

Climate impacts of fossil fuel projects under the Albanese government

Carbon emissions from fossil fuel projects receiving approvals and support under the Albanese government, compared with emission reductions expected from Australia's domestic climate policies.

Piers Verstegen, Climate Safe Solutions / November 2023



We acknowledge the Traditional Owners of Country and their continuing connection to land, waters and community. We pay respect to their Elders past and present and to the pivotal role that First Nations Peoples continue to play in caring for Country across Australia.

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Background

The Albanese government was sworn into office on 23 May 2022 with a commitment to end the climate wars and act on climate change. As part of this commitment, the government has strengthened and legislated emissions reduction targets for Australia and introduced a range of climate policies designed to achieve these targets. At the same time, the government has provided approvals and other material support for large new fossil fuel developments that would add billions of tonnes of carbon pollution to the global atmosphere.

This analysis provides a summary of fossil fuel projects that have received some form of approval from a Commonwealth Minister or regulator, or other forms of material support from the Albanese government, and those that are currently in the balance.

Summary of findings

- 16 new fossil fuel projects have received some form of Federal government approval or other material support under the Albanese government. These projects would release 6.9 billion tonnes of carbon pollution over their lifetimes. A further 10 projects are currently in the balance with no Federal approval or support yet provided, but decisions imminent. These projects would release over 9.9 billion tonnes of carbon pollution if they all proceed.
- For every tonne of carbon pollution that will be reduced by the Albanese government’s current climate policies to 2030, over 7 tonnes of pollution could result from new fossil fuel projects that have received approvals or other material support since the Albanese government came to office.
- The total carbon pollution that would result from new fossil fuel projects that have received approvals or other material support under the Albanese government is nearly 35 times larger than the total cumulative emissions reduction that will be delivered by the Albanese government’s signature climate policy, the Safeguard Mechanism, to 2030.

Projected emissions from these projects are compared with cumulative carbon pollution reduction (approximately 960 Mt CO2-e) that is expected from the implementation of climate policies to meet the Australian 2030 emissions reduction target. A methodology for how the projects have been categorised and how their lifetime emissions were calculated is also provided.

The analysis demonstrates that the pollution that could be caused by fossil fuel projects that have received approvals or other support from the Albanese government since coming to office will be many times larger than the total cumulative savings from all emissions reduction measures promised by the government to date.

10 fossil fuel projects have received approval under the Albanese government

If they proceed as planned, four coal projects and six oil and gas projects that have received approval under the Albanese government would release over 2.6 billion tonnes of carbon pollution over their lifetimes. The largest of these are new oil and gas projects by Woodside, Chevron and Santos, including the Woodside Scarborough development.

A further 6 fossil fuel projects have received material support and facilitation

This includes three coal projects and three gas projects that have received Commonwealth grants, subsidies, or other forms of assistance from the Albanese government. If they proceed as planned, these projects will release 4.3 billion tonnes of carbon pollution into the atmosphere. The largest of these projects are Beetaloo Basin / Middle Arm developments, Woodside’s Browse Basin, and Santos’ Barossa Gas projects which together would release nearly 2.9 billion tonnes of carbon pollution; as well as four large new coal projects which would release over 1.4 billion tonnes of carbon pollution.

