Analysis

15 September 2026

Everything new is old again: Woodside's Browse Gas project under our climate pollution laws

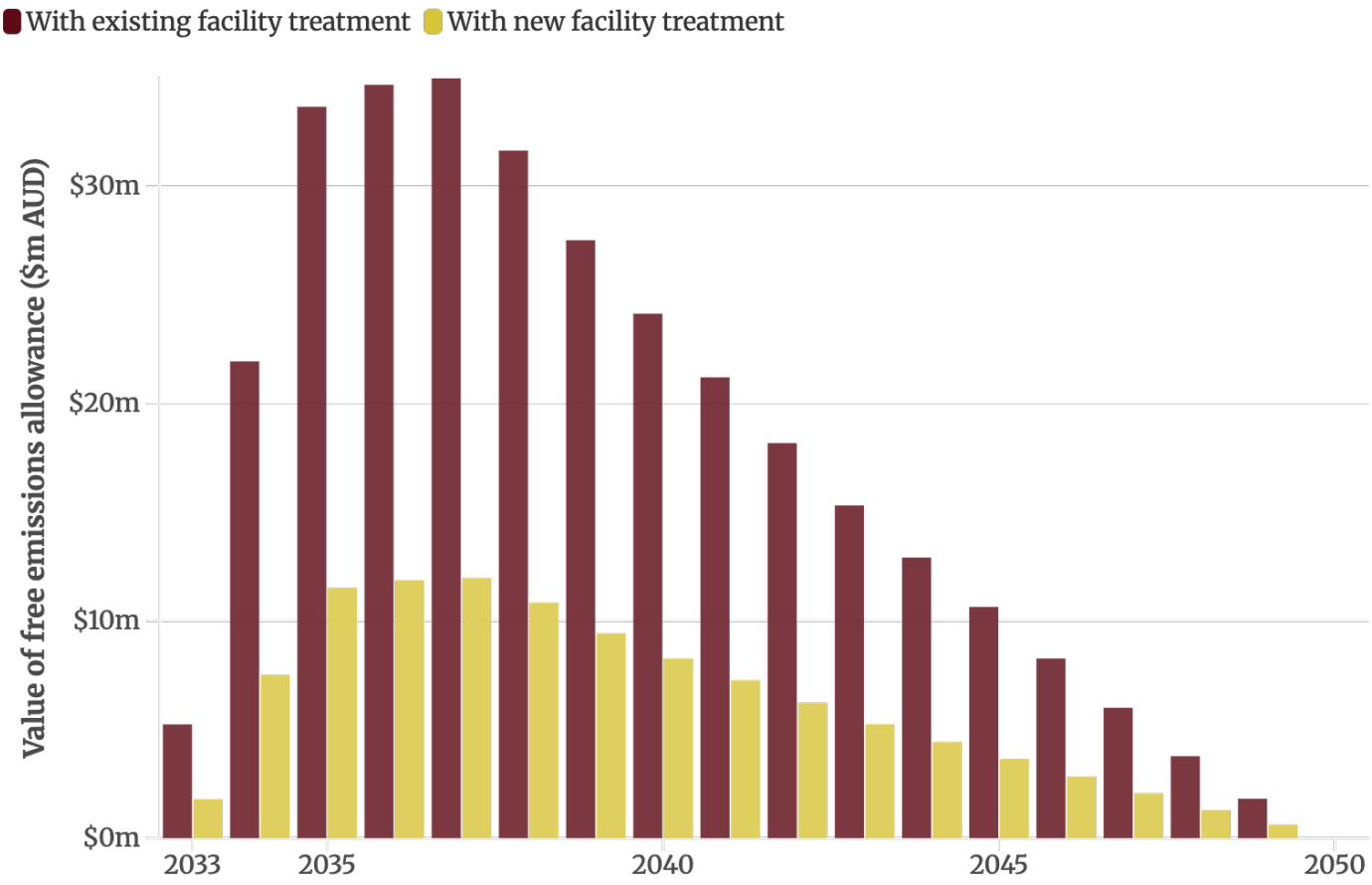
Key Points

- **Australia's climate pollution laws do not manage most of the Browse gas project's climate pollution.** Development of Browse Basin will result in up to 1.6 billion tonnes of climate pollution. More than 80% of these are untouched by Australia's climate pollution laws as they ignore the end use of Australia's exported fossil fuels.
- **Woodside's Browse gas project is the largest new fossil fuel project under development in Australia.** The scale of climate pollution from the project will make it one of the country's largest industrial polluters. In an average year, emissions just from extracting and processing the fossil fuels produced in Browse Basin will be equivalent to Qantas and Virgin's entire domestic air fleets combined. Peak years will be higher still.
- **The laws holding new facilities to more onerous emissions allowances were put in place precisely to manage the impact of mega-projects like Browse, but these rules have been incompetently made and applied.** Most fossil fuel projects currently seeking approval can avoid being deemed new by claiming to be part of an existing facility, often on tenuous grounds.
- **Browse is further from the LNG terminal that it will supply than Melbourne is from Sydney and has different owners. A loophole in the laws means that it may be deemed part of that LNG terminal for the purpose of our national climate laws.** Our climate laws are blind to reality. Under the current rules, Woodside may decide – at its own initiative – to integrate the new operations into the far-flung LNG terminal to shirk its responsibilities under the law. This bad situation is made worse by arguably unlawful interpretation of relevant laws by the Clean Energy Regulator.
- **By claiming Browse operations are part of the 40-year-old Karratha Gas Plant 900 kilometres away, Woodside will be able to avoid hundreds of millions of dollars' worth of offset requirements.** This loophole will save Woodside in the order of $210 million in offsetting requirements between the start of production at Browse and 2050.
- **While the global fossil fuel company has announced plans to capture and store carbon dioxide produced at Browse, these plans remain speculative with no identified timeframe. They cannot be trusted.** The ongoing failure of Chevron's Gorgon CCS facility to deliver as promised and as legally required shows that existing governance arrangements in Australia are not sufficient to protect against such failure repeating over and over again.

