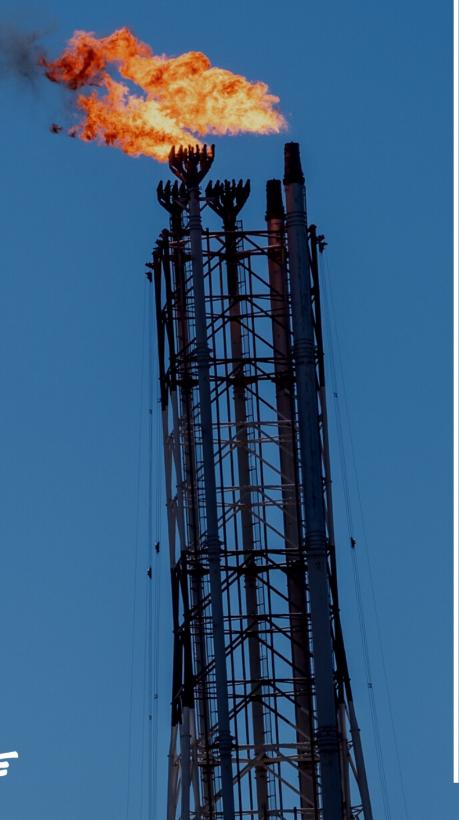
Woodside Investor Briefing

May 2022



GREENPEACE

Summary

Greenpeace is concerned about Woodside's current production plans and has identified 12 key risks associated with them:

- 1. Woodside is ignoring the demands of its shareholders to set Paris-aligned targets
- 2. Woodside's fossil fuel expansion plans are incompatible with the Paris Agreement
- 3. Woodside's fossil fuel expansion plans are incompatible with the International Energy Agency's Net Zero Emissions by 2050 Scenario
- 4. Woodside has failed to align capital expenditure with the Paris Agreement
- 5. Woodside's new projects, including Scarborough and Browse, risk losing money and becoming stranded assets
- 6. Woodside's climate plan is grossly inadequate and not aligned with the Paris Agreement
- 7. Woodside's demand assumptions are flawed
- 8. The Burrup Hub including Scarborough and Browse is risky and open to challenge
- 9. Woodside faces decommissioning risk, amid public criticism for poor practice
- 10. Woodside is facing increasing reputational risk
- 11. Woodside is missing the opportunity to capitalise on the clean transition
- 12. The Woodside Board's climate competence is questionable

Greenpeace recommends that, at Woodside's upcoming AGM, shareholders:

- Vote against Woodside's Say on Climate resolution;
- Vote for the Capital Protection shareholder proposal; and
- Vote against the re-election of the Chair of the Sustainability Committee, Ann Pickard.



Introduction

Woodside promotes itself heavily to the public and its investors as a positive contributor to the climate transition. However, its actions indicate otherwise, and expose the company and its investors to multiple risks. The Task Force on Climate-related Financial Disclosures identifies that "fossil fuel ... providers ...generally have significant financial exposure around transition issues related to GHG emissions'.¹ Greenpeace has significant concerns about how Woodside is managing this risk. Woodside's actions also expose the company and its investors to short-term legal, regulatory, ESG and reputational risk. Woodside plans to significantly increase production of oil and gas, which is incompatible with the Paris climate goals and the International Energy Agency's (IEA) Net Zero by 2050 Scenario (NZE).² The United Nations Secretary General, Antonio Guterres, recently put this starkly: "Investing in new fossil fuels infrastructure is moral and economic madness".³ While most emissions from Woodside's projects will be exported, Woodside's domestic emissions alone make it one of Australia's ten biggest corporate contributors to climate change.4

This briefing sets out twelve key risks associated with Woodside's current plans. In addition to its broad material climate risk, Woodside's plans include the development of the most climate polluting project currently proposed in Australia, the Burrup Hub project. Woodside has explained that, "To realise the Burrup Hub vision, a number of activities are being advanced simultaneously: Scarborough; Pluto Train 2; Browse to NWS Project; NWS Project Extension and Pluto-NWS Interconnector". This mega-project, which includes the Scarborough and Browse basins, carries significant climate, ESG, stranding and reputational risk. Over its lifetime, the Burrup Hub project will result cumulatively in over 6 billion tonnes of GHG emissions, which is twelve times Australia's current annual emissions.

Despite its claims to the contrary, Woodside has failed to align its production, capital expenditure and emissions goals with the Paris Agreement to limit warming to 1.5 degrees Celsius. The Climate Action 100+ has recently assessed Woodside as failing all criteria of capital allocation alignment with the Paris Agreement. Investors have a key role in demanding that Woodside adopt Paris-aligned targets, responsibly manage their growing risks, and focus on the clean energy transition.

Given these risks, Greenpeace has three recommendations for shareholders at Woodside's 2022 AGM. First, Woodside's current climate strategy is grossly inadequate, as it excludes over 90% of Woodside's emissions, relies heavily on offsets, fails to address Scope 3 emissions and foregrounds fossil fuel-based products as 'new energy solutions'. Greenpeace therefore, recommends voting against this plan.



Second, in light of Woodside's current failure to align capital expenditure with the Paris Agreement goals and the risk that this inaction places on shareholders, Greenpeace recommends that shareholders support the Capital Protection shareholder proposal, which "request[s] the company disclose, in subsequent annual reporting, information that demonstrates how the company's capital allocation to oil and gas assets will align with a scenario in which global energy emissions reach net-zero by 2050, facilitating the efficient managing down of these assets".8

Finally, it is clear that the Sustainability Committee has not steered Woodside in a direction that is aligned with the Paris Agreement or that adequately addresses ESG risk. Greenpeace, therefore, suggests that shareholders vote against the re-appointment of the Chair of the Sustainability Committee.

Greenpeace recommends that, at Woodside's upcoming AGM, shareholders:

- Vote against Woodside's Say on Climate resolution;
- Vote for the Capital Protection shareholder proposal; and
- Vote against the re-election of the Chair of the Sustainability Committee, Ann Pickard.

In addition, Greenpeace urges shareholders to engage with Woodside to:

- Express opposition to the Burrup Hub project that is, the set of activities including Scarborough; Pluto Train 2; Browse to NWS Project; NWS Project Extension and Pluto-NWS Interconnector – on the grounds of climate, biodiversity and reputational risk; and
- Urge Woodside to adopt a Clean Transitions strategy, as a value creation opportunity to transition from fossil fuels to clean alternatives like renewable energy and green hydrogen, and ammonia created using renewable resources like wind and solar.



