BHP Group Ltd/Plc (ISINs: AU000000BHP4, GB00BH0P3Z91)

Assessment of Climate Transition Action Plan

AGM date and location: 14 October (UK), 11 November (AU)

Summary

In August, BHP Group (ASX:BHP) announced that it would provide shareholders with an advisory vote on its Climate Transition Action Plan (a 'Say on Climate'). In its notice of meeting, BHP proposed that it would hold an advisory vote on its climate plan every three years.[1]

ACCR believes there is sufficient reason to vote against the approval of BHP's Climate Transition Action Plan. While BHP has made progress in recent years, its transition is not aligned with the Paris Agreement. Our key comments on BHP's transition plan are:

- Say on Climate votes should be primarily determined by alignment with the Paris Agreement;
- BHP's emissions reduction targets are not aligned with a 1.5°C pathway;
- BHP's emission reduction targets omit its largest sources of Scope 3 emissions, most notably those from steelmaking;
- BHP's operational emissions increased 2% in FY2021, and were 11% higher than its FY2017 baseline;
- The potential scale of offset use in BHP's decarbonisation strategy is unclear and uncapped, with frequent references to use of offsets "as required";
- BHP is seeking to extend the mine life of thermal and metallurgical coal mines and is also pursuing new metallurgical coal mines;
- BHP's intention to divest its Petroleum division to Woodside will likely lead to adverse climate outcomes;
- BHP has not committed to align its capital expenditure with a 1.5°C pathway;
- BHP remains a member of 11 industry associations whose lobbying practices are misaligned with the Paris Agreement, and four that are potentially misaligned.

Voting recommendation: AGAINST

1. Say on Climate: Paris alignment is paramount

The success of the 'Say on Climate' mechanism will be determined by investors. Sir Christopher Hohn has remarked: "it is in the hands of investors where this goes – it can be as powerful as investors want it to be".[2]

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report—described as the "code red for humanity"[3]—concluded that "we are at imminent risk of hitting 1.5°C in the near term" and that "the only way to prevent exceeding this threshold is by urgently stepping up our efforts and pursuing the most ambitious path."[4]

[1] BHP, Notice of Meeting 2021, 14 September 2021, link
[2] Antoine Gara, "Billionaire Chris Hohn explains why increased disclosure will force companies to cut their emissions", Forbes, March 2021, link
[3] United Nations, "Secretary-General calls latest IPCC climate report 'code red for humanity', stressing 'irrefutable' evidence of human influence', press release, 9 August 2021, link
[4] ibid.

With this sense of urgency, ACCR strongly encourages investors to use alignment with the Paris Agreement, particularly the goal to limit warming to 1.5°C, as the primary measure to assess BHP's climate transition action plan. Rewarding transparency and the 'direction of travel', or relative performance in a sector that is underperforming, is simply not good enough. We are in a critical decade for action and the time for incrementalism and gentle encouragement has passed.

2. BHP's contribution to climate change

BHP has made a considerable contribution to the accumulation of greenhouse gases in the atmosphere over the last century.[5] In 2020, the Climate Accountability Institute found that between 1965 and 2018, BHP was the 19th largest carbon emitter in the world.[6,7]

Whilst BHP has divested several carbon-intensive assets in recent years, including South32 and its US onshore petroleum assets, its emissions footprint remains significant (see Figure 1) and is characterised as follows:

- Scope 3 emissions represent 96% of total emissions;
- The processing of iron ore (Scope 3) represents 62% of total emissions;
- Metallurgical coal produces 45% of Scope 1 emissions, driven by diesel consumption and fugitive methane emissions;
- Copper is the largest source of Scope 2 emissions;
- The planned divestment of the BHP Petroleum division will decrease BHP's total carbon footprint (including Scope 3) by approximately 9%, and Scope 1 and 2 emissions by 5%.

Figure 1: BHP Group emissions by commodity, FY2021 ($MtCO_2$-e)

	Scope 1	Scope 2	Scope 3
Petroleum	0.8	0.0	38.1
Copper	1.4	4.3	5.0
Iron Ore	2.2	0.3	260.7
Met Coal	4.5	0.9	39.8
Thermal Coal	0.6	0.1	38.3
Nickel	0.5	0.6	-
Investments	-	-	2.5
Total Emissions	10.0	6.2	402.5

Note: Total includes other sources of emissions as referenced in BHP's Sustainability and ESG Navigators and Databook, 2021.

Table: ACCR • Source: BHP • Created with Datawrapper

3. BHP's performance against its short-term target

BHP's short-term target is to maintain operational emissions at or below FY2017 levels by FY2022.[8] Following the divestment of its US onshore petroleum division in 2018, BHP adjusted its FY2017 baseline to