Estimated annual emissions allowance for Browse gas project under Australia's climate pollution laws

Substantial loopholes in Australia's climate pollution laws mean that Woodside's Browse project may avoid being treated as a new facility under laws specifically designed to hold that project to a higher standard. This is occurring even though the project will not commence until the early 2030s at the soonest. It is new by any reasonable measure.

The total benefit of this loophole to Woodside and its joint venture partners is in the order of $210 million.



Original analysis applying safeguard rules to Woodside and Clean Energy Regulator disclosures. Forecast production estimated using figures from Deloitte's May 2026 Economic Impact Assessment Summary.

Chart shows only emissions allowances issued for the offshore component of production: at the basin, its FPSOs, and associated infrastructure. Further processing emissions from the creation of LNG and other fuels will occur onshore at Karratha Gas Plant and will receive less-onerous existing facility treatment regardless of any loopholes identified in this report.

Treatment of emissions from Woodside's Browse Gas Basin under Australia's climate pollution laws

Source	Peak annual	Extended lifetime total	Treatment by the Safeguard Mechanism
Installation of infrastructure	0.1 Mt CO_2e	1 Mt CO_2e	Ignored
Upstream reservoir CO_2	4.6 Mt CO_2e	107 Mt CO_2e	Must be fully offset
Upstream fuel gas use	*2.1 Mt CO_2e*	*50 Mt CO_2e*	***New facility OR Existing facility***
Upstream flaring	*0.14 Mt CO_2e*	*6 Mt CO_2e*	***New facility OR Existing facility***
Upstream fugitives	*0.02 Mt CO_2e*	*0.4 Mt CO_2e*	***New facility OR Existing facility***
Downstream reservoir CO_2	0.9 Mt CO_2e	24 Mt CO_2e	Must be fully offset
Downstream processing	4.3 Mt CO_2e	98 Mt CO_2e	Less-onerous existing facility treatment at NWS.
End use combustion of all fuels	**55.7 Mt CO_2e**	**1,331 Mt CO_2e**	**Ignored**
Total climate pollution produced by Browse	**67.8 Mt CO_2e**	**1,617 Mt CO_2e**	

Data compiled from Woodside's environmental approvals documents, including its 2019 EIS/ERD, and recent EPBC referral documents for CCS in the Calliance field.

Background

Australia's climate pollution laws and Australia's coal and gas sector in overview

After development and environmental approvals are in place – and facilities are operating – Australia's industrial greenhouse gas emissions are primarily managed through the federal Safeguard Mechanism.[1] The Safeguard Mechanism is an emissions intensity scheme that sets free

[1] For a deeper dive into the operation of the Safeguard Mechanism, see Naru Research, "The Safeguard Mechanism: The Ultimate Guide", 14 April 2026. https://naruresearch.com.au/sgm-guide/

annual emissions allowances for Australia's largest industrial emitters. If these facilities emit more than their annual allowance in each year, then they are required to purchase and surrender offset credits equivalent to their excess emissions. If they do so, there is no other penalty for exceeding that allowance.

Australia's industrial climate pollution laws covered facilities that produced 29% of the country's net annual emissions in 2024–25. This is just a little less than the climate pollution created by every power station in the country in the same year and so represents a substantial share of the country's domestic climate pollution.

As such, the Safeguard Mechanism is primarily an offsetting regime, and has been operating as such. It should be noted that there are long-standing critiques of offsetting as an approach to managing greenhouse gas emissions, both in Australia and overseas. These criticisms are principled, important, and most often simply correct. Even before considering multifarious discrete scientific and bureaucratic integrity issues within individual offset methods, the trade in offsets is at its heart based on a false equivalence that is frequently irredeemable. This is especially so when the exchange straddles the difficult boundary between fossil fuel emissions sources and land sector carbon sequestration.

While the scheme should be driving emissions reductions on site, rather than permitting an unfettered offset-and-forget to the problem, the unfortunate reality is that the scheme is simply not designed to do better than its current heavy reliance on offsets.[2] While this issue is substantial and meaningful, this analysis has a narrower focus and this fundamental issue will be set aside. The purpose here is instead to demonstrate the insufficiency of Australia's climate pollution laws even if we accept the false logic that underpins offsetting.

Australia's climate pollution laws are dominated by gas and coal producers, which are responsible for more than half of the emissions covered by the Safeguard Mechanism. The disproportionate contribution occurs even though the laws ignore the largest share of these projects' greenhouse gas emissions. The downstream emissions created when coal and gas produced in Australia is inevitably burned – largely overseas – account for up to 90% of the total climate pollution of any coal and gas development: just over 80% in the case of Browse.[3] When setting emissions allowances for coal and gas producers, the Safeguard Mechanism is entirely blind to that share.

The reason that coal and gas production can dominate Australia's climate pollution laws even though the greatest share of the climate pollution linked to those projects is ignored is simple. Producing coal and gas is itself an emissions-intensive activity, and Australia produces a globally

[2] Naru Research, "Reflections on the operation of the Safeguard Mechanism after two years of public data", 26 April 2026. https://naruresearch.com.au/2025-safeguard-data/.