10 fossil fuel projects are currently in the balance

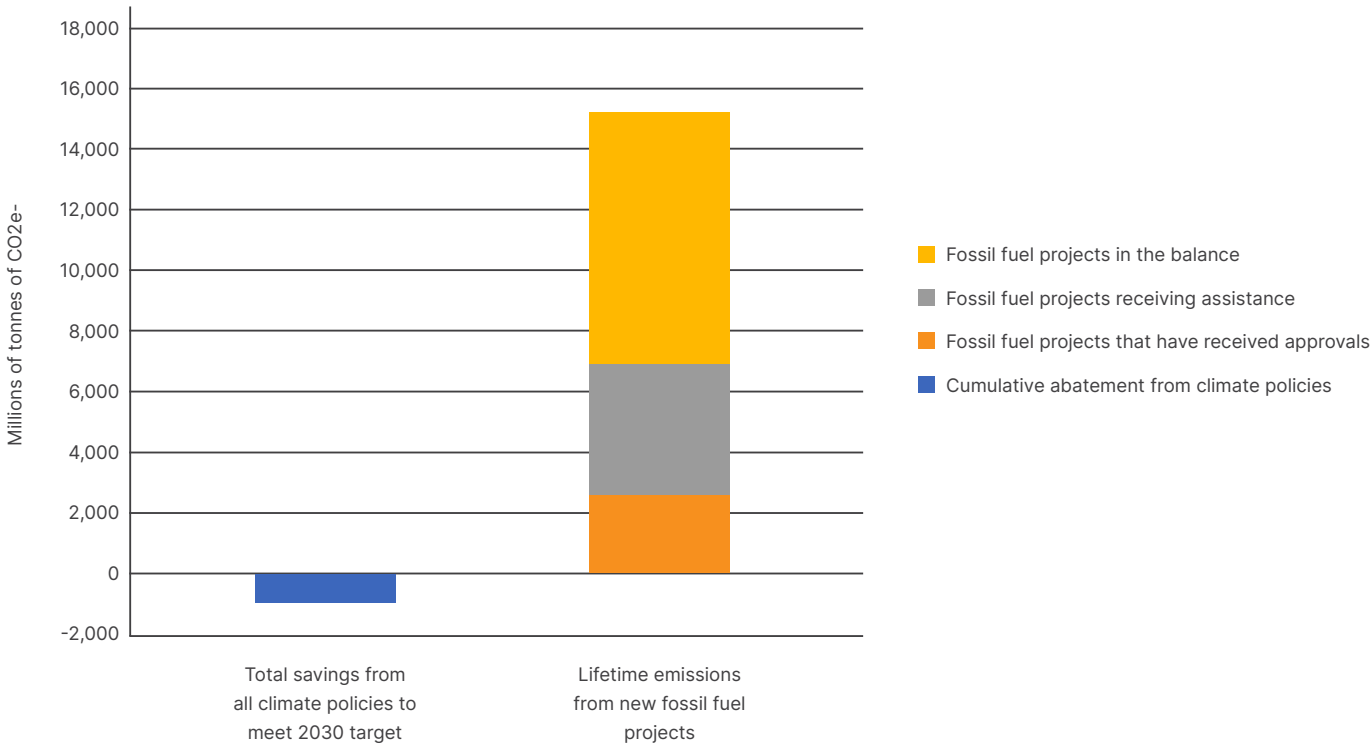
Commonwealth decisions are imminent on at least 10 further fossil fuel projects that have not yet received material support or approval under the Albanese government, including nine coal projects and one gas project. Together, these projects would produce total emissions of nearly 10 billion tonnes of carbon pollution if they all proceed as planned.

Projects in this category include the largest and most polluting project currently proposed in Australia - Woodside’s North West Shelf LNG extension to 2070. This single project would produce nearly 4.5 times the total cumulative savings from all announced Albanese government climate policies combined, or around 4.3 billion tonnes of carbon pollution alone over its lifetime. Nine new coal mine projects are also in the balance, including the very large Waratah Alpha North proposal which would result in over 3.1 billion tonnes of carbon pollution.

Exploration for new reserves is also continuing

In addition to the development of known fossil fuel reserves, the Albanese government has also continued to support exploration for new fossil fuels. This includes release of new offshore exploration acreage in the Browse, Carnarvon, Northern Carnarvon, and Gippsland Basins by Resources Minister Madeline King, and approvals for further exploration drilling in the Browse Basin.

Figure 1. Comparison of emissions from new fossil fuel projects, with abatement to be delivered by climate policy measures announced by the Albanese government*



Summary of new fossil fuel projects and total lifetime emissions*

Category	Coal projects	Gas and Oil projects	Lifetime emissions (MTCO ₂ e-)
Projects that have received approvals (10)	4	6	2,614
Projects that have received other support (6)	3	3	4,325
Projects in the balance (10)	9	1	9,946

* Further detail and references are provided in Methodology and data sources

Fossil Fuel Projects that have received approvals under the Albanese government

10 fossil fuel projects have received some form of Commonealth approval under the Albanese government, either under the Commonwealth environmental legislation (by Minister Tanya Plibersek), or through the National Offshore Petroleum Safety and Management Authority (NOPSEMA), the National offshore oil and gas regulator.

