

Investor briefing

Re: BPT, COE, NHC, WHC (ASX)

Contact: Will van de Pol - will@marketforces.org.au

19 August 2020

Summary

Market Forces has supported shareholders to propose resolutions calling on pure play coal, oil and gas producers to demonstrate how they will wind up their current operations and preserve capital as the economy rapidly moves on from fossil fuels to meet the Paris Agreement.

The following shareholder resolution is being prepared for all four pure play fossil fuel producers in the ASX 200 whose AGMs are to be held in the second half of 2020: **Whitehaven Coal, New Hope Group, Beach Energy, and Cooper Energy.**

Capital Protection

Shareholders request the company disclose, in subsequent annual reporting, a plan that demonstrates how the company will wind up its *fossil fuel* production assets and operations in a manner consistent with the climate goals of the Paris Agreement.

This plan should include:

- Details of how the company's capital expenditure will facilitate the efficient wind up of *fossil fuel* operations and assets in a timeframe consistent with the Paris goals;
- Production guidance for the lifetime of *fossil fuel* assets that is consistent with the Paris goals;
- Plans for decommissioning and rehabilitating asset sites at the end of their Paris-aligned lifetimes;
- Plans for how employees of the company will be informed of asset closures, and employee transition plans, including any compensation for job losses, training and support in seeking future employment; and
- Details of how remaining capital in the company will be returned to investors.

'Fossil fuel' replaced with 'oil and gas' for BPT & COE, and 'coal' for NHC & WHC.

The full resolutions and supporting statements are included as Appendices A-D

Introduction

“Companies that continue to sanction higher-cost projects which do not fit with a lower demand scenario risk destroying significant shareholder value through the creation of stranded assets, as well as contributing to the failure to achieve climate goals.” - [Carbon Tracker Initiative](#)

2020 has provided a glimpse into what action on climate change, commensurate with the scale needed to meet the Paris Agreement’s goals, entails for the fossil fuel industry if it fails to adequately plan for and manage the low carbon transition.

Global CO₂ emissions are [projected to fall by 8%](#) in 2020, with oil demand [expected to fall](#) by 8%, coal by 9% and gas by 5%. These projections have [prompted experts to suggest](#) “peak fossil fuel demand was almost certainly in 2019.”

To meet the goals of the Paris Agreement, global greenhouse gas emissions must [fall by more than 7.6% per year](#) over the next decade.

The scale of year-on-year declines in fossil fuel demand and prices in 2020—involving tens of billions written off the value of oil and gas projects and half of thermal coal production becoming cashflow negative—must be repeated every year to 2030 if we are to meet the Paris goals.

Recognising [universal owners’ imperative](#) to limit global warming in line with the Paris Agreement, these resolutions give investors the opportunity to protect and extract as much value from their investments in pure play fossil fuel producers as possible, while avoiding the economic and social shocks of a disorderly energy transition.

Markets disappearing

“We already have far more carbon facilities in operation today than we need to blow the Paris budget.” - [Emeritus Professor Will Steffen, ANU](#)

The latest science paints a very clear picture: the Paris Agreement means the world cannot accommodate any new or expanded fossil fuel projects. The CO₂ emissions embedded in existing and under-construction fossil fuel projects is [more than double the IPCC’s 1.5°C carbon budget](#).

The reductions in coal, oil and gas use required to meet the Paris climate goals leave fossil fuel producers exposed to rapidly declining markets. Far from justifying further capital expenditure to increase production, Paris-aligned demand scenarios require strict capital management and planning for a managed, orderly decline in production.

Thermal coal

Around 80% of Whitehaven's production is thermal coal, while all of New Hope's currently operating mines are thermal. In order to meet the Paris climate goals, coal power must be [phased out globally by 2040](#), and fall by 80% below 2010 levels by 2030. The Paris-aligned coal phase-out dates for Australia's key thermal coal export markets are:

- Japan: 2030
- Korea: 2030
- Non-OECD Asia: 2037

Based on these phase-out dates, almost 65% of Whitehaven's FY19 thermal coal market would be gone by 2030, and 95% by 2037. For New Hope, it's around 50% by 2030 and 90% by 2037.