[3] All emissions estimates cited throughout this analysis are based on those disclosed by Woodside in their various environmental approvals documents, with only very minimal adjustments made to ensure consistency. Most data relied upon was found is available in Woodside's 2019 EIS/ERD, with minor updates to reflect adjustments noted in the 2026 EPBC referral documents for CCS in the Calliance field.

significant volume of both fuels.[4] Australia is the world's largest exporter of metallurgical coal and its second largest exporter of both thermal coal and liquefied gas (aka "LNG").[5]

Even before considering climate pollution that occurs when fossil fuels are finally burned in Australian power stations, industry, homes and transport, the extraction and processing of coal and gas is responsible for more than 20% of Australia's annual domestic greenhouse gas emissions each year.[6] Because Australia produces such vast quantities of coal and gas, and because the processes to produce the fuels are so emissions-intensive, it follows naturally that the coal and gas sector would be a disproportionate presence within Australia's climate pollution laws.

Since major reforms made through 2022 and 2023, the Safeguard Mechanism now treats old and new industrial facilities very differently. Facilities that pre-date these reforms are given substantially higher annual emissions allowances than those that commenced operations after the reforms were passed. In the gas sector, a new facility will be issued with an emissions allowance that may be as much as 80% or more below that allowance applied to an existing operation. That is, where an existing facility might receive an allowance of 1 million tonnes per year, an equivalent new facility could plausibly receive 200 thousand tonnes instead for the same activity. This is because existing facilities have their annual allowance benchmarked to the average emissions intensity of their sector,[7] whereas new facilities are benchmarked to global industry best practice emissions intensity standards. This disparate treatment was a negotiated outcome through the reform secured by the cross-bench in exchange for passage of the laws. To demonstrate this, a table containing the default and intentional best practice production variables applied to oil and gas production is included in an Appendix of this analysis.

As a result of this considerable – though entirely principled – differential treatment, project operators' efforts to reclassify entirely new facilities as old for the purpose of Australian climate pollution laws can deliver five-fold increases in those facilities' annual emissions allowances. In turn this substantially reduces their annual offset reliance. In this stylised example, the value of the additional free licences is around $30 million per year.

As interpreted by the Clean Energy Regulator – which administers them – Australia's climate pollution laws allow material expansions to receive the same treatment as the existing facilities that they claim to be a part of, even when those expansions result in substantial changes to the

[4] Naru Research, "Australia's total climate pollution remains extraordinarily high as increased coal and gas exports outpace emissions reductions at home", 17 August 2026. https://naruresearch.com.au/australias-total-climate-pollution-remains-extraordinarily-high-as-increased-coal-and-gas-production-outpace-emissions-reductions-at-home

[5] Office of the Chief Economist, "Resources and Energy Quarterly", June 2026. https://www.industry.gov.au/publications/resources-and-energy-quarterly-june-2026

[6] Fossil Fuel Non-Proliferation Treaty Institute, "Exporting Harm: The Climate Toll of Australia's Fossil Fuel Expansion", March 2026. https://www.fossilfueltreaty.org/australia-report-pr

[7] To maintain sanity within an already complex analysis, this is a minor over-simplification. As a transitional arrangement, between now and 2030 most older facilities covered by the Safeguard Mechanism are on "hybrid baselines", meaning that their annual emissions allowance is set with reference to a combination of each facility's own past emissions intensity and the average emissions intensity of its industry peers. After 2030 – when Browse comes online – site-specific information will no longer be used to set facility's annual allowances in the gas sector, with only the industry average being used.

manner and form of production. Under the current rules, this loophole is available to most of the fossil fuel growth in Australia.

As will be shown in the remainder of this analysis, this is likely to be the case for Browse. Even though it is owned by a separate joint venture partnership, even though it will commence operations half a century after the Karratha Gas Plant it supplies, and even though Browse is further from that LNG terminal than Melbourne is from Sydney it can likely be considered part of it for the purposes of the Safeguard Mechanism. In doing so, Woodside can avoid new facility rules being applied to Browse even though the new rules were created precisely to hold facilities like it to a higher standard.

By doing so, Woodside will save itself hundreds of millions of dollars in liabilities under Australia's climate pollution laws.

Karratha Gas Plant and Browse

Browse gas basin is a very large proposed new gas development led by global fossil fuel developer Woodside Energy. Australia has dozens of pending coal projects at various stages of approvals and development and a smaller number of very large gas projects. Browse is the single largest new fossil fuel development currently making its way through Australia's environmental approvals regime.

The project's two floating production, storage and offloading (FPSO) vessels will be located around 400 kilometres north of Broome. Development of the basin – consisting of the Calliance, Brecknock and Torosa fields – is intended to be a new source of gas to supply the company's Karratha Gas Plant.

Exploiting the gas in Browse will require the construction and operation of a 900-kilometre pipeline to move the gas from the fields to Woodside's existing gas export terminal at Karratha. For context, the distance between basin and terminal is substantially further even than the 720 kilometres between Australia's two largest capital cities of Sydney and Melbourne. It is roughly the same as the distance between the Northern Territory's western border all the way over to its eastern one.

The Basin's very close proximity to Scott Reef means that the project spans both Western Australian state-regulated waters and federally-controlled waters. This ultimately results in the requirement that the project receive federal approval under the federal *Environment Protection and Biodiversity Conservation Act 1999*. The project is pending a final decision from the Environment Minister.

A map showing the location of the basin, pipeline and terminal is shown below.