If they proceed as planned, the combined carbon pollution from these projects would be more than 2.6 billion tonnes of carbon dioxide equivalent (CO₂e-) over their lifetimes.

This is equal to:

- Nearly six years of Australia's annual carbon pollution from all sources.
- Nearly three times the total cumulative savings expected from all current Albanese government climate policies to meet Australia's 2030 emissions reduction target.
- Over 13 times the total cumulative savings that will be delivered by the Safeguard Mechanism to 2030.
- The annual pollution from every car, truck and bus currently driven in Australia for 28 years.

The largest fossil fuel projects that have received some form of Commonwealth approval under the Albanese government are:

- The Scarborough gas development (part of Woodside's Burrup Hub complex) which would release 878 million tonnes of carbon pollution over its lifetime.
- Chevron's Wheatstone and Lago Gas field developments, which would release 1.24 billion tonnes of carbon pollution over their lifetime.
- Santos’ Dorado oil project and Varanus Island gas projects with would together release 319 million tonnes of carbon pollution over their lifetimes.

All of these projects are in Commonwealth waters off the northwest coast in Western Australia and all have received approvals from the Commonwealth offshore oil and gas regulator (NOPSEMA) during the Albanese Government.

Summary of new fossil fuel projects that have received approval under the Albanese government

Project	Approvals provided under Albanese government*	Lifetime Emissions (MT (Co ₂ e-)
Issac River Coal mine	EPBC approval granted by Minister Plibersek	7
Star coal mine	EPBC approval granted by Minister Plibersek	3
Ensham coal mine	EPBC approval granted by Minister Plibersek	106
Gregory Crinum coal mine	EPBC approval granted by Minister Plibersek	30
Woodside Burrup Hub – Scarborough gas field development	Approval of the seismic testing Environment Plan provided by NOPSEMA (later found invalid in by Federal Court). Resources Minister Madeleine King has also confirmed the Albanese government's support for the Scarborough gas project to proceed.	878
Santos – Varanus Island Spartan gas project	Approval for Environment Plan granted by NOPSEMA 30 June 2022	151
Chevron – Wheatstone and Lago gas field development	Approval for Environment Plan granted by NOPSEMA 1 August 2022	1,242
Santos – Dorado oil project	Approval for Offshore Project Proposal granted by NOPSEMA 10 February 2023	168.5
Santos – Towrie gas development	EPBC Approval provided by Minister Plibersek 17 February 2023	no data available
Beach Energy – Otway gas development	Approval for two Environment Plans granted by NOPSEMA 15 August 2022 and 1 Feb 2023	28.7
Total		2,614

* Further detail and references are provided in Methodology and data sources below

Fossil Fuel Projects that have received material support under the Albanese government

Six new fossil fuel projects have received material support and/or facilitation under the Albanese government. This includes significant Commonwealth government funding for the Middle Arm industrial precinct linked to the development of the Beetaloo gas basin in the Northern Territory, and assistance to large offshore gas developments proposed by Woodside (Browse Basin) and Santos (Barossa) through facilitating carbon capture and storage (CCS) for these projects.

If they proceed as planned, these projects will release 4.3 billion tonnes of carbon pollution into the atmosphere over their lifetime.

This is equal to:

- 9.5 years of Australia's annual domestic carbon pollution from all sources
- 4.5 times the total cumulative savings set to be delivered by all current Albanese government climate policies to meet Australia's 2030 emissions reduction target.
- Over 21 times the total cumulative savings that will be delivered by the Safeguard Mechanism to 2030
- The annual pollution from every car, truck and bus currently driven in Australia for over 46 years

The largest fossil fuel projects that have received material support or facilitation under the Albanese government include:

- Woodside's proposed Browse Basin Gas Field, part of the Burrup Hub complex. Over 1.6 billion tonnes of carbon pollution would result from this development which has received facilitation in the form of offshore CCS permits and the passage of legislation to facilitate sea dumping, including the import and export of carbon dioxide pollution, and sequestration under the seabed.
- The Middle Arm industrial precinct, which is linked to the development of fracking in the onshore Beetaloo

Basin in the Northern Territory (including Tamboran Resources' proposed new 6.6 million tonne per annum (Mtpa) LNG export facility). 913 million tonnes of carbon pollution would result from this development over its lifetime, which would be facilitated by the Middle Arm precinct and the government's funding support for the precinct.