Even the IEA's Sustainable Development Scenario (SDS), which gives just a 66% chance of limiting the global average temperature rise to 1.8°C, [shows coal demand decreasing](#) to 43Mt (-74%) in Japan, and 140Mt (-67%) in Asia Pacific, excluding China, India, Indonesia and Japan, from 2018 to 2040. In the SDS, China, India and Indonesia (all significant domestic coal producers) make up 90% of 2040 Asia Pacific coal demand.

The Asian energy system is quickly transitioning away from coal power generation. Japan [plans to close](#) around 100 of its 140 coal-fired power plants by 2030. Korea is [phasing out](#) domestic and overseas coal financing. The pipeline of proposed new coal power stations in Southeast Asia has [halved from 2015 to 2019](#), while construction starts fell 85% from 2016 to 2019. Vietnam's latest [Power Development Plan](#) will see half of the country's planned coal power plant capacity cancelled or shelved. Bangladesh is [reviewing](#) 26 of its 29 planned coal plants, stating the country's intention to "move from coal-based power."

Oil and gas

"The time to begin planning for a wind-down of gas production is, as with other fossil fuels, already upon us" - [SEI, IISD, ODI, Climate Analytics, CICERO, and UNEP](#)

While the Paris-aligned transition away from oil and gas will occur more gradually than coal, the need to begin a managed decline in production is vital to limiting warming to 1.5°C. IPCC analysis shows gas use for primary energy [must fall globally](#) (p.14) by 25% by 2030 (from a 2010 baseline), with oil's role in primary energy falling 37% over the same time frame.

Beach and Cooper are significantly exposed to international oil markets, and are major suppliers to the Australian eastern gas market via contracts with energy retailers / utilities and industrial gas users.

All scenarios modelled in the Australian Energy Market Operator (AEMO) [Gas Statement of Opportunities](#) show gas consumption for electricity generation in eastern Australia remaining below 2019 levels from now on. In fact, gas use for this purpose is expected to fall significantly in most scenarios, with a drop of 83% from 2019 to 2029 in the Paris-aligned Step Change scenario.

ClimateWorks' [Decarbonisation Futures work](#) shows gas use in Australian residential and commercial buildings falling to effectively zero by 2035, and industrial gas use also dropping significantly in a 1.5°C scenario.

Increasing stranded asset risk

“Approval of new fossil fuel development or expansion is incompatible with keeping global warming to 2°C, and will ‘lock in’ emissions and warming far beyond the end of mining operations.” - [Former Chief Scientist Penny Sackett](#)

Despite the declining markets required to meet the Paris climate goals, each of the companies receiving these resolutions have large-scale capital expenditure plans to significantly increase production.

[Whitehaven](#) and [New Hope](#) each have plans to almost double production between now and 2030, at a cost of around \$2 billion each, and project that some mines would operate into the 2050s. These plans would see Whitehaven and New Hope producing a combined 650 million tonnes of coal that could not be sold into their current markets, based on the Paris-aligned coal power phase-out dates set out above.

Beach Energy [plans to spend \\$4 billion](#) to increase production by around 50% over the next 5 years. Cooper Energy is [planning further capital expenditure](#) to support its “5 year development program [that] can lift gas production more than 10 times FY19 levels.”

By contrast, global oil and gas giant BP has [pledged to cut oil and gas production](#) by 40% by 2030.

Unreasonably optimistic forecasting

In stark contrast to the Paris-aligned thermal coal scenarios and market shifts outlined above, [New Hope claims](#): “For most Asian countries thermal coal will continue to be a significant component of their energy mix for many years to come, underpinned by continued investment in new coal fired power stations.” The company [has projected](#) Asian thermal coal imports to grow by 55% from 2017 to 2030, with key markets Taiwan and Korea increasing 13% and 17% respectively, and Japan falling just 2%.

Whitehaven [says](#) it is looking “to take advantage of the substantial growth in coal-fired power generation in Southeast Asia.” Both companies have claimed their businesses

are resilient under the International Energy Agency's (IEA) three main demand scenarios.

However, analysis of the Paris-aligned coal power phase-out scenario outlined above and the market shift already underway in Asia demonstrate Whitehaven and New Hope's major export markets are rapidly disappearing.