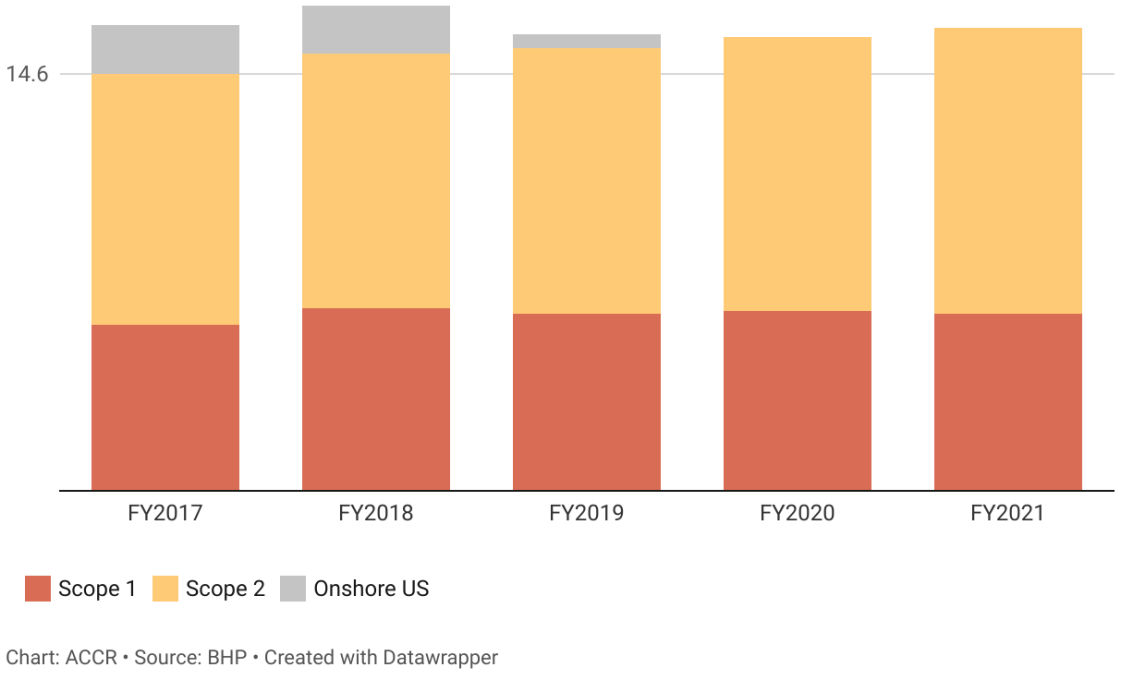
[5] IPCC, "Climate Change 2021: The Physical Science Basis", summary for policymakers, August 2021 link
[6] Climate Accountability Institute, Update of Carbon Majors 1965-2018, 9 December 2020, link
[7] This analysis excludes processing of iron ore for steel making but does include use of BHP-produced metallurgical coal for steelmaking.
[8] BHP, BHP Climate Transition Action Plan 2021, link

14.6 million tonnes CO_2-e.[9] BHP's operational emissions have been higher than its baseline for every year since FY2017 (see Figure 2), contributing an additional 4.2Mt CO_2-e to the atmosphere over four years (excluding US onshore petroleum emissions).

In FY2021, BHP's operational emissions (Scope 1 and 2) were 16.2Mt CO_2-e, an increase of 2% from FY2020 and 11% higher than its FY2017 baseline (see Figure 2).[10] This increase since FY2017 was primarily driven by a 20% jump in Scope 1 emissions, due to increased diesel consumption from 76 to 92 petajoules per annum, mostly in the Coal and Iron Ore divisions.[11]

Despite this significant increase in emissions, BHP claims that it is "currently tracking in line with our FY2022 and FY2030 targets",[12] likely due to several renewable power purchasing agreements that are due to commence in FY2022 (discussed further below in decarbonisation strategy). However it is important to note that this does not negate the additional accumulation of atmospheric greenhouse emissions that has occurred since FY2017 as a consequence of BHP's activities. For all companies setting emissions targets, the focus must be on a continuous ratcheting down of emissions from the baseline year.

Figure 2: BHP Group operational emissions, FY2017-21 (Mt CO_2-e)



4. BHP's medium and long-term targets

BHP's emissions reduction targets (see Table 1) are not aligned with the goal of limiting warming to 1.5°C, according to the Transition Pathway Initiative's (TPI) assessment for the Climate Action 100+ Net Zero Company Benchmark.[13] This same assessment found that BHP's targets do not cover the company's most material Scope 3 GHG emissions.[14] In fact, BHP's updated net zero targets for direct suppliers and shipping of products represent just 5% of BHP's FY2021 Scope 3 emissions.

[9] BHP, BHP Climate Change Report 2020, link
[10] BHP, BHP Climate Transition Action Plan 2021, link
[11] BHP, ESG Standards and Data Book 2021, link
[12] ibid.
[13] Climate Action 100+, Net Zero Company Benchmark - BHP, March2021, link
[14] ibid.

Table 1. BHP Group emissions reduction targets and goals[15]

	2030	2050
Scope 1 & 2 Target	Reduce operational emissions by at least 30% from FY2020 levels	Net zero operational emissions
Scope 3 Targets and Goals NB Goals are not firm commitments	• **Goal:** Support development of technologies capable of 30% emissions intensity reduction in integrated steelmaking • **Goal:** Support 40% emissions intensity reduction of BHP-chartered shipping of its products	• **Target:** Net zero by 2050 for operational GHG emissions of direct suppliers, subject to widespread availability of carbon neutral goods and services • **Target:** Net zero by 2050 for GHG emissions from all shipping of BHP products, subject to the widespread availability of carbon neutral solutions • **Goal:** Net zero scope 3 emissions

By way of comparison (see table 2), Fortescue Metals Group has committed to reach net zero operational emissions by 2030[16] and net zero Scope 3 emissions (including steelmaking) by 2040, primarily through the production (and ultimate end use) of green hydrogen.[17] Additionally, Glencore has committed to reduce its total emissions—Scope 1, 2 and 3—by 50% by 2035 [18] and Anglo American has a net zero target for 2040.