Twelve key risks

1

Woodside is ignoring the demands of its shareholders to set Paris-aligned targets

In 2020, 49.63% of Woodside shareholders supported an Australasian Centre for Corporate Responsibility (ACCR) resolution seeking that Woodside set Paris-aligned Scope 1, 2 and 3 emission reduction targets. Woodside has failed to act in accordance with the wishes of almost half of its shareholders. Instead, Woodside is planning to increase production and substantially increase its Scope 3 emissions.



Woodside's fossil fuel expansion plans are incompatible with the Paris Agreement

Woodside's production plans do not align with the Paris Agreement's goal of limiting global warming to as close to 1.5 degrees as possible. The Intergovernmental Panel on Climate Change (IPCC)'s latest report found that existing fossil infrastructure alone will push the world over 1.5 degrees. Continuing to develop fossil fuel-based infrastructure will only lock-in' this high emissions trajectory. The clear implication is that opening up new fossil fuel basins is incompatible with limiting global warming to 1.5 degrees. The United Nations Secretary General, Antonio Guterres, recently put this starkly:

"Investing in new fossil fuels infrastructure is moral & economic madness". 13

The IPCC also set out pathways that aim to limit warming to 1.5 degrees.¹⁴ By 2050, gas use in such pathways would decline by up to 85% from 2019 levels and oil would decline up to 90%.¹⁵ Analysis by Climate Analytics of 1.5 degree compatible scenarios from the IPCC Special Report on 1.5°C shows unabated use of natural gas in primary energy supply globally should already have peaked and be declining globally, and that it needs to drop by more than 30% below 2020 levels by 2030, and 65% below 2020 levels by 2040.¹⁶ In other words, unabated natural gas use in the power sector will need to peak within the present decade and begin a rapid decline thereafter.¹⁷

Woodside's plans to substantially increase production of both oil and gas is at odds with these pathways.

The world's largest investor engagement initiative on climate change has recently singled out Woodside as among the worst climate performers in Australia and globally. The Climate Action 100+, with 700 signatories responsible for US\$68 trillion (AU\$90 trillion) in assets under management, said recently that Woodside had failed to set targets for a safe climate trajectory and its capital expenditure plans were not aligned to the targets Woodside had set. The Climate Action 100+ recently assessed Woodside as failing all criteria of capital allocation alignment with the Paris Agreement in its company assessment.

Woodside's key strategy to deal with climate transition is to invest \$5 billion in what it calls 'new energy products'. The bulk of these 'new energy products' are fossil fuel-based hydrogen and ammonia, and Carbon Capture and Storage (CCS).²¹ The former products can be characterised as fossil fuel products: hydrogen produced with gas is more carbon intensive than direct use of gas (unabated).²² Climate Analytics has assessed that Woodside's H2Perth project will increase the state's emissions.²³ The latter is a technology that, to date, has not worked anywhere in the world commercially at scale. Genuinely green hydrogen is created using renewable resources like wind and solar, not gas. Woodside's plan is to increase oil and gas production, increase fossil fuel-based hydrogen and ammonia production, and assert that unproven CCS technology will magically square this with the Paris Agreement. Woodside's plans clearly fail to take the Paris Agreement seriously.



Woodside's fossil fuel expansion plans are incompatible with the International Energy Agency's Net Zero Emissions by 2050 Scenario

Woodside's oil and gas production plans are out of step with the International Energy Agency (IEA)s Net Zero Emissions by 2050 Scenario (NZE). The IEA has modelled a range of scenarios for the global energy transition and the Net Zero Scenario is Paris compatible. The IEA's NZE concludes: "The rapid drop in oil and natural gas demand in the [Net Zero Emissions by 2050 Scenario] means... no new oil and natural gas fields are required beyond those that have already been approved for development". The IEA indicates a steep decline in Australia's LNG exports will occur as its major markets begin to implement the Paris Agreement.

In direct contrast to the IEA's scenario, Woodside is planning to significantly increase production over the short- to medium-term. It plans to target a number of new gas fields, including Scarborough, Calypso, Browse and Sunrise, as well as the Sangomar and Trion oil fields.²⁷ Woodside's fossil fuel expansion plans are grossly misaligned with the IEA's Net Zero Scenario.

It is worth noting here that Climate Analytics has stated that the NZE significantly overestimates unabated gas consumption over the next decade, relative to IPCC assessed pathways.²⁸ Climate Analytics' analysis has found that while the IEA's NZE is Paris Agreement compatible in overall terms, there are significant indications that its projected natural gas use is much higher than can be expected, given the availability of cleaner, zero carbon technologies in the applications where natural gas is presently used. The IEA's NZE has natural gas 6% below 2020 levels by 2030 and 45% below by 2040.²⁹ The fact that Woodside's plans are inconsistent with the NZE further underscores its incompatibility with the Paris Agreement.



Woodside has failed to align capital expenditure with the Paris Agreement

Woodside continues to allocate substantial capital to oil and gas expansion. As the ACCR highlighted in recent analysis, Woodside's business as usual (BAU) and committed portfolio allocates 67% of capital to new oil and gas fields while allocating 33% to existing fields. Should the BHP Petroleum merger be approved, 53% of combined capital will be allocated to new oil and gas. According to this analysis, only 15% of capital allocation through the 2020s is targeted for non-fossil fuel investment.³⁰ Woodside's disclosed future capital expenditure is clearly not aligned with the IEA's NZE.

The Climate Action 100+ recently assessed Woodside as failing all criteria of capital allocation alignment with the Paris Agreement in its company assessment.³¹ Rather than investing heavily in new and expanded oil and gas production projects, Woodside must align their capital allocation plans with the Paris Agreement and net zero by 2050 goals. This would mean discontinuing planned new production fields and focusing instead on meeting the world's growing renewable energy needs.

Woodside argues in their Climate Report 2021 that "even in the Net Zero Emissions scenario the forecast cumulative global investment in oil and gas needed to meet the world's energy needs is approximately US\$10 trillion by 2050". 32 Through this statement, Woodside indicates that their hoped-for investment in new oil and gas fields is somehow compatible with the NZE. However, this is very far from the case. What the NZE actually says is that only a tiny proportion of global investment in oil and gas in that scenario goes on new fields, and it only goes to new fields that were already under construction or approved as of October 2021.33 Beyond that, the NZE is clear, "all upstream oil and gas investment is spent on maintaining production at existing fields".34

The Scarborough gas field was neither under construction, nor approved, as of October 2021. Nor were other new fields Woodside wants to open: Browse; Calypso; Sunrise or Trion oil fields. There is a critical distinction between the investment needed to continue current production versus opening up new fossil fuel basins after the publication of the IEA's NZE. The IEA has made it clear that while there is a role for the former, there is no role for the latter in its Net Zero Scenario. It is disingenuous of Woodside to suggest its planned new oil and gas developments are compatible with the NZE – they clearly are not.