- The Santos Barossa gas project, which also benefits from the passage of sea dumping legislation allowing export of the project's significant carbon dioxide pollution and sequestration under the seabed in Timorese waters. There are further concerns that it transfers significant risk to the Australian taxpayer. This project would result in 340 million tonnes of carbon pollution over its lifetime.
- Three very large coal projects including a major expansion of the Narrabri coal mine (Whitehaven Coal), the proposed Mt Pleasant coal mine (MACH energy), and a very large expansion of the Ensham coal mine (Idemitsu). In each case, Environment Minster Tanya Plibersek refused requests to assess the climate change impacts of these projects. Together these coal projects would produce 1.4 billion tonnes of carbon pollution over their lifetimes.

Summary of new fossil fuel projects that have received other support or facilitation under the Albanese government

Project	Facilitation or assistance provided under Albanese government*	Lifetime Emissions (MT (Co2e-))
Beetaloo Basin Developments and Middle Arm industrial hub, Northern Territory	Financial assistance has been provided by the Albanese Government for the Middle Arm industrial precinct linked to the development of the Beetaloo Basin. Facilitation of approvals has also been provided by the Albanese Government agreeing to strategic assessment process under the EPBC Act for the Middel Arm Industrial precinct.	913
Woodside Burrup Hub - Browse Basin gas development	Resources Minister Madeleine King awarded Woodside CCS permits in Browse Basin and Bonaparte Basin. These permits, and the passage of sea dumping legislation provides material support for the Browse Basin project through enabling CCS and transferring risk to taxpayers.	1615
Santos Barossa gas project	Passage of the Sea Dumping legislation provides material support for the Barossa project through enabling CCS and transferring risk to taxpayers.	340
Whitehaven coal - Narrabri Coal Mine expansion	Minister Plibersek refused request to assess climate impacts under the EPBC Act despite agreeing substantial new information on climate consequences had been provided by the applicant.	475
MACH energy- Mt Pleasant coal project	Minister Plibersek refused request to assess climate impacts under the EPBC Act.	876
Idemitsu - Ensham coal mine life extension	Minister Plibersek refused request to assess climate impacts under the EPBC Act.	106
Total		4,325

* Further detail and references are provided in Methodology and data sources below.

Total for fossil fuel projects receiving approvals or material support

In total, 16 fossil fuel projects have received some kind of approval or other material support during the term of the Albanese government. The lifetime emissions from these projects if they all proceed will be nearly 7 billion tonnes of CO2e-.

This is equal to:

- 15 years of Australia’s annual domestic carbon pollution from all sources
- 7.2 times the total cumulative savings set to be delivered by all current Albanese government climate

- policies to meet Australia’s 2030 emissions reduction target.
- Nearly 35 times the total cumulative savings that will be delivered by the Safeguard Mechanism to 2030
 - The annual pollution from every car, truck and bus currently driven in Australia for nearly 75 years.

Summary of fossil fuel projects receiving approvals and other support under the Albanese Government

Category	Number of projects	Lifetime emissions (MTCO2e-)
Projects that have received approvals	10	2,614
Projects that have received other support	6	4,325
Total projects that have received approvals or other support	16	6,939

Fossil fuel projects currently in the balance

A further 11 projects are currently in the balance which would result in 9.9 billion tonnes of carbon pollution over their lifetimes. This is equal to:

- 22 years of Australia’s annual carbon pollution from all sources
- Over 10 times the total cumulative savings set to be delivered by all current Albanese government climate policies to meet Australia’s 2030 emissions reduction target.
- Nearly 50 times the total cumulative savings that will be delivered by the Safeguard Mechanism to 2030
- The annual pollution from every car, truck and bus driven in Australia for 107 years.