Many commentators [recognise](#) the thermal coal sector is in terminal decline. Under the [SDS](#), Japan thermal coal import prices are projected to be US\$65/t in 2030 and US\$69/t in 2040. As noted above, a 1.5°C scenario would see global thermal coal demand effectively reach zero by 2040. By contrast, Whitehaven's economic assessment for the Vickery Extension Project [assumes](#) long term thermal coal prices of US\$85/t and an operating life to at least 2045, while New Hope [assumes](#) a coal price of US\$120/t in the Economic Impact Assessment for its Elimatta project.

Beach and Cooper's growth strategies appear to be based on long-term oil price forecasts and carbon price assumptions that are inconsistent with Paris-aligned expectations, and unreasonably optimistic in light of current market conditions.

Beach's overestimation of oil prices has led to impairments totalling \$1.6 billion since FY10. Considering all annual oil price estimates (FY16E-FY20E) provided in its five annual reports to FY19, Beach has overestimated actual Brent oil prices by an average of 28%.

In the last major oil price crash—from US\$100/bl in June 2014 to below US\$50/bl in January 2015—Cooper's revision down of oil price forecasts saw the company write off 10% of gross fixed asset value in [FY15](#), and a further 15% in [FY16](#).

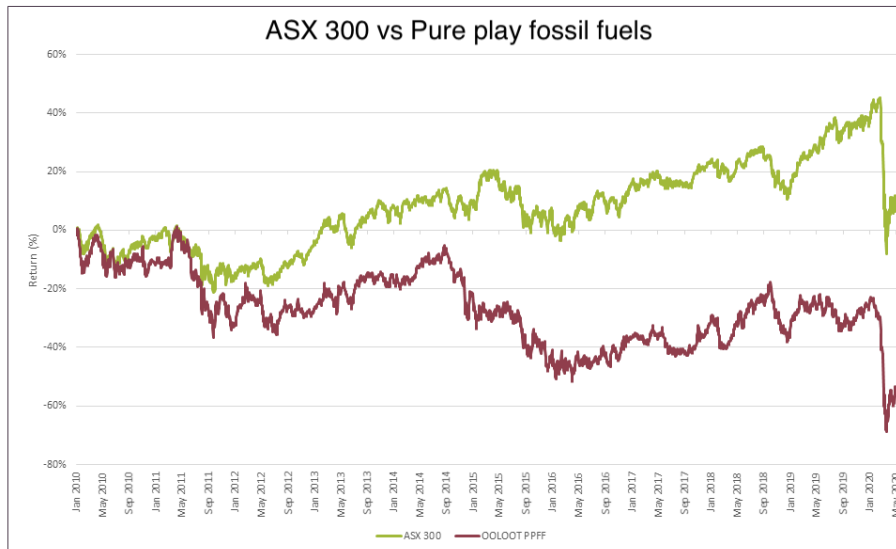
Beach has [recently revised down](#) its long term oil price assumption to US\$60/bbl, while [Cooper's FY19 Annual Report](#) assumed a long term price of US\$68/bbl. By contrast, [BP has set](#) its long term oil price forecast at US\$55/bbl, while [Carbon Tracker states](#) that, in a scenario closer to alignment with the Paris climate goals, "oil demand can be satisfied by projects that generate a 15% internal rate of return at an oil price in the [high] \$40s."

Accelerating an existing trend

Continued capital expenditure on projects that are not expected to achieve value in a Paris-aligned scenario risks accelerating an existing trend of underperformance by Australia's pure play fossil fuel producers.

[Market Forces' analysis](#) showed an index tracking the sharemarket performance of the 11 'pure play' fossil fuel companies in the ASX 300 halved in value from January 2010 to May 2020, while the ASX 300 rose 20% over that time. The performance gap has widened over the past 10 years, and the trend has been exacerbated during the Covid-19 pandemic.

Period 2010 - 2020



Cumulative returns of ASX 300 index vs weighted index of ASX 300 pure play fossil fuel producers (Woodside, Santos, Oil Search, Beach Energy, Whitehaven Coal, New Hope, Cooper Energy, Karoon Energy, Carnarvon Petroleum, Senex Energy, FAR)
01/01/2010 – 11/05/2020

Throughout this period of underperformance, coal, oil and gas companies have justified expansionary investments by relying on wildly optimistic commodity price assumptions and demand projections consistent with 3°C of warming or more.