Woodside's new projects, including Scarborough and Browse, risk losing money and becoming stranded assets

Given the IEA's key conclusion that there is no room for new oil and gas production projects in the pathway to net zero emissions by 2050, many new projects being pursued by Woodside are at risk of losing money and eventually becoming stranded assets.

The Investor Group on Climate Change recently commissioned Wood Mackenzie to undertake a cashflow analysis of Scarborough and Browse (alongside six other projects) under two scenarios aligned with 1.5 degrees.³⁵ The report highlighted significant risks with currently planned capital expenditure for these projects. The report concluded: "Under the 1.5°C scenarios explored in this report, Australian gas will have a diminishing role in the transition to net-zero emissions, particularly from the 2030s onwards. By 2050, Australia is forecast to have minimal LNG exports or domestic gas demand, suggesting new projects carry a substantial risk of stranding should key policy and market changes materialise" [emphasis added].³⁶

Woodside's major customer countries for LNG, Japan, the Republic of Korea and China, have now set net zero targets. In a report commissioned by Woodside, the CSIRO modelled different future electricity generation mixes consistent with reducing emissions in the global electricity sector.³⁷ It found that, under some scenarios, increasing gas supply to certain regions (including Japan and South Korea) could delay their transition to renewable energy.³⁸ As the costs of renewable energy continue to fall, there is a risk that demand for LNG in Woodside's key markets will decline, leaving Woodside with stranded assets.

Climate Analytics has warned in its assessment of the Scarborough-Pluto project that, "[t]he Scarborough to Pluto project is not 1.5°C consistent and consequently is a major stranded asset risk".³⁹

Demand for Woodside's fossil fuel products is expected to decline significantly under the IEA's NZE. In this scenario, as drawn out by Market Forces, Australia's LNG exports fall 25% below 2020 levels by 2030, and halve by 2035.⁴⁰ In fact, the IEA Net Zero report indicates the potential for a collapse in the LNG market from Australia as its major markets begin to implement the Paris agreement.⁴¹ Domestically, the Australian Energy Market Operator has said that "the role of natural gas in Australia's energy market is uncertain as a rapid electrification of the country's economy alters demand for the fossil fuel".⁴²

Woodside has also based its projections on questionable pricing assumptions. Analysis by Market Forces suggests Woodside has adopted oil price assumptions for the purposes of impairment testing that are almost double those projected under NZE by 2030. Woodside's pricing assumptions should be reality-tested against the IEA's scenarios. Woodside also appears to have massively underestimated its potential exposure to carbon pricing. Analytics applied the NZE's carbon pricing for major developed economies and concluded that, "[t]hese costs could have a major impact on the project [Scarborough]'s bottom line, particularly after the mid-2030s, and would seriously and adversely affect the competitiveness of LNG from the project". This analysis suggests the value of many of Woodside's projects could be decimated in a 1.5 degree world.

Woodside's climate plan is grossly inadequate and not aligned with the Paris Agreement

Woodside's Climate Strategy, which the CEO says is "an integral part of our company strategy" is grossly inadequate for four reasons.⁴⁷ First, its targets exclude more than 90% of the emissions Woodside causes.⁴⁸ Woodside's biggest contribution to global warming is the fossil fuels it exports, emissions from the end use of which are categorised as scope 3 emissions. Woodside excludes Scope 3 emissions from its climate targets.⁴⁹

Second, its scope 1 and 2 decarbonisation plan is dominated by the use of offsets,⁵⁰ which expert investor guidance has discredited as a strategy for addressing increased greenhouse gas emissions. A carbon offset broadly refers to a reduction in greenhouse gas emissions – or an increase in carbon storage (e.g. through tree-planting) – that is used to compensate for emissions that occur elsewhere.⁵¹ There are a number of well-known problems with offsetting that mean it is generally seen as the last step in a carbon management strategy, after every other option to reduce emissions has been tried.⁵² The Investor Group on Climate Change guidance for corporate climate transition plans, for example, states that offsets are "generally not considered [a] credible approach". Woodside instead plans to dramatically increase its Scope 1 and 2 emissions and attempt to offset them. There appears to have been very little attempt to reduce emissions directly.

Third – and most importantly – the company's fossil fuel expansion plans are in clear contravention of the IEA's NZE. This has been discussed in more detail above.

Fourth, many of the 'new energy products' Woodside plans to invest in are fossil fuel-based hydrogen and ammonia, and CSS. As discussed above, genuinely green hydrogen is created using renewable resources like wind and solar, not fossil fuels. A recent ANU study found that emissions from gas or coal based hydrogen production systems could be substantial even with CCS, and the cost of CCS is higher than often assumed. CCS is a technology that, to date, has not worked in Western Australia commercially at scale. For example, Western Australia's Hydrogen Minister, Alannah MacTiernan, recently stated, "We know that green hydrogen can work and can reduce emissions, carbon capture and storage is a less certain proposition". At a time when the world needs to move swiftly away from fossil fuels and towards renewable energy, a 'clean energy' strategy that banks almost exclusively on more fossil fuels and an unproven technology is simply not credible.



Woodside's demand assumptions are flawed

Woodside heavily promotes that its products are critical to decarbonisation in Asia, and anticipates large demand growth in its key Asian export markets. However, as noted above, demand for Woodside's products is expected to decline significantly under the IEA's NZE, leaving no room for new projects.

Woodside's claims that increased gas will be good for climate transition by displacing coal in key Asian export markets have also been questioned. The Age and Sydney Morning Herald revealed recently that this claim was undermined by a report Woodside commissioned from CSIRO.⁵⁷ CSIRO found that supplying more gas to those markets would either have 'no change' or 'no net benefit' or a 'negative impact' by delaying renewable energy uptake.⁵⁸ An independent analysis by Climate Analytics reached a similar conclusion, that "natural gas is impeding investment in, and development of, renewable energy technologies and their associated infrastructure, and this is in line with studies on carbon lock-in and the crowding out effect".⁵⁹

As the Investor Group on Climate Change has said in response to the CSIRO Report, this raises important questions for investors: "One is – is this narrative you're actually making a positive contribution through producing gas credible? This obviously casts doubt on that. The second part – is there going to be any demand for your product? And it also raises concerns that if you have an overzealous pushing of gas into those markets, it could displace more renewable sources of electricity, which is really worrying". 60 CSIRO's study undermines major claims Woodside is making about the role of Woodside's increased LNG exports in decarbonisation of major trading partners.