- These projects include:
- Nine coal projects which would together release 5.6 billion tonnes of carbon pollution over their lifetimes
 - A lifetime extension to 2070 of Australia’s largest LNG production facility, Woodside’s North West Shelf extension as part of the Burrup Hub complex. This project would release a total of 4.3 billion tonnes of carbon pollution over its lifetime making it the single largest climate decision that will be taken by the Albanese government, with total pollution nearly 4.5 times the combined cumulative savings projected from all Albanese Government climate policies to 2030.

A request for reconsideration of these projects to include assessment of their climate and carbon pollution impacts has been made to Environment Minister Tanya Plibersek. No decision has yet been made on these projects.

Summary of new fossil fuel projects that are currently in the balance

Project	Current status	Lifetime Emissions (MT (Co2e-)
Woodside Burrup Hub - North West Shelf LNG extension - Extension of operations at Australia's largest LNG export facility until 2070	EPBC decision by Minister Plibersek anticipated in early 2024. Living Wonders reconsideration request to consider climate impacts pending decision by Minister. Material support has been provided for gas developments to feed the NWS extension. (Browse Basin). Approvals for Scarbrough development also assist this project.	4300
Idemitsu Boggabri coal mine expansion	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	156
Waratah coal Alpha North Coal project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	3144
Mt Ramsay coal company Baralaba South Coal project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	245
Cuesta coal Moorlands open cut coal project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	134
BHP Saraji East coal project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	356
Whitehaven coal Winchester South coal project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	627
Bowen Basin Coal Lake Vermont Meadowbrook coal project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	307
TEC Coal (Stanwell) Meandu Mine King 2 East Project	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	204
BHP Caval Ridge Mine Horse Pit extension	Project currently under assessment. Living Wonders reconsideration request to consider climate impacts pending decision by Minister Plibersek	473
Total		9,946

* Further detail and references are provided in Methodology and data sources

Fossil fuel exploration projects

The Albanese government has also continued to support exploration for new fossil fuels, in addition to the development of already known reserves. Four areas of new exploration acreage have been release and one exploration drilling project has been approved, as summarized in the table below.

Summary of new fossil fuel exploration activities under the Albanese government

Gas Basin	Details
Inpex / Browse Basin exploration	NOPSEMA approval for Environment Plan for drilling of exploration wells 10 October 2023
Gippsland Basin exploration	Release of new exploration acreage by DISER and resources Minister Madeline King
Carnarvon Basin	Release of new exploration acreage by DISER and resources Minister Madeline King
Browse Basin	Release of new exploration acreage by DISER and resources Minister Madeline King
Northern Carnarvon Basin	Release of new exploration acreage by DISER and resources Minister Madeline King

Methodology and data sources

Classification of projects

Projects receiving approvals

Projects have been classified as having received approvals under the Albanese government if they have a) received approvals granted by the Minster for the Environment under the Environmental Protection and Biodiversity Conservation (EPBC) Act and / or b) received approvals granted by the Commonwealth offshore oil and gas regulator (NOPSEMA). Projects that have only received approvals from state governments are not included. While NOPSEMA approvals are granted at the agency level, the regulator and its actions fall under the responsibility, jurisdiction and legislation of the Commonwealth government and are therefore considered actions of the government in power.

The NOPSEMA approvals captured in this analysis are primarily for Environment Plans (EP’s) which generally cover individual activities rather than an entire project. Approvals for the initial Offshore Project Proposals (OPP) associated with these projects were in most cases granted before the Albanese government came to office, however under the NOPSEMA regulatory regime detailed assessment and consideration of environmental risks is conducted at the stage of EPs which are required before any activities associated with the projects may be implemented.

Projects receiving material support and facilitation

Projects have been classified as having received material support and facilitation where they have received funding or other assistance that confers a material benefit to the project proponents. A description of support and facilitation received by projects classified in this category is provided below.

Projects in the balance

This category includes projects where a decision is pending from the Albanese government, but no support or approvals have yet been provided. This includes nine coal projects and one gas project which are the subject of applications made under Section 78A of the EPBC Act for Minister Plibersek to reconsider the terms of existing assessments in order to include assessment of climate impacts and carbon emissions in their scope. The Minister has not yet responded to the reconsideration requests for projects in this category.