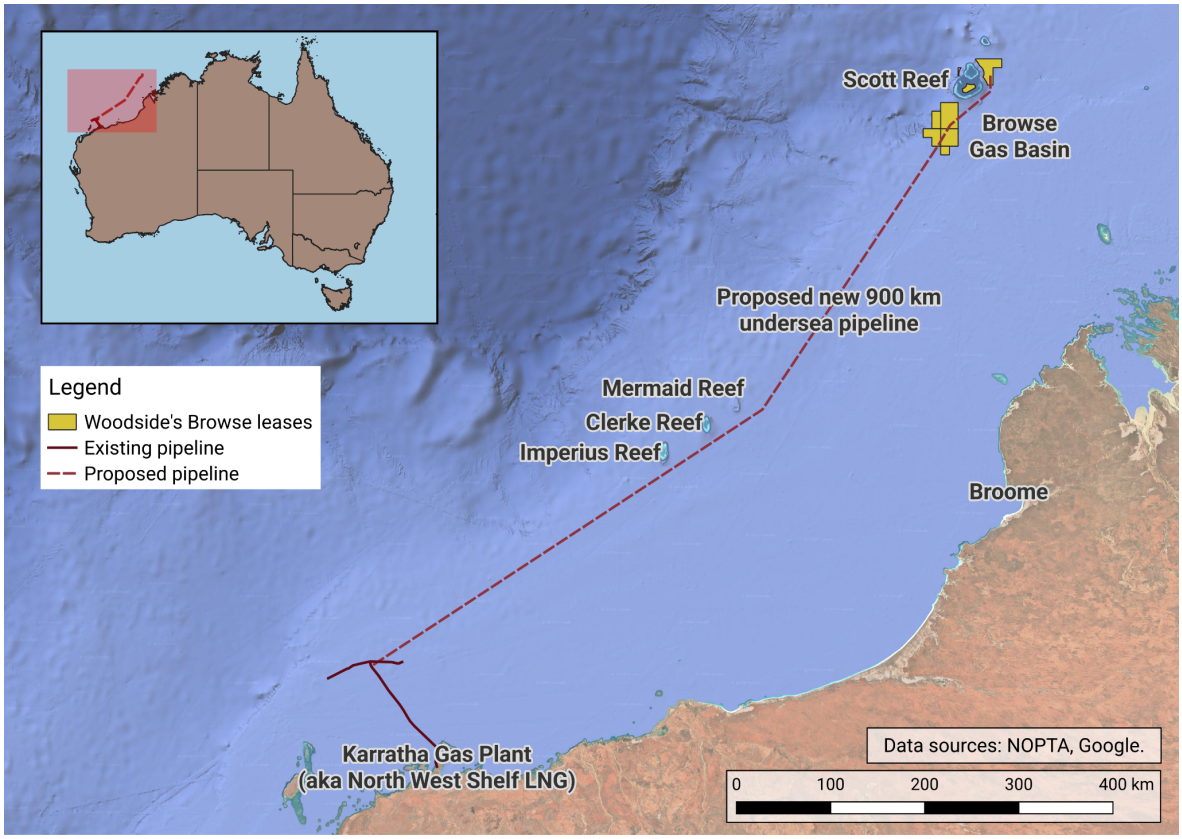


Figure 1: Location of Browse Gas Basin and Karratha Gas Plant along with the indicative path for the gas transmission pipeline as identified by Woodside in its environmental approval documents.

The Karratha Gas Plant is Australia's oldest and its largest LNG export terminal. At LNG terminals, gas is processed, cooled and compressed for export by ship. Cooling and compressing gas to convert it to liquid form increases its density by around 600 times, permitting it to be shipped in bulk quantities. Gas changes from gaseous to liquid form at –161°C. Reaching temperatures that low requires the use of a prodigious amount of energy. The Australian gas industry uses more gas each year just to facilitate this process than any other industry in the country.[8] However, without this step, there is no credible pathway through which Australia could export gas overseas. As noted previously, Australia is presently the world's second largest exporter of LNG, after the USA.

Karratha Gas Plant commenced operations in 1984 and was recently approved to continue operating until 2070. Presently it processes gas extracted from several offshore fields that are much nearer the facility than Browse, including North Rankin (135 km), Goodwyn (135 km) and Angel (120 km) fields. In a problematic reading of the relevant legislation, emissions from these fields are fully integrated with KGP as part of a single Safeguard facility. This issue will be returned to in later sections.

[8] Department of Climate Change, Energy, Environment and Water, "Australian Energy Update: 2025", 22 August 2025. https://www.energy.gov.au/publications/australian-energy-update-2025.

As part of the Woodside-run "North West Shelf" facility, Karratha Gas Plant and its associated fields are given a single annual emissions allowance under Australia's climate pollution laws. This has been the case under the Safeguard Mechanism since its inception in 2016. As an existing facility that predates major reforms to the safeguard mechanism that occurred in 2022 and 2023, North West Shelf's emissions annual allowance is benchmarked against the average emissions intensity of its industry peers.[9] Unsurprisingly given the age of the facility, North West Shelf's emissions intensity is slightly higher than those peers.[10] However, the difference is certainly too small to make a meaningful difference to the economics of the plant going forward.

At the very earliest, if Woodside receives approval to develop Browse gas in coming months and the company moves at breakneck speed, the basin could theoretically begin supplying gas to Karratha Gas Plant in 2031, though a more plausible timeframe would be 2033 or later.[11] This means operations would be coming online a full decade after major reforms to the safeguard mechanism in 2022/23 and half a century after the commencement of operations at KGP.