The Burrup Hub - including Scarborough and Browse - is risky and open to challenge

Woodside's Burrup Hub project is the most polluting fossil fuel development currently proposed in Australia.⁶¹ Global climate research organisation Climate Analytics has calculated that Woodside's cumulative emissions from the Burrup Hub Project will be 6.1 billion tonnes.⁶² This is approximately twelve times Australia's current annual emissions. Climate Analytics concludes that Woodside's Burrup Hub is incompatible with the Paris Agreement.⁶³ In fact, the Scarborough-Pluto expansion is incompatible with the Paris Agreement on its own.⁶⁴ The high emissions figures from the Scarborough-Pluto expansion led Climate Analytics to conclude that: "Woodside's proposed Scarborough to Pluto LNG project in Western Australia represents a bet against the world implementing the Paris Agreement".⁶⁵

The Scarborough project, which reached Final Investment Decision (FID) last year, remains exposed to significant legal and regulatory risks. Brookfield abandoned its plans to invest in the controversial Scarborough gas development in late 2021. 66 While climate risk has been the focus of controversy for Scarborough, the project also carries other ESG risks relating to biodiversity concerns, and significant community concern about the project's marine impacts.

The offshore project area off Western Australia's coastline is home to some of the world's most remarkable ecosystems and marine wildlife. Whale sharks, humpback whales and several threatened species of sea turtles and sawfish rely on the area and risk being directly impacted by the development of the project.⁶⁷ For example, Woodside has proposed to undertake dredging and spoil dumping operations in the Dampier Archipelago, which is Western Australia's richest area of marine biodiversity,⁶⁸ containing coral reefs, sponge gardens, seagrass and more than 650 fish species.⁶⁹ Over 150,000 people have signed a Greenpeace petition expressing their opposition to this project on climate and environmental grounds⁷⁰ and over 4,000 have tailor-written their concerns about the Burrup Hub to Woodside directly.

A number of key environmental approvals for Scarborough have not been obtained, or are subject to active legal challenge. Four key operational approvals, known as 'Environment Plans' remain outstanding from The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA). These critical approvals are required before any work can commence. A key primary environmental state environment approval is also currently being challenged in the WA Supreme Court by the Conservation Council of WA.

The Browse project carries significant biodiversity as well as climate risk. The Browse proposal involves drilling 54 wells to extract gas from the Browse basin gas field which lies beneath Scott Reef, the largest individual offshore coral reef in Australia and one of the most ecologically significant marine environments in the world. 71 According to Woodside's own risk models, a well blowout in the Torosa gas field would release approximately 142,154 cubic metres (more than the equivalent of two cargo tanks) of unstabilised gas condensate that would last 77 days and spread across Scott Reef and Seringapatam Reef at concentrations lethal to marine life, including migratory whales. 72 The Browse Project will need to be assessed under the Environmental Protection and Biodiversity Act 1999 and is yet to receive its major environmental approvals.

In addition, significant concerns have been placed on the record from Traditional Custodians about the direct and indirect impacts of expansion on the World Heritage-nominated rock art of the Burrup Peninsula.⁷³ An application for an injunction to a downstream user of Woodside's gas has been made to the Federal Environment Minister, as was widely reported last month.⁷⁴ A recent scientific study has concluded that the petroglyphs are being actively degraded by industrial pollution.⁷⁵



Woodside faces decommissioning risk, amid public criticism for poor practice

Woodside may face large decommissioning liabilities, especially should the BHP Petroleum merger be executed and the project portfolio is expanded to include ageing offshore oil assets. Woodside currently records US\$2.1 billion for decommissioning liabilities.⁷⁶ Woodside's exposure to decommissioning is likely to increase significantly if its shareholders approve the purchase of BHP's petroleum assets that include two ageing assets: a 50 per cent stake in ExxonMobil's Gippsland operation and an additional one-sixth share of the North West Shelf LNG project operated by Woodside. We note that ACCR has proposed a shareholder resolution for Woodside to reveal the true cost of decommissioning their facilities.⁷⁷

Woodside's reputation is being increasingly tarnished by its approach to decommissioning, with the Northern Endeavour and the Nganhurra riser turret mooring being two clear examples. Woodside operated the Northern Endeavour vessel for 15 years, slated the facility for decommissioning, then sold it to Northern Oil and Gas Australia (NOGA) in 2016. NOGA entered liquidation after the industry regulator shut down production in February 2020, leaving taxpayers with the decommissioning liability. The Federal Government then intervened in this clearly unacceptable outcome. This has resulted in an industry levy being touted for all offshore oil and gas producers to cover the cost of cleanup, and Woodside has been criticised by other oil and gas companies for its role in creating this situation.⁷⁸

Late last year, Woodside was forced by the Commonwealth Environment Department to abandon its plan to dump a controversial 83 metre-long piece of equipment related to production at the Enfield oil field on the seabed near Ningaloo Marine Park. Woodside planned to dump the structure, which likely contained plastics, hydraulic oil and nowbanned toxins that bioaccumulate in fish and are linked to loss of IQ in humans, just outside the Ningaloo World Heritage Area. Federal regulator NOPSEMA initiatied compliance action against Woodside last year over this matter. Recently, (a) NOPSEMA spokesman said it was investigating whether Woodside had breached the law by not properly maintaining the riser turret mooring. It is clear that Woodside's flawed approach to decommissioning is a source of considerable legal and reputational risk.



Woodside is facing an increasing reputational risk

Amidst climate-fuelled record-breaking flooding, bushfires and heatwaves, Woodside as a pure play fossil fuel provider is being increasingly challenged over its social licence. Early this year, Western Australia's most loved literary son and 'national living treasure' Tim Winton used his closing speech at the Perth Writers' Festival to call out Woodside for its harmful, climate-wrecking projects, in comments that were reproduced around the world. In 2021, Woodside experienced its highest voluntary staff turnover in seven years. Woodside also recently lost naming rights for the Perth Fringe Festival. The Say No to Scarborough Gas Alliance was also recently established to oppose Woodside's fossil fuel expansion projects. Membership of this Alliance of international, national and state-based environment groups includes the Australian Marine Conservation Society, Greenpeace, The Conservation Council of Western Australia, 350.org and Market Forces. These groups collectively represent over one million Australians.



Woodside is missing the opportunity to capitalise on the clean transition

The Investor Group on Climate Change has recently pointed out that: "Investors have a key role in ensuring that oil and gas producers responsibly manage these risks and increase their focus on the opportunities of the transition, which will help them build a sustainable long-term business strategy beyond gas". 86 As a company with deep expertise in the oil and gas sector, Woodside could pursue an accelerated transition plan and become a leader in genuinely green hydrogen production and renewable energy.