[15] BHP, BHP Climate Change Report 2020, link; BHP Climate Transition Action Plan 2021, link
[16] Fortescue Metals Group, "Climate Change and Energy", link
[17] Fortescue Metals Group, "Fortescue announces target to achieve net zero scope 3 emissions" link
[18] Glencore, "Climate Change", link

Table 2. Medium and long-term GHG targets of BHP's peers

Company	Medium-term target	Long-term target	Scope 3
Anglo American[19]	Reduce net emissions by 30% by 2030 (2016 baseline). Improve energy efficiency by 30% by 2030 (2016 baseline).	Net zero operational emissions by 2040.	Shipping: Partnered with the GlobalMaritime Forum and founding signatory to the Sea Cargo Charter (established a standard methodology to measure and align shipping emissions to the Paris Agreement). Introduced LNG fuelled capesize+ vessels.
BHP Group[20]	Reduce operational emissions by at least 30% by 2030 (2020 baseline).	Net zero operational emissions by 2050.	2030 goals: Support development of technologies capable of 30% reduction in integrated steelmaking; Support 40% emissions intensity reduction of BHP-chartered shipping. 2050 targets: Net zero by 2050 for operational GHG emissions of direct suppliers, subject to widespread availability of carbon neutral goods and services; Net zero by 2050 for GHG emissions from all shipping of BHP products, subject to the widespread availability of carbon neutral solutions. Goal of net zero Scope 3 emissions by 2050.
Fortescue Metals Group[21]	Net zero operational emissions by 2030 (2020 baseline).	Net zero operational emissions by 2030.	Net zero Scope 3 emissions by 2040. - Reduce emissions intensity in shipping of FMG iron ore by 50% by 2030 (on 2021 levels). - Reduce emissions intensity in steelmaking by FMG customers by 7.5% by 2030 (on 2021 levels).
Glencore[22]	50% reduction of total (Scope 1, 2 and 3) emissions by 2035 (2019 baseline).	Ambition to achieve net zero for Scope 1, 2 and 3 emissions by the end of 2050.	50% emissions reduction by 2035 (2019 baseline) and ambition of net zero Scope 3 emissions by end of 2050.
Rio Tinto[23]	Reduce emissions intensity by 30% by 2030. Reduce absolute emissions by 15% by 2030 (2018 equity baseline, adjusted for divestments).	Ambition to reach net zero operational emissions by 2050.	Scope 3 goals: - Reduce Rio Tinto-chartered shipping emissions intensity by 40% by 2030; net zero ambition by 2050. - Work with customers to develop and invest in technology to reduce carbon intensity of steelmaking by at least 30% by 2030; net zero by 2050. - Develop breakthrough technology enabling net zero aluminium smelting.
Vale[24]	Reduce Scope 1 and 2 absolute emissions by 33% by 2030 (2017 baseline). Reduce Scope 3 emissions by 15% by 2035 (2018 baseline).	Net zero operational emissions by 2050.	Shipping: Supporting a reduction in shipping emissions intensity by 40% by 2030 and 50% absolute emissions by 2050, aligned with IMO targets - EcoShipping Program. Partnerships and investment in emissions reduction technologies, particularly in steel decarbonisation.

[19] Anglo American, Sustainability Report, 2020, link, pp. 39, 44.
[20] BHP Climate Transition Action Plan 2021, link
[21] Fortescue Metals Group, Climate Change Report FY2021, link, pp. 12, 24, 'Fortescue announces target to achieve net zero Scope 3 emissions', 5 October 2021, link
[22] Glencore, 2021 Half-Year Results, link, p. 28.
[23] Rio Tinto, 2021 Half-Year Results Presentation, link, p. 32; Rio Tinto notes that targets for Scope 1 and 2 GHG emissions are for managed and non-managed operations on an equity basis.
[24] Vale, Annual Report 2020, link, p. 107.

5. Decarbonisation strategy

Within BHP's plans to meet its Scope 1 and 2 operational targets, there is a strong focus on decarbonising electricity supply, which constituted 38% of total Scope 1 and 2 emissions in FY2021.[25]

In FY2020, BHP entered into four renewable power purchase agreements (PPAs) to supply electricity to its Escondida and Spence copper mines in Chile.[26] The contracts are expected to displace 3Mt CO_2e per year from FY2022, approximately 18% of BHP's FY2021 operational emissions, beginning in August 2021 and January 2022.

In FY2020, BHP also signed a renewable PPA to meet half of its electricity needs across its Queensland coal mines.[27] The contract is expected to displace 1.7Mt CO_2e between FY2021 and FY2025 (340,000 t CO_2e per year). Queensland's state-owned CleanCo will supply electricity from its portfolio of hydroelectric and gas generation from January 2021, with new solar and wind generation expected to progressively supply electricity from late 2022.