Karratha Gas Plant is owned as part of the North West Shelf joint venture and managed by Woodside. After Woodside obtains Chevron's share, which is expected to happen at the end of 2026, the partners in that joint venture and their stakes will be as follows: Woodside (50%), Japan Australia LNG (16.67%), BP (16.67%) and Shell (16.67%).

While Browse is also managed by Woodside, it is owned under a different joint venture agreement. The ownership of that joint venture is likewise currently in flux. If the currently understood transfers receive necessary approvals and resolve in the way that is currently the most likely, at the conclusion the partners and their equity stakes will be: Woodside (41.27%), BP (39.33%), Japan Australia LNG (14.4%) and GS Energy (5%).

Some conjecture about the future treatment of Browse under Australia's climate pollution laws has pointed to the existence of these separate joint venture agreements to claim that the new basin cannot integrate with the existing facility. As discussed in later sections of this analysis, this is based on a misunderstanding of the legislation, with the determinative factor in the legislation not being ownership structure, but overall control. Overall control of both the Browse development and the existing North West Shelf facility sits with Woodside Energy. As will be shown later in this analysis, the claim that Browse and North West Shelf cannot be integrated with one another also does not align with the interpretation of the rules by the Clean Energy Regulator, which is ultimately responsible for interpreting and applying the legislation.

As noted previously, under the reformed safeguard rules, new facilities are issued with more onerous emissions allowances. Instead of having the calculation of their emissions allowances benchmarked against the historical average emissions performance of their industry, the emissions allowances of new facilities are benchmarked against international best practice

[9] See note 1.

[10] Clean Energy Regulator, "Emissions intensity determination data", 14 September 2026. https://cer.gov.au/markets/reports-and-data/safeguard-data/emissions-intensity-determination-data.

[11] This estimate is confirmed by the Woodside-commissioned Deloitte, "Browse to North West Shelf Project Economic Impact Assessment Summary", May 2026. https://www.woodside.com/docs/default-source/our-business---documents-and-files/browse/2026-browse-economic-impact-assessment.pdf

standards for climate pollution in each sector. Again as noted previously, as operationalised in the reformed safeguard mechanism rules, for the gas sector this is a substantial difference. Total emissions allowances for a hypothetical new gas facility held to this higher standard could have a total emissions allowance as much as 80% lower than peers. For reference, the relevant factors are included at Appendix A.

The question of whether Browse is held to the higher or the lower standard then, is meaningful. It comes down to whether development of the Basin and its associated infrastructure is deemed to be an entirely new facility in its own right, or a simple expansion of an existing facility. As already telegraphed, the most likely position to be taken by the Clean Energy Regulator based on current practice is that it will be deemed to be a simple expansion, saving Woodside tens of millions of dollars per year in potential offsetting liabilities.

The Browse Basin contains relatively high levels of carbon dioxide. Woodside's current best estimates have the volume of carbon dioxide in the formation at around 12% by volume. This means that for every litre of raw gases produced from the fields, around 120 ml is carbon dioxide. In the context of gas extraction and processing, carbon dioxide is known as "acid gas" for its propensity to form carbonic acid when in the presence of even small amounts of water. One of the earliest stages of processing raw gas is the removal of carbon dioxide from the supply stream to avoid damage to sensitive infrastructure. After removal, it is standard practice for industry to simply release this carbon dioxide directly to the atmosphere, where it plays its other role: the most significant greenhouse gas driving the global climate crisis.

The 12% carbon dioxide content of Browse compares unfavourably with much existing production in Australia. For example, North Rankin field – which also feeds Karratha Gas Plant – has a far lower carbon dioxide content at just 3%. In approvals documents, Woodside claims that its new Scarborough gas field could be even cleaner, with less than 0.1% carbon dioxide content. In fairness to Browse, it should be noted that other fields have carbon dioxide contents that are higher still. Chevron's Gorgon gas field has a carbon dioxide content of 16%. Santos's new Barossa field hits 18% carbon dioxide content.

Under Australia's climate laws, emissions of reservoir carbon dioxide from new gas fields receive an emissions allowance of zero whether these are deemed to form part of existing facilities or new facilities in their own right. This means that Browse's reservoir carbon dioxide emissions must be fully offset regardless of whether it is compelled to register as a separate new facility bound to industry best practice emissions allowances. It is necessary to again point out that this is not a complete solution to the problem. In myriad ways that are beyond the scope of this analysis, offsetting is not an effective solution to the problem of emissions from the production and use of fossil fuels.

While Woodside has announced plans to store reservoir carbon dioxide from Browse offshore, these plans are not material to this analysis.[12] It should however briefly be noted that these plans are highly speculative. Globally, announced carbon capture and storage projects have a very high

[12] The latest environmental approval documents related to this project are available on the Federal Government's EPBC Portal under EPBC number 2026/10569.

failure rate. While projects are frequently announced to great fanfare – especially around the time that development approvals are being sought – these plans are most often shelved shortly after.[13] Australia has never had a successful offshore carbon capture and storage project developed, nor are any of the alternative plans well-developed.

Further, even when CCS projects around the world are developed, they frequently under-perform. Chevron's Gorgon CCS project not far from the Karratha Gas Plant is instructive in this regard. Several years after commencement, its annual capture rates continue to hit new record lows each year.[14] And unlike Woodside's plans for Browse, Gorgon is at least notionally legally-required.[15]

It is the remainder of Browse's emissions profile that will be determined by how the project is treated by the scheme. These emissions will principally be the result of the combustion of fuel gas offshore to power the FPSOs and extraction infrastructure. Another smaller amount of climate pollution will be produced by flaring gas at the FPSO and methane leaks.