This would benefit the company and its investors by ensuring the company's resilience in the clean energy market transformation taking place. Renewables were the only energy source for which demand increased in 2020. In 2021, renewables dominated investment in new power generation and were expected to account for 70% of 2021's total of US\$530 billion spent on all new generation capacity. It is worth reflecting on the words of the United Nations Secretary General, Antonio Guterres: "Such investments will soon be stranded assets — a blot on the landscape and a blight on investment portfolios. But, it doesn't have to be this way". Unfortunately, Woodside's plans as outlined in this year's Annual Report suggest it is currently choosing the path away from the Paris Agreement – but it doesn't have to be this way.



The Woodside Board's climate competence is questionable

The standard of climate competence required of a modern Board is high.

The Investor Group on Climate Change defines a climate competent board as: "one that effectively integrates climate change into all the components of board governance. It can demonstrate, through its public disclosure, that it has the structures, systems and capability to ensure it integrates climate change into the short-, medium- and long-term company strategy and the oversight of company risk management". 90

Further, as Sarah Barker of Minter Ellison has explained regarding Noel Hutley SC's most recent opinion on Directors' duties and climate change⁹¹, "The Opinion concludes that evolving market expectations on climate change have considerably elevated the standard of care required to discharge a directors' duty of due care and diligence. It also highlights the risk of liability for misleading disclosure, in the form of 'greenwashing', should there be inconsistency between a company's stated position and ambition on climate risk management, and its internal strategy, plans and actions". 92

Greenpeace is concerned about whether Woodside's existing climate governance is adequate.

The Sustainability Committee, for example, has not steered Woodside in a direction that is aligned with the Paris Agreement or that adequately addresses ESG risk. Woodside lacks a climate strategy and capital expenditure that is aligned with the Paris Agreement. Few of the directors appear to have industry experience in integrating ESG risks into corporate strategy, sustainability, renewable energy, or low or zero emissions technologies. It is questionable, therefore, whether Woodside has sufficient 'climate competence' for a Parisaligned world. For this reason, Greenpeace recommends against re-election of the Chair of the Sustainability Committee, Ann Pickard.



Conclusion

This briefing has outlined twelve key risks associated with Woodside's current production, capital expenditure and emissions goals. In short, if Woodside continues to pursue its current strategy, it will be exposed to a growing range of climate, ESG, reputational and commercial risks. However, there is another possible future for the company, in genuinely clean energy. This could be Woodside's 'Kodak moment'. It could choose to double down on dangerously increasing fossil fuel production, a choice which is inconsistent with the Paris Agreement. Or it can choose a path of accelerated transition to a major clean energy provider. Investors have a key role in pushing the company forward, by demanding that Woodside adopt a 1.5 degree path.



Endnotes

- 1. The Task Force on Climate-related Financial Disclosures, Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, October 2021, p. 63 accessed online https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf
- 2. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, p.51, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf
- 3. United Nations, Secretary-General Statements and Messages, "Secretary-General Warns of Climate Emergency, Calling Intergovernmental Panel's Report 'a File of Shame', While Saying Leaders 'Are Lying', Fuelling Flames", 4 April 2022, accessed online https://www.un.org/press/en/2022/sgsm21228.doc.htm
- 4. Commonwealth of Australia, Clean Energy Regulator, National Greenhouse and Energy Reporting, "2020-2021 Highlights: Australia's 10 highest emitters (Scope 1)", published 2022, accessed online at http://www.cleanenergyregulator.gov.au/NGER/National%20greenhouse%20and%20energy%20reporting%20data/Data-highlights/2020-21-published-data-highlights We note that the Clean Energy Regulator calculates their 'Australia's 10 highest emitters (Scope 1)' on an operated basis, rather than an equity basis
- 5. Woodside, "North West Shelf Project Extension", August 2019, p.1, accessed online at https://www.woodside.com.au/docs/default-source/current-consultation-activities/australian-activities/nws-project-extension-fact-sheet.pdf?sfvrsn=bbbdcd7f 16
- 6. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, accessed online at https://climateanalytics.org/media/climateanalytics.scarboroughpluto-dec2021.pdf
- 7. Climate Action 100+, "Company Assessment, Woodside Petroleum Ltd. Alignment Assessments", accessed online at https://www.climateaction100.org/company/woodside-energy/#skeletabsPanel4. In these, Woodside received a score of "No, does not meet any criteria" for capital allocation alignment.
- 8. Market Forces, "Investor Briefing: Woodside Petroleum and Santos", published 23 March 2022, p.11, accessed online at
- https://www.marketforces.org.au/wp-content/uploads/2022/03/2022-03-STO-WPL-investor-briefing.pdf
- 9. Australasian Centre for Corporate Responsibility (ACCR), "Woodside Petroleum Ltd (ISIN: AU000000WPL2) Assessment of 2021 Climate Report", published 8 April 2022, p.1 https://www.accr.org.au/research/woodside-petroleum-ltd-assessment-of-2021-climate-report/
- 10. The goal of the Paris Agreement is "Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change". United Nations, Paris Agreement, 2015,
- https://unfccc.int/sites/default/files/english_paris_agreement.pdf. The Glasgow Climate Pact, adopted by all 192 nations that are signatory to the Paris Agreement, reaffirmed support for limiting global warming to 1.5 degrees. This briefing focuses on 1.5 degree-aligned scenarios, given the increase in global policy signals indicating that 1.5 degrees is becoming the preferred emissions pathway.
- 11. "Climate Change 2022: Mitigation of Climate Change". Working Group III Contribution to the IPCC Sixth Assessment Report (SPM B.7; Ch 2.7.3; C.4). https://www.ipcc.ch/report/ar6/wg3/
- 12. "Climate Change 2022: Mitigation of Climate Change". Working Group III Contribution to the IPCC Sixth Assessment Report (SPM B.7; Ch 2.7.3; C.4). https://www.ipcc.ch/report/ar6/wq3/
- 13. United Nations, Secretary-General Statements and Messages, "Secretary-General Warns of Climate Emergency, Calling Intergovernmental Panel's Report 'a File of Shame', While Saying Leaders 'Are Lying', Fuelling Flames", 4 April 2022, accessed online https://www.un.org/press/en/2022/sgsm21228.doc.htm
- 14. In summary, the IPCC says that to meet the Paris Agreement, global carbon emissions need to be about halved by 2030 from current levels on their way to net zero by mid century. Fossil fuel use needs to decline fast, with fastest reduction rates required in pathways that aim at 1.5 degrees. This is compatible with pathways that limit warming to 1.5 degrees with little to no overshoot, with at least 50% certainty, and would very likely keep below 2 degrees. "Climate Change 2022: Mitigation of Climate Change". Working

Group III Contribution to the IPCC Sixth Assessment Report (C.1.2;Table SPM.1,C1a) https://www.ipcc.ch/report/ar6/wq3/