BHP expects that the renewable PPAs in Chile and Queensland will deliver sufficient emissions reductions required to meet its short term target of maintaining operational emissions at or below FY2017 levels by FY2022.

A focus on increased renewable energy capacity will complement the electrification of haulage and transportation at mine sites, which will help to address diesel consumption in material movement, which comprised 40% of FY2021 operational Scope 1 & 2 emissions.[28]

BHP's operational emission sources with limited abatement options include fugitive methane emissions from coal mining and oil and gas (13.5% in FY2021).[29]

As detailed in the Climate Transition Action Plan (CTAP), BHP also has a range of partnerships relating to green hydrogen, energy efficiency, carbon capture utilisation and storage (CCUS) and steel decarbonisation.[30]

BHP states that offsets will be used to meet its scope 1, 2 and 3 targets[31] "as required", however, the exact quantity is unknown. This potential over-reliance on offsets to achieve its targets is concerning. Recent research found that a "CO_2 emission into the atmosphere is more effective at raising atmospheric CO_2 than an equivalent CO_2 removal is at lowering it",[32] meaning that there is an "asymmetry"[33] between emissions generating activities and offsets, reinforcing the need to prioritise emissions avoidance above all else. The International Energy Agency (IEA) Net Zero scenario has demonstrated an ambitious 1.5°C pathway without the use of offsets.[34]

[25] ibid.
[26] BHP, BHP Climate Change Report 2020, link
[27] ibid.
[28] ibid.
[29] ibid.
[30] BHP, BHP Climate Transition Action Plan, 2021, link
[31] ibid.
[32] Kirsten Zickfield et al, "Asymmetry in the climate-carbon cycle response to positive and negative CO_2 emissions", Nature Climate Change, Vol 11, 613-317, 2021
[33] ibid
[34] IEA Net Zero by 2050, May 2021, link

It is worth noting that BHP has a long track record of divesting carbon intensive assets, having previously spun off coal-heavy South32 in 2015[35] and its US shale gas business in 2018.[36] The issues with divestment are discussed further below.

6. Coal divestment, new mines and extensions

Recent research published in Nature found that, at a global level, 60% of oil and gas reserves and 90% of coal reserves must remain unextracted in order to limit warming to 1.5°C.[37] The authors emphasise that due to the study being based upon a 50% probability, the findings are very likely to underestimate the production curtailment that is actually required. This study followed the IEA Net Zero Scenario which concluded that no new oil, gas and coal projects (including mine extensions) can be approved after 2021 in order to ensure a pathway to net zero emissions by 2050.[38]

BHP currently part-owns and operates 10 metallurgical coal mines in Queensland (one in care and maintenance, see Table 3), with BHP's share of production at 59.9 Mt in FY2021. Two of these mines are earmarked for divestment,[39] along with three potential new mines (including Wards Well[40]) as part of the planned BHP Mitsui Coal (BMC) divestment. There are many decades of available metallurgical coal production within BHP's remaining portfolio[41] and BHP is seeking to extend the mine life of several assets, including the Caval Ridge mine, by 31 years to 2056.[42] BHP also has two potential new metallurgical coal mines—Red Hill Mining[43] and Saraji East[44]—with a combined potential production of 25 million tonnes per annum.

BHP has announced its intent to divest its thermal coal assets.[45] In June, BHP announced the sale of its one-third share in the Cerrejón thermal coal mine in Colombia to Glencore.[46] BHP is still seeking a buyer for its Mt Arthur thermal coal mine in NSW. To support the sale, BHP is seeking to extend the mine life of Mt Arthur from 2026 to 2045.[47]

BHP's pursuit of new coal mines and mine life extensions is entirely at odds with limiting warming to 1.5°C. Divestment of coal assets might decrease BHP's emissions footprint but it presents no benefit to the climate if those assets continue producing for decades to come. To align with the Paris Agreement, BHP must cease efforts to expand and extend coal production and responsibly manage down assets like Mt Arthur.

[35] BHP, Shareholder support for Demerger of South32 by BHP Billiton, 6 May 2015, link
[36] BHP, Sale of Onshore US assets, 26 July 2018, link
[37] Dan Welsby et al, "Unextractable fossil fuels in a 1.5°C world", Nature, 597, 230-234, 2021
[38] IEA Net Zero by 2050, May 2021, link
[39] BHP, Divestment Review Hub, link
[40] Jo Clark, "BHP looks to higher quality coking coal", Argus Media, 16 September 2020, link
[41] BHP, Annual Report 2021, p260, link
[42] Henry Ballard, "Caval Ridge extension on the cards for BMA", Australian Mining, 13 September 2021, link
[43] Queensland Government, Red Hill Mining Lease Project, link
[44] Queensland Government, Proposed Saraji East Mining Lease Project, link
[45] BHP, "BHP results for the year ended 30 June 2020", 18 August 2020, link
[46] BHP, BHP announces divestment of Cerrejon interest, 29 June 2021, link
[47] BHP, Mount Arthur Coal continuation project, link

Table 3. BHP's operational and proposed coal mines[48]