Details of material support and facilitation

Middle Arm and Beetaloo Basin Developments

- Financial assistance has been provided by the Albanese government for the Middle Arm industrial precinct linked to the development of the Beetaloo Basin. \$1.5 billion for common user infrastructure at the Middle Arm Precinct was committed in the 2022-23 federal budget as an equity investment by the Albanese government.
- Documents released to Guardian Australia under freedom of information laws show the Albanese government was told the development was seen as a ‘key enabler’ for the export of gas from the Beetaloo basin.¹ Separate documents show several of the wharves that would be funded by the Commonwealth would be used for the export of gas and petrochemicals.²
- Tamboran Resources has secured land in the proposed Middle Arm Precinct for their LNG development to process fracked gas from Beetaloo Basin.³

¹ The Guardian (2023) Darwin’s ‘sustainable’ Middle Arm development is key to huge fossil fuel projects, documents show <https://www.theguardian.com/environment/2023/may/18/darwins-sustainable-middle-arm-development-is-key-to-huge-fossil-fuel-projects-documents-show>

² The Guardian (2023) Albanese government knew ‘sustainable’ Darwin harbour project would be used for gas export, documents show <https://www.theguardian.com/australia-news/2023/jun/07/albanese-government-knew-sustainable-darwin-harbour-project-would-be-used-for-gas-export-documents-show>

³ Tamboran Resources ASX Announcement (9 June 2023) Tamboran secures land at Middle Arm Sustainable Development Precinct for proposed Northern Territory LNG (NTLNG) Development <https://www.investi.com.au/api/announcements/tbn/c2224152-5fb.pdf>

- Facilitation of approvals has also been provided by the Albanese government agreeing to a strategic assessment process for the Middle Arm Industrial precinct. The Environment Minister Tanya Plibersek has agreed to the Strategic Assessment under the EPBC Act, which ‘will streamline approval processes’. Further, ‘It will remove the need for individual referral assessments under the EPBC Act, where proposed projects are an approved ‘class of action’ that align with the endorsed Program and meet the approval conditions.’⁴

Woodside Browse Basin and Santos Barossa projects

- The Woodside Browse Basin and Santos Barossa Developments have been provided with material assistance through facilitation of Carbon Capture and Storage (CCS) for the developments associated with these projects.
- This has included the passage of sea dumping legislation which enables CCS in Commonwealth waters, and transfers long term risk associated with the stored carbon to the Australian government.⁵ It has been reported that the Sea Dumping legislation paves the way for Santos’s Carbon Capture and Storage project in the Timor Sea⁶, which is connected with the company’s Barossa development.⁷

- For the Woodside Browse Basin, Resources Minster Madeline King has also approved permits for CCS in the Browse Basin and Bonaparte Basin, stating that ‘This directly supports development, job creation and economic security across Northern Australia’ and ‘CCS is a safe, key proven technology that can support the petroleum sector in its low carbon transition.’⁸
- Analysis of Federal government spending in the 2023 budget by the Australia Institute reveals that the Federal government will provide \$141.1 million over 10 years to assist CCS projects and that ‘the intended purpose of most CCS projects funded by state and federal governments is to enable the continued operation of fossil fuel industries.’⁹
- CCS is particularly beneficial for the Browse Basin and Barossa projects because of the unusually high reservoir CO2 content in these gasfields. The ability to undertake CCS for these projects is considered key for both companies to meet corporate emissions reduction targets, attracting investment to the projects, and meeting the requirements of customers. For example, that the inclusion of CCS as part of the Barossa project was critical in Santos securing investors, and also assists the company by delaying the decommissioning costs of the depleted Bayu-Undan gas field.¹⁰ Facilitation for CCS therefore makes these projects more commercially viable and allows these projects to comply more easily with Commonwealth requirements for offshore gas projects under the Safeguard Mechanism.

Emissions estimates for included projects

Emissions estimates for the projects considered here reflect lifetime emissions including combustion of the produced fossil fuels (scope 3 emissions).