Estimated emissions from the different components of the Browse gas project, and their treatment by the reformed safeguard mechanism is included at the start of this analysis.

Boundary setting under Australia's climate pollution laws

As noted previously, under Australia's climate pollution laws facilities that commenced after reforms to the scheme in 2022 and 2023 are treated more harshly than those that commenced earlier. Older facilities are given substantially higher annual emissions allowance than new, with those older facilities at times receiving allowances five times greater than new facilities doing the same thing. This is intentional and was a negotiated outcome made to rein-in climate pollution from a series of large fossil fuel projects moving through the approval and development process at the time of those reforms. Among the projects specifically intended to be reined-in was Browse, which was then – and still is – the largest fossil fuel project currently seeking approval in Australia.

However, under the rules of the Safeguard Mechanism, even as reformed, expansions to existing facilities are generally treated as a simple increase in production at the existing facility. Under the rules as applied by the Clean Energy Regulator, a simple expansion would ordinarily have its annual emissions allowance determined using the same settings as apply to the existing facility it is attached to. The prospect of having a new project considered to be an expansion of an existing

[13] Ketan Joshi, "The false promise of carbon capture and storage", 9 January 2026. https://thepoint.com.au/off-the-charts/090126-part-one-the-false-promise-of-carbon-capture-and-storage.
[14] Chevron, "Gorgon Gas Development and Jansz Feed Gas Pipeline: Five-year Environmental Performance Report 2020–2025", 5 November 2025. https://australia.chevron.com/what-we-do/gorgon-project/environmental-approvals-and-expert-panels.
[15] Tim Baxter, "Gorgon carbon capture and storage project: The failure of the world's largest CCS facility", Nov 30, 2024. https://timinclimate.medium.com/gorgon-carbon-capture-and-storage-project-the-failure-of-the-worlds-largest-ccs-facility-d517de0ee176.

facility rather than as an independent new facility represents a material financial benefit to the project operator.

Determining how projects will be treated under the law requires a detailed assessment of the relevant rules. Getting to the answer is irredeemably technical, and the rules are not clear. Indeed, lawful application of these rules appears to have caused difficulties even for the Clean Energy Regulator, who is in charge of operationalising the rules. However, as will be shown the interpretation described here appears to be the one preferred by the regulator.

Whether more onerous international best practice emissions standards apply to a facility comes down to whether it is legally a "new facility". A new facility is ultimately defined in sub-s 29(2) of the *Safeguard Rule 2015* and related provisions as one that did not report to the Safeguard Mechanism between the 2017/18 financial year and the 2022/23 financial year. If a facility was absent from the scheme in that period, it is considered to be new and held to a more onerous standards and lower free emissions allowances. The corollary of this is that if a facility did report in that period, it is an existing facility and held to less onerous standards with higher free annual allowances.

The question then becomes whether a new fossil fuel project is able to form part of the same facility as an existing operation: What is a facility, and when will a set of activities be considered to be two separate facilities rather than one?

As is relevant to this discussion, in simplified form "facility" is defined in s 9 of the *National Greenhouse and Energy Reporting Act 2007* as a series of **activities** that produce greenhouse gases, or produce or use energy that forms a **single undertaking or enterprise** and meets the requirements of the regulations.

At s 7, an "**activity**" is defined as any relevant emitting process that would require reporting under the Act. For example, venting reservoir carbon dioxide to the atmosphere, or the operation of a gas transmission pipeline are both activities because both must be reported under the *NGER Measurement Determination 2008*.

The *NGER Regulations 2008* provide some additional clarity on whether a series of activities constitutes a single undertaking or enterprise. Variously:

- **Reg 2.16** sets out that activities that together form part of the same production process are a **single undertaking or enterprise** if these occur at a **single site**. For example, electricity production at an FPSO can form part of the same facility as processing gas at the same site. Stabilisation of crude from the same production stream at the same site would likewise form part of that same process. Under certain circumstances, this might require consideration of whether the activities are under the **overall control** of the same entity. Activities under the control of different entities cannot be considered a single facility and must register separately.
- **Reg 1.03**, among other things, defines a **single site** as "single physical area that can include a series of geographical locations in close proximity to one another", with a note indicating that "a network of mines in close proximity" might be deemed a single site under the definition.

- **Reg 2.14** states that an entity has **overall control** over a series of activities if the entity can introduce operating, health and safety and environmental policies. Where multiple parties share operational control, the entity with the greatest authority to introduce these policies is taken to have overall control.

A "single site"

Australia has five onshore LNG terminals that have historically received gas from offshore fields in Australian waters. These are: Karratha Gas Plant, Wheatstone, Gorgon, Ichthys and Pluto. Four of these terminals are in Western Australia, and the fifth in the Northern Territory. All terminals are fed by offshore fields in the waters to the north-west of Western Australia.

All five of these terminals are vertically-integrated with their offshore gas fields into single facilities for the purposes of the Safeguard Mechanism using the provisions cited above. The distances between field and terminal are frequently immense. At times it strains good sense to understand how the rules have been applied in a way that permits this integration.

While full consideration of this issue goes some way beyond the scope of this analysis, the way in which these rules have been applied by the Clean Energy Regulator to integrated gas extraction, processing and LNG manufacturing facilities is sufficient to mount a plausible case for maladministration. Certainly, one can point to the fact that extraction, processing, transport and liquefaction activities are a series. That aspect of the legal definition of a "single site" is met.