Division	Mine	Type	Status	FY2021 Production (Mt, BHP Share)	FY2021 Production (Mt, Total)	Reserves/ Resources* (Mt)
BMA (BHP 50%)	Blackwater	Metallurgical	**Operational**	6.2	12.4	386
	Broadmeadow	Metallurgical	**Operational**	9.4	18.9	159
	Goonyella Riverside	Metallurgical	**Operational**			513
	Caval Ridge	Metallurgical	**Operational**	3.9	7.8	333
	Duania	Metallurgical	**Operational**	1.9	3.9	85
	Peak Downs	Metallurgical	**Operational**	5.9	11.8	1065
	Saraji	Metallurgical	**Operational**	4.5	9.0	511
	Norwich Park	Metallurgical	**Care/maintenance**	-	-	229
	Red Hill Mining	Metallurgical	**Proposed**	-	-	1711
	Saraji East	Metallurgical	**Proposed**	-	-	1689
BMC (BHP 80%)	Poitrel	Metallurgical	**Operational**	3.9	4.8	48
	South Walker Creek	Metallurgical	**Operational**	4.9	6.1	123
	Nebo West	Anthracite	**Proposed**	-	-	71
	Bee Creek	Metallurgical	**Proposed**	-	-	23
	Wards Well	Metallurgical	**Proposed**	-	-	1306
Total Queensland Coal				**40.6**	**74.7**	
NSW	Mt Arthur	Thermal	**Operational**	14.3	14.3	292
Colombia	Cerrejón	Thermal	**Divested**	5.0	15.0	344
Total Energy Coal				**19.3**	**29.4**	

**For operational projects, reserves = proved + probable; for proposed projects, resources = indicated + inferred*

7. Petroleum divestment

BHP announced in August 2021 that, subject to shareholder and regulatory approvals, it intends to merge its Petroleum division with Woodside.[49] Woodside sees this merger as a great opportunity to increase "cash flow and financial strength to fund near-term projects and new energy sources".[50] Woodside is particularly keen to pursue the Scarborough LNG and Pluto Train 2 development in Western Australia. The merger will increase the likelihood of the project proceeding by improving Woodside's capacity to fund the project without needing additional capital[51] and removing BHP as a barrier to final investment decision.[52] Carbon Tracker has determined that Scarborough and Pluto Train 2 are "inconsistent even with a 2.7°C world",[53] demonstrating that the merger with Woodside has major climate consequences.

[48] BHP, Annual Report 2021, link, pp. 243, 260-265.
[49] BHP, Woodside and BHP to create global energy company, 17 August 2021, link
[50] Nick Toscano, "BHP to exit oil and gas in Woodside mega-deal as climate pressure heats up", SMH, August 17 2021, link
[51] UBS, "Woodside Petroleum: Proposed merger could de-risk our investment thesis", 17 August 2021, via Bloomberg Finance L.P
[52] Peter Ker and Angela McDonald-Smith, "The great transition turns blue chips into green chips", AFR, 20 August 2021, link
[53] Carbon Tracker, "Adapt to Survive: Why companies must plan for net zero and avoid stranded assets", September 2021, link

The merger will also see BHP divest itself of a series of ageing Australian assets with considerable decommissioning liabilities, along with a large portfolio of producing and growth projects in the Gulf of Mexico and Trinidad and Tobago.[54] Just prior to the announced merger, BHP approved $544 million in capital expenditure to execute the Shenzi North oil project in the US Gulf of Mexico.[55]

Selling carbon intensive assets may reduce BHP's emissions inventory and transition risk exposure but it will do nothing to minimise its physical climate risk exposure as the divested assets continue to generate significant greenhouse gases. In fact, there are many examples where divestment of fossil fuel assets has prolonged their life.[56] If BHP genuinely believes that a 1.5°C pathway is better for its business, then it should avoid further divestments and confront the urgent need to wind-down fossil fuel assets.

8. Scope 3 emissions from metallurgical coal and steelmaking

Steelmaking emissions represent approximately 7-10% of global greenhouse emissions[57] and BHP's Scope 3 emissions from the processing of iron ore and use of metallurgical coal represent 72% of the company's total greenhouse inventory. BHP states that it cannot set a firm target for these scope 3 emissions because steel decarbonisation is "dependent on the development and downstream deployment of solutions and supportive policy".[58] Until recently, the steel sector has had limited options for decarbonisation,[59] however there still are valid questions to be asked around whether BHP, a company that achieved record profits in FY2021[60] and which has significant metallurgical coal interests, is being sufficiently ambitious with regard to the decarbonisation of steel production.

BHP's primary steel decarbonisation goal is to "support the industry to develop technologies and pathways capable of 30% emissions intensity reduction in integrated steelmaking, with widespread adoption expected post-2030".[61] In support of this goal, it has invested ~US$10 million in steel decarbonisation startup Boston Metal[62] and has committed up to $65 million through its Climate Investment Program in partnerships with China Baowu[63], JFE Steel[64] and HBIS Group Co[65]. BHP has also developed a Steel Decarbonisation Framework to "examine the stages the industry must pass through in its decarbonisation journey."[66] Notably, there is no time frame associated with these stages.

There are divergent views on the rate that steel can be decarbonised between BHP and its competitors, particularly Fortescue Metals Group. BHP has previously stated that "the use of traditional blast furnaces and basic oxygen furnaces would still account for over half of global steelmaking by 2050".[67] In contrast, Fortescue Metals Group Chairman Andrew Forrest "believes that coal-fired blast furnaces will be extinct by 2050"[68] and has recently committed to a target for net zero emissions from steelmaking by 2040[69].