The Covid-19 pandemic has seen billions of dollars of planned investment in new fossil fuel production projects delayed, giving investors insight into the fossil fuel growth projects that don't stack up in a low demand scenario. Having recognised the need to manage investments in line with the Paris climate goals, investors must take this opportunity to avoid wasted capital expenditure, and instead manage the necessary decline of the fossil fuel sector.

Capital preservation

"This is a serious shareholder resolution about the core value of the company and its long-term viability in a marketplace where investors are moving away from fossil fuels" - [Martijn Wilder](#), Pollination Group

With the transition to a decarbonised economy shrinking fossil fuel markets, capital invested in coal, oil and gas producers must be preserved, rather than wasted pursuing plans based on demand scenarios and price forecasts that are inconsistent with global climate goals.

Shareholders are interested in this preservation of capital, maximising future company value, and ensuring sites of operations are restored and employees supported in the energy transition. All investors are strongly encouraged to support these resolutions.

Appendix A

Beach Energy Ltd Resolution & Supporting Statement

Resolution - Capital Protection

Shareholders request the company disclose, in subsequent annual reporting, a plan that demonstrates how the company will wind up its oil and gas production assets and operations in a manner consistent with the climate goals of the Paris Agreement.

This plan should include:

- Details of how the company's capital expenditure will facilitate the efficient wind up of oil and gas operations and assets in a timeframe consistent with the Paris goals;
- Production guidance for the lifetime of oil and gas assets that is consistent with the Paris goals;
- Plans for decommissioning and rehabilitating asset sites at the end of their Paris-aligned lifetimes;
- Plans for how employees of the company will be informed of asset closures, and employee transition plans, including any compensation for job losses, training and support in seeking future employment; and
- Details of how remaining capital in the company will be returned to investors.

Supporting statement

This resolution is in the best interests of shareholders and the company, given the risk that further capital expenditure on oil and gas development and production projects would be stranded by market and policy shifts to meet the climate goals of the Paris Agreement, resulting in severe financial impacts on our company.

We request disclosure of a plan to limit capital expenditure to only support production that is demonstrably viable in a Paris-aligned scenario, and meet the company's obligations for asset site rehabilitation, employee wage and entitlement payments, and an employee transition plan.

The Paris Agreement on climate change aims to hold global warming to well below 2°C above pre-industrial levels and pursue a 1.5°C limit, and has been ratified by 185 countries. Governments and markets are accelerating climate action to achieve these goals.

Managed decline for oil and gas

"The time to begin planning for a wind-down of gas production is, as with other fossil fuels, already upon us" - SEI, IISD, ODI, Climate Analytics, CICERO, and UNEP

IPCC analysis shows the remaining global carbon budget for a 66% chance of limiting warming to 1.5°C was 420 Gt CO₂ from 2018. Given the CO₂ emissions embedded in existing and under-construction fossil fuel projects is more than double the IPCC's 1.5°C budget, there is no room for new or expansionary supply projects.

“We already have far more carbon facilities in operation today than we need to blow the Paris budget.” - Emeritus Professor Will Steffen, ANU

IPCC modelling of a 1.5°C scenario shows gas use for primary energy falling globally by 25% by 2030 and 74% by 2050 (from a 2010 baseline), and oil’s role in primary energy falling 37% and 87% over the same timeframes.

Markets shrinking

The decline in oil and gas use required to meet the Paris goals leaves Beach exposed to rapidly shrinking markets. Beach’s FY19 sales revenue was split around 60:40 between gas (sold to the Australian domestic market) and oil (sold to international energy traders). Beach’s growth plans are focused on increasing gas production.

As shown in the Australian Energy Market Operator (AEMO) Gas Statement of Opportunities, all of AEMO’s scenarios for the country’s major electricity grid model gas consumption for electricity generation remaining below 2019 levels from now on. In fact, gas use for eastern Australia electricity generation is expected to fall significantly in most scenarios, with a drop of 83% from 2019 to 2029 in the Paris-aligned Step Change scenario.

