henry's gas export tax, asking for up to 100% of the windfall profits of gas exporters.²⁴

The Queensland government may seek a fair share of the gas industry's windfall profits or leave it to the Federal government to tax the exporters. Either way, this is a prime opportunity to have the fossil fuel industry contribute to alleviating the economic and financial pressure on Australian taxpayers.

A further consideration is the non-renewable aspect of gas exports. Australia will only export gas until it runs out. There is a finite amount of gas underground in Australia. It is time to utilise part of the increased coal and potentially petroleum (gas) royalties for a sovereign wealth fund.

Given the recent inflated revenue figures, it is fair to expect the multi-billion-dollar gas industry companies to pay almost the same share of their revenue as a typical Australian citizen's income tax.

²² Mining.Com. [Indonesia raises coal royalty rate to range of 14% to 28%](#). April 2022.

²³ KPMG. [UK Government announces 'windfall tax' on extraordinary oil and gas profits](#). May 2022.

²⁴ ABC. [Gas export tax would help to fix Australia's energy crisis, says Dr Ken Henry](#). June 2022.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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