---

[54] Woodside, Woodside and BHP Petroleum Merger, investor presentation, 17 August 2021, link
[55] BHP, BHP approves Shenzi North project and moved Trion into the FEED phase, ASX release, 5 August 2021 link
[56] Peter Ker and Angela McDonald-Smith, "The great transition turns blue chips into green chips", AFR, 20 August 2021 link
[57] IEA, "Iron and Steel Technology Roadmap", 21 Oct 2020, link
[58] BHP, BHP releases Climate Transition Action Plan 2021, 14 September 2021, link
[59] Nick O'Malley, As the world turns to coal, scientists are at work on green steel, SMH, 26 September 2021, link
[60] BHP, BHP results and strategic update growing value and positioning for the future FY21, 17 August 2021, link
[61] BHP, Climate Transition Action Plan 2021, link, p.8.
[62] Peter Ker, "BHP ventures further into steel decarbonisation", *Australian Financial Review*, 12 Jan 2021, link
[63] BHP, "BHP partners with China Baowu to address the challenges of climate change", 6 Nov 2021, link
[64] BHP, partners with JFE to address decarbonisation in the steel industry", 10 Feb 2021, link
[65] BHP, "BHP inks MoU with BHIS to mitigate emissions in the steel industry", 8 March 2021, link
[66] BHP, Climate Transition Action Plan 2021, link, p. 16, figure 4.
[67] Antony Barich, "Coal-fired blast furnaces to be extinct by 2050, Fortescue chairman says", March 2021, link
[68] ibid.
[69] Fortescue Metals Group, "Fortescue announces target to achieve net zero scope 3 emissions" link

Modelling by BloombergNEF[70] suggests that by 2050, green hydrogen-based direct reduction paired with electric arc furnaces (H2DR-EAF)[71] and molten oxide electrolysis (MOE)[72], both zero-carbon processes, will be more cost-effective than coal or gas-based production. The modelling also suggests that the most expensive net zero option in 2050 will be traditional blast furnaces combined with CCUS and offsets.[73] This analysis in part supports Fortescue Metals Group's view of the steel decarbonisation landscape between now and 2050.

To conclude, ACCR does not deny that significant supportive policies and collaboration between a broad range of stakeholders will be necessary to decarbonise steel production. However, as an owner of metallurgical coal mines, some of which are on the market, there are financial risks to BHP for being ambitious about the rate of steel decarbonisation prior to divestment, providing an incentive to limit positive messaging and firm commitments around the opportunity.

9. Assessing capital alignment with 1.5°C

Prior to the announcement of the merger of the Petroleum division with Woodside, BHP stated that it was focused on three global mega-trends: decarbonisation, electrification and population growth.[74] This focus explains BHP's pivot away from fossil fuel production, even if the emissions from those assets will continue to be produced by another party. It also explains BHP's most significant growth initiative, the Jansen potash project. BHP has estimated capital expenditure of US$5.7 billion on Jansen, with first production expected in 2027.[75]

Even though BHP is prioritising decarbonisation in its group strategy, its capital allocation policy does not align with the Paris Agreement's objective of limiting global warming to 1.5℃. This is despite BHP conceding that its portfolio would benefit from an accelerated decarbonisation pathway.[76] The Climate Action 100+ Net Zero Company Benchmark assessment of BHP confirmed this misalignment, and BHP's recent Climate Transition Action Plan[77] continues to forgo a firm commitment to alignment with a 1.5℃ pathway.

While BHP intends to integrate 'one or more Paris-aligned scenarios' into its capital prioritisation processes beginning FY2022, capital expenditures forecasted for FY2022 do not align with this account.[78] BHP's forecast capital and exploration expenditure in FY2022 includes US$6.7 billion for minerals, including US$600 million for coal[79] and US$2.3 billion for petroleum.[80] BHP is also planning to develop new metallurgical coal mines, towards which further capital will be allocated. This is in stark contrast to the company's capital allocation to its Climate Investment Program of US$400 million over five years to invest in GHG reductions across its operated assets and value chain.[81] This includes US$65 million towards partnerships with BHP's customers in the steel sector.

[70] Leiliang Zheng, "Decarbonizing Steel: Technologies and Costs", *BloombergNEF,* 25 Aug 2021, via Bloomberg Finance L.P
[71] In this process, iron ore is reduced with green hydrogen to produce direct reduced iron (DRI) or sponge iron. The sponge iron is fed into an EAF powered by renewables and melted to produce steel.
[72] Electrolysis is a technique that uses a direct electric current to separate chemical compounds and in doing so, enables the direct production of steel from an iron ore feedstock.
[73] Leiliang Zheng, "Decarbonizing Steel: Technologies and Costs", *BloombergNEF,* 25 Aug 2021, p. 40, via Bloomberg Finance L.P
[74] Nick Toscano, 'BHP records biggest year of iron ore exports as prices boom', 20 July 2021, link
[75] BHP, Results Presentation, Year End 30 June 2021, link, p. 50.
[76] BHP, Climate Transition Action Plan 2021, link
[77] ibid.
[78] ibid.
[79] BHP, Results Presentation, Year End 30 June 2021, link, p. 50.
[80] BHP, Annual Report 2021, link, p268
[81] BHP, Annual Report 2021, link, pp. 42, 136.