ClimateWorks’ Decarbonisation Futures work shows gas use in Australian residential and commercial buildings falling to effectively zero by 2035, and industrial gas use also dropping significantly in a 1.5°C scenario.

Increasing stranded asset risk

Beach’s current plans would risk investor capital on projects that are incompatible with a Paris-aligned energy transition. Beach plans to spend AU\$4 billion to increase production by around 50% over the next 5 years.

This is in addition to considerable recent acquisitions and development, which have seen Beach triple production since FY15. In FY18, Beach raised AU\$300 million in equity and AU\$1.5 billion in credit facilities to fund AU\$1.5 billion worth of acquisitions, doubling the company’s production rate from FY17 to FY18.

Optimistic forecasting

Beach’s growth strategy appears to be based on long-term oil price forecasts that are inconsistent with Paris-aligned expectations, and unreasonably optimistic in light of current market conditions.

The company’s overestimation of oil prices has led to impairments totalling \$1.6 billion since FY10. Considering all annual oil price estimates (FY16E-FY20E) provided in its five annual reports to FY19, Beach has overestimated actual Brent oil prices by an average of 28%.

In FY15 Beach recorded an impairment of AU\$753 million as a result of the sharp oil price crash from above US\$100/bl in June 2014 to below US\$50/bl in January 2015. In its FY15 Annual Report, Beach forecast oil prices to almost fully recover to over US\$90/bl from FY19 onwards. However, the average annual price decreased again from FY15 to FY16 and has remained below US\$70/bl since then. Beach then significantly lowered its oil price assumption in FY16, causing another major impairment loss of AU\$609 million.

Beach's FY19 Annual Report assumed FY20 oil prices of US\$70/bl. Brent prices are currently around US\$45/bl, and Brent Crude Futures are currently trading at below US\$60/bl out to 2029. BP has set its long term oil price forecast at US\$55/bl, and committed to cut production by 40% by 2030. Carbon Tracker states that, in a scenario closer to alignment with the Paris climate goals, "oil demand can be satisfied by projects that generate a 15% internal rate of return at an oil price in the [high] \$40s."

Capital preservation

With the transition to a decarbonised economy shrinking our company's markets, capital in our company must be preserved, rather than wasted pursuing plans based on demand scenarios and price forecasts that are inconsistent with global climate goals.

Shareholders are interested in this preservation of capital, maximising future company value, and ensuring sites of operations are restored and employees supported in the energy transition. All shareholders are strongly encouraged to support this resolution.

Appendix B

Cooper Energy Ltd Resolution & Supporting Statement

Resolution - Capital Protection

Shareholders request the company disclose, in subsequent annual reporting, a plan that demonstrates how the company will wind up its oil and gas production assets and operations in a manner consistent with the climate goals of the Paris Agreement.

This plan should include:

- Details of how the company's capital expenditure will facilitate the efficient wind up of oil and gas operations and assets in a timeframe consistent with the Paris goals;
- Production guidance for the lifetime of oil and gas assets that is consistent with the Paris goals;
- Plans for decommissioning and rehabilitating asset sites at the end of their Paris-aligned lifetimes;
- Plans for how employees of the company will be informed of asset closures, and employee transition plans, including any compensation for job losses, training and support in seeking future employment; and
- Details of how remaining capital in the company will be returned to investors.

Supporting statement

This resolution is in the best interests of shareholders and the company, given the risk that further capital expenditure on oil and gas development and production projects would be stranded by market and policy shifts to meet the climate goals of the Paris Agreement, resulting in severe financial impacts on our company.

We request disclosure of a plan to limit capital expenditure to only support production that is demonstrably viable in a Paris-aligned scenario, and meet the company's obligations for asset site rehabilitation, employee wage and entitlement payments, and an employee transition plan.

The Paris Agreement on climate change aims to hold global warming to well below 2°C above pre-industrial levels and pursue a 1.5°C limit, and has been ratified by 185 countries. Governments and markets are accelerating climate action to achieve these goals.