- 15. "Climate Change 2022: Mitigation of Climate Change". Working Group III Contribution to the IPCC Sixth Assessment Report (C.3.6; Ch 3, Figure 3.8; C.3.2)
- 16. Climate Analytics, "Why gas is the new coal", November 2021, p.6, accessed online at https://climateanalytics.org/media/gas is new coal nov 2021 1 1.pdf
- 17. Climate Analytics, "Why gas is the new coal" November 2021, p.6, accessed online at https://climateanalytics.org/media/gas is new coal nov 2021 1 1.pdf
- 18. Richard Gluyas, "Woodside and Santos named as poor climate performers in Climate Action 100+ global study", The Australian, 30 March 2022, accessible online at https://www.theaustralian.com.au/business/woodside-and-santas-named-as-poor-climate-performers-in-cl
- https://www.theaustralian.com.au/business/woodside-and-santas-named-as-poor-climate-performers-in-climate-action-100-global-study/news-story/171ff4328ebef21c988ddc47b459b138
- 19. Richard Gluyas, "Woodside and Santos named as poor climate performers in Climate Action 100+ global study", The Australian, 30 March 2022, accessible online at https://www.theaustralian.com.au/business/woodside-and-santas-named-as-poor-climate-performers-in-cl

https://www.theaustralian.com.au/business/woodside-and-santas-named-as-poor-climate-performers-in-cimate-action-100-global-study/news-story/171ff4328ebef21c988ddc47b459b138

- 20. Climate Action 100+, "Company Assessment, Woodside Petroleum Ltd. Alignment Assessments", accessed online at https://www.climateaction100.org/company/woodside-energy/#skeletabsPanel4. In these, Woodside received a score of "No, does not meet any criteria" for capital allocation alignment.
- 21. Woodside, "Climate Report 2021", p.20, accessed online at
- https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-cli mate-report/climate-report-2021.pdf
- 22. Robert W. Howarth and Mark Z. Jacobson, "How green is blue hydrogen?" *Energy Science and Engineering*, 12 August 2021, accessed online at https://onlinelibrary.wiley.com/doi/10.1002/ese3.956
- 23. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, see pp.11 and 21,accessed online at <a href="https://climateanalytics.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.scarboroughpluto.org/media/climateanalytics.org/media/climateanalytics.scarboroughpluto.o
- 24. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf
- 25. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, p.51, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector CORR.pdf
- 26. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, p.175, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector CORR.pdf
- 27. Woodside, "Annual Report 2021", p.57, accessed online at
- https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-full-year-results/annual-report-2021.pdf?sfvrsn=6572f6c4_8
- 28. Climate Analytics, "Why gas is the new coal", November 2021, p.14 acessed online https://climateanalytics.org/media/gas is new coal nov 2021 1 1.pdf
- 29. Climate Analytics, "Why gas is the new coal", November 2021, p.6 accessed online https://climateanalytics.org/media/qas is new coal nov 2021 1 1.pdf
- 30. Australasian Centre for Corporate Responsibility (ACCR) "Investor briefing: Shareholder Resolutions to Woodside Petroleum Ltd on climate-related lobbying and decommissioning", published 12 April 2022, accessed online at
- $\underline{https://www.accr.org.au/research/investor-briefing-shareholder-resolutions-to-woodside-petroleum-ltd-on-climate-related-lobbying-and-decommissioning/$
- 31. Climate Action 100+, "Company Assessment, Woodside Petroleum Ltd. Alignment Assessments", accessed online at https://www.climateaction100.org/company/woodside-energy/#skeletabsPanel4. In these, Woodside received a score of "No, does not meet any criteria" for capital allocation alignment.

- 32. Woodside, "Climate Report 2021", p.13, accessed online at https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-climate-report/climate-report-2021.pdf
- 33. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, p.103, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector CORR.pdf
- 34. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, p.103, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf
- 35. Investor Group on Climate Change, "Changing pathways for Australian gas: A 1.5°C scenario analysis of new Australian gas projects", published April 2022, p.13, accessed online at https://igcc.org.au/wp-content/uploads/2022/04/IGCC-Changing-pathways-for-Australian-gas-FINAL.pdf
- 36. Investor Group on Climate Change, "Changing pathways for Australian gas: A 1.5°C scenario analysis of new Australian gas projects", published April 2022, p.25, accessed online at https://igcc.org.au/wp-content/uploads/2022/04/IGCC-Changing-pathways-for-Australian-gas-FINAL.pdf
- 37. Hayward J and Graham P, CSIRO Energy, "Modelling the emissions impact of additional LNG in Asia: A report for Woodside Energy Pty Ltd", November 2019, accessed online at
- https://www.woodside.com.au/docs/default-source/sustainability-documents/climate-change/modelling-the-emissions-impact-of-additional-lng-in-asia.pdf?sfvrsn=fb147f13_3
- 38. Hayward J and Graham P, CSIRO Energy, "Modelling the emissions impact of additional LNG in Asia: A report for Woodside Energy Pty Ltd", November 2019, p.ix, accessed online at <a href="https://www.woodside.com.au/docs/default-source/sustainability-documents/climate-change/modelling-the-emissions-impact-of-additional-lng-in-asia.pdf?sfvrsn=fb147f13_3
- 39. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.1, accessed online at https://climateanalytics.org/media/climateanalytics scarboroughpluto dec2021.pdf
- 40. Market Forces, "Investor Briefing: Woodside Petroleum and Santos", published 23 March 2022, p.2, accessed online at
- https://www.marketforces.org.au/wp-content/uploads/2022/03/2022-03-STO-WPL-investor-briefing.pdf
- 41. International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector", October 2021, p.175, accessed online at
- https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf
- 42. Colin Packham, "Future role of gas in Australia's grid is uncertain, AEMO says", Australian Financial Review, 29 March 2022, accessed online at
- 43. Market Forces, "Investor Briefing: Woodside Petroleum and Santos", published 23 March 2022, p.2, accessed online at
- https://www.marketforces.org.au/wp-content/uploads/2022/03/2022-03-STO-WPL-investor-briefing.pdf
- 44. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.2, accessed online at
- https://climateanalytics.org/media/climateanalytics scarboroughpluto dec2021.pdf
- 45. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.9, accessed online at https://climateanalytics.org/media/climateanalytics.scarboroughpluto dec2021.pdf
- 46. Market Forces, "Investor Briefing: Woodside Petroleum and Santos", published 23 March 2022, p.2, accessed online at
- https://www.marketforces.org.au/wp-content/uploads/2022/03/2022-03-STO-WPL-investor-briefing.pdf 47. Woodside, "Climate Report 2021", p.10, accessed online at
- https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-climate-report/climate-report-2021.pdf
- 48. Australasian Centre for Corporate Responsibility (ACCR), "Woodside Petroleum Ltd (ISIN: AU000000WPL2) Assessment of 2021 Climate Report", published 8 April 2022, p.1, accessed online at https://www.accr.org.au/research/woodside-petroleum-ltd-assessment-of-2021-climate-report/