The table below provides detail on the capital that BHP's peers are allocating to the climate transition, which clearly demonstrates that Fortescue Metals Group, Rio Tinto and Vale are allocating significantly more funds towards decarbonisation than BHP.

Table 3. Peer analysis on climate investments

Company	Climate investments
Anglo American[82]	US$108 million investment to develop technology to capture SO2 from its Polokwane platinum smelter in South Africa.
BHP Group[83]	US$400 million Climate Investment Program (CIP) over 5 years (announced July 2019).
Fortescue Metals Group[84]	Allocation of 10% net profit after tax (NPAT) to fund Fortescue Future Industries (FFI). The FY2021 allocation to FFI was US$1 billion, with expenditure of US$122 million. FY2022 expenditure is expected to be US$400-600 million.
Glencore[85]	Glencore has not disclosed a budget for investment in climate solutions per se, but has committed to "allocating capital to prioritise transition metals".
Rio Tinto[86]	US$1 billion climate-related spend over a 5-year period starting in 2020 (announced Feb 2021).
Vale[87]	$US4-6 billion investment by 2030 for GHG reduction and $US 50/tCO2e shadow price for all capital allocation decisions.

10. Just transition

The importance for the climate transition to be both fast and fair is recognised in the Paris Agreement, which emphasises the necessity to reduce emissions but also considers "the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities."[88] As defined by the International Labour Organization, "a just transition for all towards an environmentally sustainable economy … needs to be well managed and contribute to the goals of decent work for all, social inclusions and the eradication of poverty."[89]

BHP has not explicitly committed to decarbonising in line with just transition principles and is currently relying on the development of a "common understanding of a just transition"[90] to allow companies such as itself to "make clear commitments."[91]

BHP highlights the "opportunity to demonstrate a planned and purposeful approach to closure and rehabilitation through the life cycle of [its] operated assets,"[92] and that, "where value cannot be generated from divestment, the best option to balance financial, workforce and community considerations may be to

[82] Anglo American, Sustainability Report 2020, link, p. 61.
[83] BHP, Climate Transition Action Plan 2021, link, p. 10.
[84] Fortescue Metals Group, FY21 Full Year Results, 30 Aug 2021, link, p.2
[85] Glencore, Climate change, link
[86] Rio Tinto, Climate Change Report 2020, link, p. 27.
[87] Vale, ESG Webinar, Climate Change, 24 June 2021, link, p. 10.
[88] United Nations, "Paris Agreement", 2015, p2
[89] International Labour Organisation, "Guidelines for a just transition towards environmentally sustainable economies and societies for all", 2015, link
[90] BHP, Climate Transition Action Plan 2021, link, p. 21
[91] ibid.
[92] BHP, Climate Transition Action Plan 2021, link, p. 20

retain an asset and transition it towards closure."[93] The company's reported financial provisions for closure and rehabilitation amount to US$11.9 billion.[94] However, BHP's approach to its NSW coal mine, Mt Arthur, is illustrative of its approach to legacy fossil fuel assets. The mine has rehabilitation costs of approximately US$1 billion[95] and rather than winding down production and commencing rehabilitation, it is seeking to divest. BHP has also reportedly forced workers from its wholly-owned labour-hire subsidiary, Operations Services, to accept transfers to interstate mines or resign from their positions.[96]

11. Climate policy engagement

UK think tank InfluenceMap rates BHP's climate policy footprint 'D'[97] (scale A-F), and in 2020 ranked BHP the second most oppositional company on climate and energy policy in Australia.[98] BHP remains a member of 11 groups with climate lobbying practices that are misaligned with the Paris Agreement, and four that are potentially misaligned.[99]

BHP's industry association review[100] does not assess its industry associations' advocacy for consistency with the Paris Agreement; it narrowly focuses on policy positions and cosmetic support. BHP's industry associations have sought to exploit the COVID-19 pandemic and the Australian Government's approach to climate policy has been heavily influenced by BHP's industry associations, including:

- its lack of ambition to 2030;
- the 'gas-fired recovery' prioritises gas expansion;
- its 'technology not taxes' approach is intended to prolong the use of coal and gas.

On balance, the impact of BHP's industry associations on Australia's climate and energy policy remains overwhelmingly negative, and there has been little improvement since it published its first review of industry associations in 2017.

12. Climate governance

BHP's approach to climate change governance appears to be industry-leading, with a Climate Change Team that advises the Executive Leadership Team, which also collaborates with the Sustainability committee, Audit and Risk committee and the Board.[101]

While the assessment of climate competence of any board is challenging, the primary industry experience of BHP directors is varied and recent appointments have experience from outside the resources sector.

In terms of remuneration, climate change now forms 10% of the Cash and Deferred Payment (CDP), which was increased from 4% under the previous Short Term Incentive Plan (STIP).[102] In summarising the FY2021 performance under the CDP, BHP states that performance was "slightly above target".[103] In effect, senior executives were rewarded with short-term incentives despite BHP's operational emissions in FY2021 being 11% higher than its FY2017 baseline, and well above the FY2017 baseline for four years.