Managed decline for oil and gas

"The time to begin planning for a wind-down of gas production is, as with other fossil fuels, already upon us" - SEI, IISD, ODI, Climate Analytics, CICERO, and UNEP

IPCC analysis shows the remaining global carbon budget for a 66% chance of limiting warming to 1.5°C was 420 Gt CO₂ from 2018. Given the CO₂ emissions embedded in existing and under-construction fossil fuel projects is more than double the IPCC's 1.5°C budget, there is no room for new or expansionary supply projects.

“We already have far more carbon facilities in operation today than we need to blow the Paris budget.” - Emeritus Professor Will Steffen, ANU

IPCC modelling of a 1.5°C scenario shows gas use for primary energy falling globally by 25% by 2030 and 74% by 2050 (from a 2010 baseline), and oil’s role in primary energy falling 37% and 87% over the same timeframes.

Markets shrinking

The decline in oil and gas use required to meet the Paris goals leaves Cooper exposed to rapidly shrinking markets. Cooper’s FY19 revenue was split around 30:70 between oil and gas. In FY19, 60% of Cooper’s gas was contracted to south-east Australia’s gas utilities, 8% contracted to industrial users, and the remaining 32% uncontracted. The company is exposed to the global oil market, but has focused on growing its gas production business, specifically for the Australian east coast gas market.

As shown in the Australian Energy Market Operator (AEMO) Gas Statement of Opportunities, all of AEMO’s scenarios for the east coast energy grid model gas consumption for electricity generation remaining below 2019 levels from now on. In fact, gas use for eastern Australia electricity generation is expected to fall significantly in most scenarios, with a drop of 83% from 2019 to 2029 in the Paris-aligned Step Change scenario.

ClimateWorks’ Decarbonisation Futures work shows gas use in Australian residential and commercial buildings falling to effectively zero by 2035, and industrial gas use also dropping significantly in a 1.5°C scenario.

Increasing stranded asset risk

Cooper’s growth plans threaten to waste investor capital on projects that are incompatible with a Paris-aligned energy transition. Cooper has pursued rapid growth through acquisitions and development in recent years. It plans to continue on this path with a “5 year development program that can lift gas production more than 10 times FY19 levels, excluding exploration.”

This is in addition to considerable acquisition and development capital expenditure that saw Cooper almost triple production from FY16-19. In FY17, Cooper raised over AU\$200 million of equity to finance acquisitions and development capex commitments over the following 12 months. The company continued to invest in development and exploration assets throughout FY18 and FY19, for which an additional AU\$220 million in debt and AU\$127 million in equity have been raised. The company’s average annual capex from FY17-19 (AU\$150 million) was five times that of the period FY10-16 (AU\$30 million).

Optimistic forecasting

Cooper’s growth strategy appears to be based on long-term oil price forecasts that are inconsistent with those that can be expected under a Paris-aligned energy transition, and are unreasonably optimistic in light of current market conditions.

In the last major oil price crash - from US\$100/bl in June 2014 to below US\$50/bl in January 2015 - Cooper's revising down of oil price forecasts saw the company write off 10% of gross fixed asset value in FY15, and a further 15% in FY16.

Cooper's FY19 Annual Report assumed prices of US\$65/bl in FY20 and US\$68/bl (real) in FY21 and beyond. Brent prices are currently around US\$40/bl, and Brent Crude Futures are currently trading at below \$US60/bl out to 2029. BP has set its long term oil price forecast at US\$55/bl, and committed to cut production by 40% by 2030. Carbon Tracker states that, in a scenario closer to alignment with the Paris climate goals, "oil demand can be satisfied by projects that generate a 15% internal rate of return at an oil price in the [high] \$40s."

Capital preservation

With the transition to a decarbonised economy shrinking our company's markets, capital in our company must be preserved, rather than wasted pursuing plans based on demand scenarios and price forecasts that are inconsistent with global climate goals.

Shareholders are interested in this preservation of capital, maximising future company value, and ensuring sites of operations are restored and employees supported in the energy transition. All shareholders are strongly encouraged to support this resolution.

Appendix C

New Hope Corporation Ltd Resolution & Supporting Statement

Resolution - Capital Protection

Shareholders request the company disclose, in subsequent annual reporting, a plan that demonstrates how the company will wind up its coal production assets and operations in a manner consistent with the climate goals of the Paris Agreement.