- 49. Woodside, "Climate Report 2021", p.15, accessed online at
- https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-climate-report/climate-report-2021.pdf
- 50. Woodside, "Climate Report 2021", p.19, accessed online at
- https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-climate-report/climate-report-2021.pdf
- 51. Carbon Offset Guide,
- https://www.offsetguide.org/understanding-carbon-offsets/what-is-a-carbon-offset/
- 52. See UN Environment Program, "Carbon offsets are not our get-out-of-jail free card", June 2019, accessed online at
- 53. Investor Group on Climate Change, "Corporate Climate Transition Plans: A guide to investor expectations", March 2022, p.8, accessed online at
- https://igcc.org.au/wp-content/uploads/2022/03/IGCC-corporate-transition-plan-investor-expectations.pdf
- 54. Woodside, "Climate Report 2021", p.20, accessed online at
- https://www.woodside.com.au/docs/default-source/investor-documents/major-reports-(static-pdfs)/2021-climate-report/climate-report-2021.pdf
- 55. Longden T., Beck, F.J., Jotzo F., Andrews, R. and Prasad M., "Clean' hydrogen? An analysis of the emissions and costs of fossil fuel based versus renewable electricity based hydrogen", CCEP Working Paper 21-03, ZCEAP Working Paper ZCWP02-21, March 2021, The Australian National University. Accessed online at
- https://www.anu.edu.au/files/document-collection/ZCWP02-21%20Clean%20hydrogen%20emissions%20 and%20costs 1 1.pdf
- 56. Quoted in Peter Milne, "Liberals' WA gas cash splash offers both climate action and delay", Sydney Morning Herald, 21 April 2022, accessed online at
- https://www.smh.com.au/politics/federal/liberals-wa-gas-cash-splash-offers-both-climate-action-and-delay-20220419-p5aeev.html
- 57. Charlotte Grieve, "'Really worrying': \$65 trillion climate group to probe Woodside's CSIRO report", Sydney Morning Herald, 23 March 2022, accessed online at
- https://www.smh.com.au/business/banking-and-finance/really-worrying-65-trillion-climate-group-to-probe-woodside-s-csiro-report-20220322-p5a6sc.html
- 58. Hayward J and Graham P, CSIRO Energy, "Modelling the emissions impact of additional LNG in Asia: A report for Woodside Energy Pty Ltd", November 2019, accessed online at https://www.woodside.com.au/docs/default-source/sustainability-documents/climate-change/modelling-the-emissions-impact-of-additional-lng-in-asia.pdf?sfvrsn=fb147f13 3
- 59. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.70, accessed online at <a href="https://climateanalytics.org/media/climateanalytics.org/med
- 60. Charlotte Grieve, "'Really worrying': \$65 trillion climate group to probe Woodside's CSIRO report", Sydney Morning Herald, 23 March 2022, accessed online at
- https://www.smh.com.au/business/banking-and-finance/really-worrying-65-trillion-climate-group-to-probe-woodside-s-csiro-report-20220322-p5a6sc.html
- 61. Climate Analytics, "Impact of Burrup Hub on Western Australia's Paris Agreement Carbon Budget", February 2021, p.9, accessed online at
- https://climateanalytics.org/media/climateanalytics-burruphubwacarbonbudget-report-feb2020.pdf. The Burrup Hub includes the development of two massive gas projects, Scarborough and Browse, entailing new extraction of six gas fields as well as the piping to and extension of two large existing LNG production facilities on the Burrup Peninsula Pluto LNG and the Karratha Gas Plant (KGP).
- 62. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.lv, accessed online at
- https://climateanalytics.org/media/climateanalytics_scarboroughpluto_dec2021.pdf. See also, Climate Analytics, "Impact of Burrup Hub on Western Australia's Paris Agreement Carbon Budget", February 2021, p.9, accessed online at
- https://climateanalytics.org/media/climateanalytics-burruphubwacarbonbudget-report-feb2020.pdf

- 63. Climate Analytics, "Impact of Burrup Hub on Western Australia's Paris Agreement Carbon Budget", February 2021, p.9, accessed online at
- https://climateanalytics.org/media/climateanalytics-burruphubwacarbonbudget-report-feb2020.pdf
- 64. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.18, accessed online at https://climateanalytics.org/media/climateanalytics_scarboroughpluto_dec2021.pdf
- 65. Climate Analytics, "Warming Western Australia. How Woodside's Scarborough and Pluto Project undermines the Paris Agreement", November 2021, p.iv, accessed online at <a href="https://climateanalytics.org/media/climateanalytics.org/med
- 66. Petroleum Australia, "Brookfield reportedly abandons plans for Scarborough development", October 2021, accessed online at
- https://petroleumaustralia.com.au/projects/brookfield-reportedly-abandons-plans-for-scarborough-development/
- 67. Woodside, "Scarborough Offshore Project Proposal", 2020, p.31, accessed online at https://www.nopsema.gov.au/sites/default/files/documents/2021-03/A724553.pdf. Woodside's own documents outline The Environment that May Be Affected (EMBA) by Scarborough. Eight Protected Areas and Marine Parks overlap with the Scarborough Project area or EMBA, according to Woodside's own assessment. These include Dampier Archipelago, Montebello Marine Park, Dampier Marine Park, Barrow Island Marine Park, Gascoyne Marine Park, Ningaloo Marine Park, Carnarvon Canyon Marine Park and Shark Bay Marine Park. The Scarborough Project will involve activities such as seismic testing, pre-lay surveys, drilling operations, installation of the Floating Production Unit piling, FPU operations, hydrocarbon extraction, vessel operations (including trunkline installation vessels) and helicopter operations. All of these activities will impact on the marine environment, particularly marine life.
- 68. Government of Western Australia, Department of Environment and Conservation, "Dampier Archipelago: Island Reserves", 2010, accessed online at
- https://parks.dpaw.wa.gov.au/sites/default/files/downloads/parks/final_2010114_dampierarchipelagoreserves_web.pdf
- 69. Western Australia Parks and Wildlife Service, "Dampier Archipelago Island Reserves", 2017, accessed online at https://parks.dpaw.wa.gov.au/park/dampier-archipelago%20
- 70. https://www.greenpeace.org.au/act/woodside
- 71. Woodside, "Proposed Browse to NWS Project Draft EIS/EID", 2019, p.64, accessed online at <a href="https://files.woodside/docs/default-source/current-consultation-activities/australian-activities/propsed-browse-to-north-west-shelf-project---draft-eis-erd.pdf?sfvrsn=12d274a8 4
- 72. Ibid, pp.623-658
- 73. Peter Milne, "Pilbara rock art custodians want WA government, Woodside to hit pause on Burrup projects", Sydney Morning Herald, 24 March 2022, accessed online at
- 74. Royce Kurmelovs, "Fertiliser company urged to halt plans to remove Burrup Peninsula Indigenous rock art", The Guardian, 12 March 2022, accessed online at
- https://www.theguardian.com/australia-news/2022/mar/12/fertiliser-company-urged-to-halt-plans-to-remove-burrup-peninsula-indigenous-rock-art
- 75. Smith, et al, "The Impact of Industrial Pollution on the Rock Art of Murujuga, Western Australia", *Rock Art Research,* October 2021, 39(1): pp.3-14, accessed online at
- https://www.researchgate.net/publication/355393113_The_Impact_of_Industrial_Pollution_on_the_Rock_Art_of_Murujuga_Western_Australia
- 76. Peter Milne, "Woodside and Santos pushed to disclose multibillion-dollar clean up 'time bomb'", 13 February 2022, Sydney Morning Herald, accessed online at
- 77. Australasian Centre for Corporate Responsibility (ACCR) "Investor briefing: Shareholder Resolutions to Woodside Petroleum Ltd on climate-related lobbying and decommissioning", published 12 April 2022, accessed online at
- https://www.accr.org.au/research/investor-briefing-shareholder-resolutions-to-woodside-petroleum-ltd-on-climate-related-lobbving-and-decommissioning/
- 78. Ben Butler, "Chevron attacks rival Woodside for its 'failings' over sale of floating rig", The Guardian, 19 November 2021, accessed online at
- https://www.theguardian.com/business/2021/nov/19/chevron-attacks-rival-woodside-for-its-failings-over-sale-of-floating-rig