Data for emissions from individual projects has been obtained from several sources, including:

- For offshore oil and gas developments – emissions estimates are taken from company information submitted to the Commonwealth regulatory agency (NOPSEMA) in Environment Plans or Offshore Project Proposals.¹¹ Where not provided in the proponent documents, lifetime emissions were calculated for each project based on proposed operational life for each project or activity covered by the EP or OPP as applicable.
- For the Santos Barossa project, Scope 3 or combustion emissions associated with the development were not assessed in the OPP for the project. In this case total emissions were calculated using proponent estimates for Scope 1 emissions associated with offshore activities (3.385 Mtpa) and associated processing emissions at Darwin LNG facility (2.051 Mtpa),¹² with a factor of 3.13 tonnes of Co2e- per tonne of exported LNG applied to estimate Scope 3 emissions over the 20-year proposed life of the project. This factor accounts for final combustion and other emissions including transport, regassification and distribution emissions. This factor (Ecoinvent v3.5) follows the international standards for lifecycle assessment and was quoted in the OPP for the Woodside Scarborough gas field development approved by NOPSEMA.¹³

- For coal mine projects, lifetime emissions estimates are from The Australia Institute Coal Mine Tracker database¹⁴

- For the Beetaloo Basin and Middle Arm developments, emissions estimates have been sourced from the Climate Analytics October 2023 report *Emissions Impossible* which reviewed and updated previously published Beetaloo Basin development scenarios to include current Tamboran Resources 6.6 Mtpa LNG proposal.¹⁵ The estimate used here does not account for potential expansion to 20 Mtpa LNG flagged by Tamboran, which would substantially increase the lifetime emissions.
- For the North West Shelf Extension, emissions estimates are taken from Woodside’s *North West Shelf Project Extension Greenhouse Gas Management Plan* submitted to the WA EPA as part of the EPBC accredited assessment for the development.¹⁶
- Emissions from the Santos Towrie 116 Well CSG development in Queensland approved by Minister Plibersek has not been included in this analysis as no data on emissions or production could be found for this project in the available time.

Where aggregated totals are provided (such as in Figure 1), an adjustment has been made to avoid double-counting of emissions from the Browse Basin (included as a project receiving facilitation) given that gas from this field would be processed at the North West Shelf LNG facility (included as a project in the balance). This means that totals for the three categories do not add up to the aggregate number.

⁴ DCCEEW (2022) Middle Arm Sustainable Development Precinct Strategic Assessment <https://www.dcceew.gov.au/environment/epbc/strategic-assessments/middle-arm>

⁵ The Environment Protection (Sea Dumping) Amendment (Using New Technologies to Fight Climate Change) Bill 2023 amends the Sea Dumping Act to: allow for the issue of permits for the export of carbon dioxide streams from carbon dioxide capture processes for the purpose of sequestration into a sub-seabed geological formations.

⁶ ABC (2023) Sea dumping legislation paves way for Santos’s carbon capture and storage project <https://www.abc.net.au/news/2023-11-14/sea-dumping-carbon-capture-storage-legislation-santos-barossa/103078290>

⁷ AFR (2023) Santos’ Barossa project targeted in carbon plan <https://www.afr.com/companies/energy/santos-barossa-project-targeted-by-safeguard-deal-20230328-p5cvxd>

⁸ The Hon Madeline King MP, media release (24 Aug 2022) New offshore greenhouse gas storage acreage to help lower emissions <https://www.minister.industry.gov.au/ministers/king/media-releases/new-offshore-greenhouse-gas-storage-acreage-help-lower-emissions>

⁹ The Australia institute (2023) Fossil fuel subsidies in Australia 2023 <https://australiainstitute.org.au/wp-content/uploads/2023/05/P1378-Fossil-fuel-subsidies-2023-Web.pdf>

¹⁰ Sydney Morning Herald (2023) Barossa is Santos’ big bet on dirty gas that keeps backfiring <https://www.smh.com.au/business/companies/barossa-is-santos-big-bet-on-dirty-gas-that-keeps-backfiring-20230406-p5cyna.html>

¹¹ Available from the NOPSEMA Website Approved projects and activities (accessed 20 November 2023) https://info.nopsema.gov.au/home/approved_projects_and_activities?utf8=%E2%9C%93&keyword_search=

¹² Conoco Phillips (2017) Barossa Area Development Offshore Project Proposal, <https://www.nopsema.gov.au/sites/default/files/documents/2021-03/Draft-for-public-commentBarossa-Area-Development-Offshore-Project-Proposal-July-2017.p>