This plan should include:

- Details of how the company's capital expenditure will facilitate the efficient wind up of coal operations and assets in a timeframe consistent with the Paris goals;
- Production guidance for the lifetime of coal assets that is consistent with the Paris goals;
- Plans for decommissioning and rehabilitating asset sites at the end of their Paris-aligned lifetimes;
- Plans for how employees of the company will be informed of asset closures, and employee transition plans, including any compensation for job losses, training and support in seeking future employment; and
- Details of how remaining capital in the company will be returned to investors.

Supporting statement

This resolution is in the best interests of shareholders and the company, given the risk that further capital expenditure on coal development and production projects would be stranded by market and policy shifts to meet the climate goals of the Paris Agreement, resulting in severe financial impacts on our company.

We request disclosure of a plan to limit capital expenditure to only support production that is demonstrably viable in a Paris-aligned scenario, and meet the company's obligations for mine site rehabilitation, employee wage and entitlement payments, and an employee transition plan.

The Paris Agreement aims to hold global warming to well below 2°C above pre-industrial levels and pursue a 1.5°C limit, and has been ratified by 185 countries. Governments and markets, including those our company supplies, are accelerating climate action to achieve these goals.

Markets disappearing

NHC claims our business is sustainable under three International Energy Agency (IEA) scenarios. However, analysis of a Paris-aligned coal power phase-out scenario demonstrates our major export markets are on a path to complete elimination.

Climate Analytics shows that, in order to meet the Paris climate goals, coal power must be phased out globally by 2040, and fall 80% below 2010 levels by 2030. The Paris-aligned coal phase out dates for NHC's export markets are:

- Japan (44% of FY19 revenue): 2030
- Taiwan (25% of FY19 revenue): 2037
- China (9% of FY19 revenue): 2037
- Korea (combined with Indonesia for 8% of FY19 revenue): 2030

In this scenario, almost half of NHC's current thermal coal market would be gone by 2030, over 90% by 2037, and 100% by 2040.

Even the IEA's Sustainable Development Scenario (SDS) shows coal demand decreasing to 43Mt (-74%) in Japan, and 140Mt (-67%) in Asia Pacific, excluding China, India, Indonesia and Japan, from 2018 to 2040. In the SDS, China, India and Indonesia - all significant domestic coal producers - make up 90% of Asia Pacific coal demand in 2040. These countries combined accounted for less than 18% of NHC's FY19 revenue.

Growth expectations unrealistic

In stark contrast to the above scenarios, NHC claims: "For most Asian countries thermal coal will continue to be a significant component of their energy mix for many years to come, underpinned by continued investment in new coal fired power stations." The company has projected Asian thermal coal imports to grow to 55% from 2017 to 2030, with key markets Taiwan and Korea increasing 13% and 17% respectively, and Japan falling just 2%.

Falling renewable energy prices, stricter climate change and pollution policies, and the rapid shift in global financial markets away from coal contradict NHC's unreasonably optimistic expectations of Asian coal demand.

The pipeline of proposed new coal power stations in Southeast Asia has halved from 2015 to 2019, while construction starts fell 85% from 2016 to 2019. Japan plans to close around 100 of its 140 coal-fired power plants by 2030. Korea is phasing out domestic and overseas coal financing. Vietnam's latest Power Development Plan will see half of the country's planned coal power plant capacity cancelled or shelved. Bangladesh is reviewing 26 of its 29 planned coal plants, stating the country's intention to "move from coal-based power."

Increasing stranded asset risk

NHC is planning to significantly increase thermal coal production "through existing resource development, new resource exploration and acquisitions."

NHC has expanded through acquisition of a 40% stake in the Begalla project for AU\$865 million in FY16, and a further 40% for AU\$860 million in FY19. Bengalla has a planned production capacity of 10Mtpa out to 2039.

The AU\$900 million New Acland Stage 3 project would expand that mine's production capacity to 7.5Mtpa run-of-mine (ROM), and extend its production life by 12 years.

NHC has submitted mining lease applications for its AU\$1.2 billion Elimatta project, which would produce up to 5Mtpa for "in excess of 32 years." The company is undertaking pre-feasibility studies on a further 17Mtpa ROM of coal production capacity.