However, they are not all "in close proximity to one another" as is required by the legislation. While they are each sources of emissions requiring reporting under the *NGER Act* – and directly connected – the various components of a daisy-chain link between gas field, platform, trunkline and LNG terminal are not "in close proximity **to one another**" if the first and last parts of that chain are vast distances apart. The vertically-integrated offshore gas field and onshore terminal is also certainly not analogous to the illustrative example given in the regulations of "a network of mines in close proximity to one another".

It is worth noting that the explanatory statement to the *NGER Regulations 2008* offers a little additional guidance [emphasis added]:

> A single site is defined under regulation 1.03 as a physical location or series of physical locations in close proximity to one another. **Close proximity is not defined as this will be dependent on the context.** For example, in an urban area three factories spread across a city with three separate addresses would be three different sites. However, in a non-urban setting close proximity could imply longer distances. For example, **a series of mines within a single area (i.e. series of physical locations) that form a primary production process may be kilometres apart. Although these activities are kilometres apart, if they are on the same or adjoining tenements or are the only activities occurring in that area they may be considered to be a single site.**

It might be argued that activities offshore could be somewhat further apart still than the series of terrestrial mines in a single area. Again, the guidance indicates that these may be kilometres apart, if they are on adjoining tenements or alone in their area.

The table below shows the relative distance between the component parts of registered, currently-reporting, offshore gas fields that are integrated with their LNG terminals for the purpose of Australia's climate pollution laws.

Gas field	Integrated with	Distance between field & terminal
Gorgon	Gorgon LNG	70 km
Angel	Karratha Gas Plant	120 km
Jansz-Io	Gorgon LNG	130 km
Goodwyn	Karratha Gas Plant	135 km
North Rankin	Karratha Gas Plant	135 km
Pluto	Pluto LNG	180 km
Wheatstone	Wheatstone LNG	225 km
Ichthys	Ichthys LNG	820 km
Browse	*Karratha Gas Plant*	*890 km*

This situation goes very far beyond what is specified in the legislation. To be frank, the Regulator's interpretation of those rules in a way that permits the integration of gas fields with their terminals over distances like these beggars belief. There is simply no lawful way that this interpretation could safely be read into the rules as written, and the existing arrangements represent a manifest perversion of the rules as they were made. Even if one were to accept that Gorgon field and terminal might be 'in close proximity' for the purpose of the rules, an earnest reading of those rules cannot make the same case for Wheatstone or Ichthys. Certainly, such a reading cannot be so ambitious to interpret them that way for Browse, which is even further still from the terminal it will supply.

As without lawful basis as this interpretation is, it is nonetheless the current situation. As noted, the Clean Energy Regulator's maladministration is important, but largely beyond the scope of this analysis. Instead, this analysis focuses on how the law will most likely be applied, and the benefit that flows from that application.

Regardless of whether a lawful interpretation of the rules would require a different outcome, what this indicates is that under the Clean Energy Regulator's interpretation of the law distance is no object to the integration of Browse with the Karratha Gas Plant. In turn this means that

distance is no object to the integration of production at the Browse Gas Basin within the existing North West Shelf facility.

While the distance between Browse and Karratha Gas Plant is further than the distance between Melbourne and Sydney, it is only a little further than the distance between Inpex's Ichthys field and the Ichthys LNG terminal, which has been operating as a single vertically-integrated safeguard facility since it commenced operations in the 2018/19 financial year. As such, its treatment by the Regulator will almost certainly be the same.

'Overall control'

Some consideration of the future treatment of climate pollution from Browse places undue emphasis on the fact that the new gas basin is owned by a separate joint venture agreement to the joint venture that owns Karratha Gas Plant and the broader North West Shelf development. This is a baseless misunderstanding of the legislation.

As noted previously, after the reconciliation of some movement between the equity holders, the North West Shelf joint venture's equity profile is as follows: Woodside (50%), Japan Australia LNG (16.67%), BP (16.67%) and Shell (16.67%). Further movement is underway between the equity holders of the Browse joint venture, but the most likely outcome of that shuffling is the following: Woodside (41.27%), BP (39.33%), Japan Australia LNG (14.4%) and GS Energy (5%).

While Woodside is the most significant equity holder in both cases, and some other players are shared between the joint ventures, these are of course manifestly different.

However, differences in the ownership structure underlying a series of emitting activities are not determinative of whether these can be integrated into a single facility. In fact, in the strict sense the ownership structure is irrelevant. What matters instead is whether the activities are overseen by an entity with shared **overall control** of their operations. Overall control is determined instead by which entity can set major policy directives for the activities. Where this authority is shared, it is determined by examining which entity has the greatest authority to set those directives.

In the case of both the existing North West Shelf safeguard facility and the Browse gas project this is undoubtedly Woodside in both instances. Woodside is the largest shareholder in both sets of activities and the registered operator of both developments. All approval documents for both the existing and proposed components are in Woodside's name. While the different joint venture arrangements might lead to a reorganisation of relative power between the participants, in this case it has not. Woodside has overall control of both the existing North West Shelf facility and Browse gas project.

And while the legislation in this case is very clear, it is also possible to point to the ongoing practice of the Clean Energy Regulator to reinforce the point. For example, Santos's Moomba Gas Plant in South Australia is owned under a separate joint venture agreement to the carbon capture and storage facility that operates on the same site. These are integrated for the purpose

of Australia's climate pollution laws. Unrelatedly, but also involving Santos, documents obtained under Freedom of Information in 2024 showed the Clean Energy Regulator discussing the prospect of integrating operations at the new Barossa gas field with Darwin LNG terminal 285 km away.[16] Like Browse, Barossa gas field is owned under a different joint venture agreement from the terminal that it will supply.