¹³ Woodside Energy (2020) Scarborough Offshore Project Proposal available for download here https://info.nopsema.gov.au/offshore_projects/41/show_public

¹⁴ The Australia Institute Coal Mine Tracker project <https://australiainstitute.org.au/initiative/coal-mine-tracker/> (accessed 20 November 2023)

¹⁵ Climate Analytics (2023) Emissions impossible Unpacking CSIRO GISERA Beetaloo and Middle Arm fossil gas emissions estimates <https://ca1-clm.edcdn.com/assets/emissions-impossible.pdf?v=1698659237>

¹⁶ Woodside (2021) North West Shelf Project Extension Greenhouse Gas Management Plan, Revision 7 https://www.epa.wa.gov.au/sites/default/files/Proponent_response_to_submissions/Appendix%20E%20-%20Greenhouse%20Gas%20Management%20Plan%20Revision%207.pdf

Potential emissions abatement required from these projects under the Australian governments Safeguard Mechanism (SGM) has not been precisely estimated in this study, but is considered negligible in comparison to the total emissions that will result from the projects. This is because:

- The SGM reduction requirement applies to Scope 1 emissions only, which represent less than 15% of total emissions in the case of LNG projects and less than 2% of overall emissions in the case of coal projects.
- The cumulative Scope 1 emission reduction that will be required from these projects by 2030 is equal to only around 20% of the total Scope 1 emissions that will result from the projects over this time period. In overall terms, the net reduction in total emissions from these projects required by the SGM to 2030 is likely to be 1-3% of the total emissions (including Scope 3 combustion emissions) that will result from the projects.
- Examination of company data and documents submitted to regulators¹⁷ demonstrates that these projects will meet the majority of their SGM abatement requirements through purchasing of offsets. This means the actual (rather than net) emissions from the projects may be substantially unaffected by the SGM.

Emissions comparisons

Emissions from the fossil fuel projects examined are compared with anticipated emissions reductions that would be achieved by the Albanese government's climate policies, and other comparisons. These comparisons are calculated using the following data:

For total cumulative abatement anticipated by all current climate policies to 2030:

- Modelling of over 70 emissions reduction measures proposed by the Albanese government to meet the national emissions reduction target found that approximately 960 Mt CO₂-e of abatement can be achieved by 2030.¹⁸
- The Safeguard Mechanism requires covered facilities to reduce emissions by an estimated total of over 200 million tonnes of carbon dioxide equivalents (CO₂-e) by 2030.¹⁹
- Australia's total pollution from all sources was 464.8 tonnes in 2020-21 according to the DCCEEW (2021) National Inventory Report.²⁰
- Australia's national transport sector emissions were 93 million tonnes CO₂e- in 2022 according to the Australian Government 2023 greenhouse gas inventory.²¹

¹⁷ For example see Woodside (2021) Woodside (2021) North West Shelf Project Extension Greenhouse Gas Management Plan, https://www.epa.wa.gov.au/sites/default/files/Proponent_response_to_submissions/Appendix%20E%20-%20Greenhouse%20Gas%20Management%20Plan%20Revision%207.pdf

¹⁸ Energetics (2016) Australia's 2030 climate change emissions reduction target – abatement potential <https://www.dcceew.gov.au/sites/default/files/documents/australias-2030-abatement-potential-summary.pdf>

¹⁹ Clean Energy Regulator (2023) [https://www.cleanenergyregulator.gov.au/Infohub/Markets/Pages/qcmr/march-quarter-2023/Australian-Carbon-Credit-Units.aspx#:~:text=On%2011%20April%202023%20the,2%20De\)%20by%202030](https://www.cleanenergyregulator.gov.au/Infohub/Markets/Pages/qcmr/march-quarter-2023/Australian-Carbon-Credit-Units.aspx#:~:text=On%2011%20April%202023%20the,2%20De)%20by%202030)

²⁰ DCCEEW (2021) National Inventory Report <https://www.dcceew.gov.au/sites/default/files/documents/national-inventory-report-2021-volume-1.pdf>

²¹ Australian Government (2023) National Greenhouse Gas Inventory <https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-gas-inventory-quarterly-update-december-2022>