- 79. Peter Milne, "Woodside abandons plan to dump derelict structure in Ningaloo and call it an artificial reef", Sydney Morning Herald, October 2021, accessed online at
- 80. Peter Milne, "Woodside and fishing lobby planned to dump structure with toxic chemicals near Ningaloo", Sydney Morning Herald, May 2022, accessed online at
- https://www.smh.com.au/environment/conservation/woodside-and-fishing-lobby-planned-to-dump-structure-with-toxic-chemicals-near-ningaloo-20220510-p5ak1p.html
- 81. NOPSEMA, "NOPSEMA takes compliance action against Woodside Energy Ltd", 5 February 2021, accessed online at
- https://www.nopsema.gov.au/blogs/nopsema-takes-compliance-action-against-woodside-energy-ltd
- 82. Peter Milne, "Woodside and fishing lobby planned to dump structure with toxic chemicals near Ningaloo", Sydney Morning Herald, May 2022, accessed online at
- https://www.smh.com.au/environment/conservation/woodside-and-fishing-lobby-planned-to-dump-structure-with-toxic-chemicals-near-ningaloo-20220510-p5ak1p.html
- 83. Peter de Kruijff, "Smouldering dumpster fire': Literary giant Tim Winton pokes the oil and gas bear", Sydney Morning Herald, 28 February 2022, accessed online at
- https://www.smh.com.au/environment/climate-change/smouldering-dumpster-fire-literary-giant-tim-winton-pokes-the-oil-and-gas-bear-20220228-p5a0b5.html
- 84. Australasian Centre for Corporate Responsibility (ACCR), "Woodside Petroleum Ltd (ISIN: AU000000WPL2) Assessment of 2021 Climate Report", published 8 April 2022, p.25, accessed online at https://www.accr.org.au/research/woodside-petroleum-ltd-assessment-of-2021-climate-report/
- 85. Emma Young, "Perth Fringe World to drop Woodside as principal sponsor after fossil fuel arts rage", WAtoday, June 2021, accessed online at
- https://www.watoday.com.au/national/perth-fringe-world-to-drop-woodside-as-principal-sponsor-after-fossi l-fuel-arts-rage-20210624-p583v2.html
- 86. Investor Group on Climate Change, "Changing pathways for Australian gas: A 1.5°C scenario analysis of new Australian gas projects", published April 2022, p.25, accessed online at https://igcc.org.au/wp-content/uploads/2022/04/IGCC-Changing-pathways-for-Australian-gas-FINAL.pdf
- 87. International Energy Agency, "Renewable Energy Market Update 2021", May 2021, accessed online at https://www.iea.org/reports/renewable-energy-market-update-2021
- 88. International Energy Agency, "World Energy Investment 2021", accessed online at https://www.iea.org/reports/world-energy-investment-2021/executive-summary
- 89. United Nations, Secretary-General Statements and Messages, "Secretary-General Warns of Climate Emergency, Calling Intergovernmental Panel's Report 'a File of Shame', While Saying Leaders 'Are Lying', Fuelling Flames", 4 April 2022, accessed online https://www.un.org/press/en/2022/sgsm21228.doc.htm
- 90. Investor Group on Climate Change, "A changing climate: What investors expect of company directors on climate risk", October 2021, p.13, accessed online at
- https://igcc.org.au/wp-content/uploads/2021/11/IGCC-Climate-Change-Board-Report.pdf
- 91. Centre for Policy Development, "Climate Change and Directors' Duties" Mr Noel Hutley SC Further Supplementary Memorandum of Opinion, 23 April 2021, accessed online
- 92. Sarah Barker, "New Hutley Opinion: What does it mean for directors?", April 2021, accessed online at https://www.minterellison.com/articles/new-hutley-opnion-what-does-it-mean-for-directors

GREENPEACE

Contact Details:

Jess Panegyres

Greenpeace Australia Pacific
jess.panegyres@greenpeace.org

Disclaimer: The information in this briefing is for general information purposes only. Greenpeace Australia Pacific Limited is not an investment or financial advisor. This document is not intended as legal, financial or investment advice and should not be relied on as such. You should consider seeking independent legal, financial, taxation or other advice to check how the information relates to your unique circumstances. Neither Greenpeace nor the authors are liable for any loss caused, whether due to negligence or otherwise arising from the use of, or reliance on, the information provided directly or indirectly, by this briefing. This includes, but is not limited to, lost profits or punitive or consequential damages. This publication should not be viewed as a comprehensive guide of all questions an investor should ask an institution, but rather as a starting point for questions specifically related to the issues presented in this publication. The opinions expressed in this publication are based on the documents referenced in this document. We encourage readers to review those documents.