A close reading of the legislation and an examination of the Regulator's current practice demonstrates that it is simply not true to suggest that the separate joint venture agreements between Browse and North West Shelf will result in Browse being held to more onerous emissions reduction obligations.

With neither the distance nor the ownership structure likely to pose an impediment to Browse registering as part of an integrated whole with the North West Shelf facility and Karratha Gas Plant, there is no other existing limitation that would prevent the integration occurring. This means that Woodside could – if it chooses – receive existing facility treatment under Australia's climate pollution laws for Browse.

This is despite a gap of almost 1,000 kilometres between field and terminal, despite the fact that the binary between existing facilities and new being created specifically to manage projects like it, despite the fact that it will commence operations almost a full decade after the reforms that created that distinction and despite the fact that it will commence operations half a century after the facility it would purport to be a part of.

Recommendations

This situation is egregious. Australia's climate pollution laws are home to a great many integrity discrete issues, and the treatment of Browse is among the most dispiriting. This is a problem that should – at least in part – be solved already.

There are two separate problems at play.

The larger of these is that the Safeguard Mechanism simply does not effectively manage the climate pollution of Australia's fossil fuel producers. The largest share of emissions – those emissions inevitably released when exported fuels are eventually burned – is entirely unmanaged. No serious person should be expected to take seriously the faulty claim that as one of the largest producers of fossil fuel in the world Australia carries no responsibility for the harmful products that it produces. None should be willing to. It is not the claim of a serious person. There is no other domain of social or industrial policy where such a claim would hold sway. It is absurd on its face.

[16] ABC News, "Cost of 'best practice' on emissions at leaking Darwin gas plant an 'intolerable risk' for Santos", 16 October 2025. https://www.abc.net.au/news/2025-10-16/santos-darwin-lng-emissions-best-practice-intolerable-risk/105819802.

In 2024/25, Australia's most expansive climate change policy – the Safeguard Mechanism – notionally covered 132.8 million tonnes of emissions, the majority of which were "managed" with free emissions allowances. In that year, just 13.1 million tonnes worth of offset units were required to be surrendered.

In the same year, Australia's exported fossil fuel production led to 1,175.1 million tonnes worth of climate pollution. Australia's total domestic emissions that year amounted to 461.7 million tonnes. Combined, the nation's total climate pollution for the year totalled 1,636.8 million tonnes. Quite apart from the fundamental false equivalence between fossil fuel production and emissions previously mentioned in this report, a scheme that requires just 13.1 million tonnes is not effectively managing a problem as large as Australia's contribution to global emissions.

The Safeguard Mechanism is not designed to solve that problem, and cannot. The only solution to this problem is detailed, comprehensive and co-ordinated fossil fuel phase-out policy of a kind that the federal government is unwilling to consider.

Then there is the narrower issue of Browse and how that project might be held to the more onerous standards put in place specifically for it. Here, there are two simple options:

All that is required to hold Browse to the more onerous legislated standards is for the Clean Energy Regulator to correctly implement the law. The Regulator's current interpretation of what might constitute a single site under the law as written is plainly baseless. It should be abandoned. Doing so would inevitably result in the law being applied as it was so obviously intended.

However, while this would close a $210 million loophole, this does precious little to manage the full emissions impact of Australia's largest fossil fuel development. The only way to manage those emissions effectively and efficiently is to ensure that the project does not go ahead. This can occur by the federal Environment Minister rejecting the project, and its manifold unmanageable environmental risks.

Appendix A: Safeguard Mechanism production variables relevant to gas extraction and processing

	Emissions intensity variable applied to pre-reform facilities	Emissions intensity variable applied to new facilities
Extracted oil and gas (s 26)	0.376 kg CO_2e per GJ	0.0360 kg CO_2e per GJ (-90.4%)
Stabilised crude oil or condensate (stabilisation only) (s 27)	1.21 kg CO_2e per GJ	0.320 kg CO_2e per GJ (-73.6%)
Stabilised crude oil (integrated extraction and stabilisation) (s 28)	3.84 kg CO_2e per GJ	0.356 kg CO_2e per GJ (-90.7%)
Processed natural gas (processing only) (s 29)	1.59 kg CO_2e per GJ	0.243 kg CO_2e per GJ (-84.7%)
Processed natural gas (integrated extraction and processing) (s 30)	2.75 kg CO_2e per GJ	0.394 kg CO_2e per GJ (-85.7%)
Liquefied natural gas (from unprocessed natural gas) (s 31)	4.14 kg CO_2e per GJ	0.876 kg CO_2e per GJ (-78.8%)
Liquefied natural gas (from processed natural gas) (s 32)	4.01 kg CO_2e per GJ	0.633 kg CO_2e per GJ (-84.2%)
Ethane (s 33)	7.67 kg CO_2e per GJ	3.21 kg CO_2e per GJ (-58.1%)
Liquefied petroleum gas (s 34)	1.80 kg CO_2e per GJ	0.420 kg CO_2e per GJ (-76.7%)
Reservoir carbon dioxide from existing gas fields (s 35)	0.928 kg CO_2e per kg reservoir carbon dioxide	0.020 kg CO_2e per kg reservoir carbon dioxide (97.8%)
Reservoir carbon dioxide from new gas fields (s 35A)	0 kg CO_2e per kg reservoir carbon dioxide	0 kg CO_2e per kg reservoir carbon dioxide (same)
On-site Electricity generation (s 57)	539 kg CO_2e per MWh	236 kg CO2-e per MWh (-56.2%)