---

[93] ibid.
[94] BHP, Annual Report 2021, link, p. 206
[95] Melanie Burton, "Analysis: BHP's Mt. Arthur bind illustrates mining's coal dilemma", 30 Arpil 2021, Reuters, link
[96] Jake Lapham, "BHP tell miners in NSW Hunter to transfer interstate or resign as company prepares for sale", 16 Sept 2021, ABC, link
[97] InfluenceMap, "The CA100+ Target Companies: Scoring and Analysis of Climate Lobbying", link
[98] InfluenceMap, "Australian Industry Associations and their Carbon Policy Footprint", September 2020, link
[99] InfluenceMap, "The CA100+ Target Companies: Scoring and Analysis of Climate Lobbying", link
[100] BHP, "Industry associations", link
[101] BHP, Climate Transition Action Plan 2021, link, p22
[102] BHP, Annual Report 2021, link, p109
[103] ibid.

BHP's remuneration report states that "for FY2021, we improved on our operational GHG emissions target of 17.0 Mt, with an actual result of 16.2 Mt".[104] The reference to a 17.0 Mt target in FY2021 is misleading as it is a forecast prepared at the start of the year rather than a target (the FY2017 baseline of 14.6 Mt CO_2-e remains unchanged). The use of a forecast essentially shifts the goal posts by potential use of conservative assumptions and/or accommodating predictable increases in emissions.

The remuneration report referred to "steps in place" to meet its short-term target of maintaining operational emissions at FY2017 levels by FY2022, being the renewable energy PPAs in Chile and Queensland. It also referred to the partnerships with Asian steelmakers.

As BHP's operational and Scope 3 emissions targets are not Paris-aligned, BHP risks rewarding incremental progress rather than incentivising the step-change required in the decade to 2030.

Conclusion

ACCR believes there is sufficient reason to vote against the approval of BHP's Climate Transition Action Plan. While BHP has made progress in recent years, incrementalism and the 'direction of travel' is insufficient to approve its current approach to reducing emissions. BHP must seek to align its emissions reduction targets with the Paris Agreement.

About ACCR

The Australasian Centre for Corporate Responsibility is a philanthropically-funded NGO that monitors environmental, social and governance (ESG) practices and performance of listed companies. We undertake research and highlight emerging areas of business risk through private and public engagement, including the filing of shareholder resolutions.

Contacts

Dan Gocher | Director of Climate and Environment | dan@accr.org.au
Harriet Kater | Climate Lead - Australia | harriet.kater@accr.org.au

[104] ibid.

Disclaimer

This document has been prepared by the Australasian Centre for Corporate Responsibility Inc. ("**ACCR**").

Copyright
Any and all of the content presented in this report is, unless explicitly stated otherwise, subject to a copyright held by the ACCR. No reproduction is permitted without the prior written permission of ACCR.

No distribution where licence would be required
This document is for distribution only as may be permitted by law. It is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or would subject ACCR to any registration or licensing requirement within such jurisdiction.

Nature of information
None of ACCR, its officers, agents, representatives or and employees holds an Australian Financial Services Licence (AFSL), and none of them purports to give advice or operate in any way in contravention of the relevant financial services laws. ACCR, its officers, agents, representatives and employees exclude liability whatsoever in negligence or otherwise, for any loss or damage relating to this document or its publications to the full extent permitted by law.

This document has been prepared as information or education only without consideration of any user's specific investment objectives, personal financial situation or needs. It is not professional advice or recommendations (including financial, legal or other professional advice); it is not an advertisement nor is it a solicitation or an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Because of this, no reader should rely upon the information and/or recommendations contained in this site. Users should, before acting on any information contained herein, consider the appropriateness of the information, having regard to their objectives, financial situation and needs. It is your responsibility to obtain appropriate advice suitable to your particular circumstances from a qualified professional before acting or omitting to act based on any information obtained on or through the report. By receiving this document, the recipient acknowledges and agrees with the intended purpose described above and further disclaims any expectation or belief that the information constitutes investment advice to the recipient or otherwise purports to meet the investment objectives of the recipient.

Information not complete or accurate

The information contained in this report has been prepared based on material gathered through a detailed industry analysis and other sources and although the findings in this report are based on a qualitative study no warranty is made as to completeness, accuracy or reliability of fact in relation to the statements and representations made by or the information and documentation provided by parties consulted as part of the process.

The sources of the information provided are indicated in the report and ACCR has not sought to independently verify these sources unless it has stated that it has done so. ACCR is not under any obligation in any circumstance to update this report in either oral or written form for events occurring after the report has been issued. The report is intended to provide an overview of the current state of the relevant industry or practice.

This report focuses on climate related matters and does not purport to consider other or all relevant environmental, social and governance issues.

Any prices stated in this document are for information purposes only and do not represent valuations for individual securities or other financial instruments. ACCR does not represent that any transaction can or could have been affected at those prices, and any prices do not necessarily reflect ACCR's internal books and records or theoretical model-based valuations and may be based on certain assumptions. Different assumptions by ACCR or any other source may yield substantially different results.

Links to Other Websites

This document may contain links to other websites not owned or controlled by the ACCR and ACCR assumes no responsibility for the content or general practices of any of these third party sites and/or services whose terms and conditions and privacy policy should be read should you access a site as a result of following a link cited in this report.