Even without these pre-feasibility projects, NHC plans to spend over AU\$2 billion on projects that would significantly increase production out to 2039, and continue production beyond 2050. Based on the coal phase-out dates stated above, these plans could see production of up to 150Mt of coal that could not be sold into our current markets.

Capital preservation

Recent periods of low thermal coal prices provide insight into the risk facing NHC's production plans.

Since 2010, EBITDA margins have ranged between:

- 35-38% from FY10-13, when the thermal coal price averaged US\$98.9/t
- 17-28% from FY14-16 (US\$64.1/t)
- 34-43% from FY17-19 (US\$92.2t)

Thermal coal prices fell to US\$66/t in December 2019 and just US\$52/t in May 2020. Based on an average of the latest major analyst forecasts available in July 2020 (including JP Morgan, UBS, and Macquarie, among others), coal prices are expected to remain below US\$75/t out to 2024. Analysts forecast NHC's revenue and EBITDA will remain well below FY19 levels out to 2022.

Many commentators recognise the thermal coal sector is in terminal decline, and is no longer cyclical. Under the SDS, Japan thermal coal import prices are projected at US\$65/t in 2030 and US\$69/t in 2040. As noted above, a 1.5°C scenario would see global thermal coal demand reach zero by 2040. By contrast, NHC brazenly assumes a coal price of US\$120/t in the Economic Impact Assessment for its Elimatta project.

Shareholders are interested in the preservation of capital, maximising future company value, and ensuring sites of operations are restored and employees supported in the energy transition. All shareholders are strongly encouraged to support this resolution.

Appendix D

Whitehaven Coal Ltd Resolution & Supporting Statement

Resolution - Capital Protection

Shareholders request the company disclose, in subsequent annual reporting, a plan that demonstrates how the company will wind up its coal production assets and operations in a manner consistent with the climate goals of the Paris Agreement.

This plan should include:

- Details of how the company's capital expenditure will facilitate the efficient wind up of coal operations and assets in a timeframe consistent with the Paris goals;
- Production guidance for the lifetime of coal assets that is consistent with the Paris goals;
- Plans for decommissioning and rehabilitating asset sites at the end of their Paris-aligned lifetimes;
- Plans for how employees of the company will be informed of asset closures, and employee transition plans, including any compensation for job losses, training and support in seeking future employment; and
- Details of how remaining capital in the company will be returned to investors.

Supporting statement

This resolution is in the best interests of shareholders and the company, given the risk that further capital expenditure on coal development and production projects would be stranded by market and policy shifts to meet the climate goals of the Paris Agreement, resulting in severe financial impacts on our company.

We request disclosure of a plan to limit capital expenditure to only support production that is demonstrably viable in a Paris-aligned scenario, and meet the company's obligations for mine site rehabilitation, employee wage and entitlement payments, and an employee transition plan.

The Paris Agreement on climate change aims to hold global warming to well below 2°C above pre-industrial levels and pursue a 1.5°C limit, and has been ratified by 185 countries. Governments and markets, including those our company supplies, are accelerating climate action to achieve these goals.

Markets disappearing

Whitehaven claims our business is resilient under three International Energy Agency (IEA) scenarios. However, analysis of a Paris-aligned coal power phase-out scenario demonstrates our major export markets are on a path to complete elimination.

Climate Analytics shows that, in order to meet the Paris goals, coal power must be phased-out globally by 2040, and fall 80% below 2010 levels by 2030. The Paris-aligned coal phase-out dates for Whitehaven's key export markets are:

- Japan (50% of FY19 revenue): 2030
- Korea (14% of FY19 revenue): 2030
- Non-OECD Asia (32% of FY19 revenue): 2037

In this scenario, 64% of Whitehaven's current thermal coal market would disappear by 2030, and over 96% by 2037.

Even the IEA's Sustainable Development Scenario (SDS), which gives just a 66% chance of limiting the global average temperature rise to 1.8°C, shows coal demand decreasing to 43Mt (-74%) in Japan, and 140Mt (-67%) in Asia Pacific, excluding China, India, Indonesia and Japan, from 2018 to 2040. In 2019, Japan accounted for 50% of Whitehaven's revenue, while Asia Pacific (ex China, India, Indonesia and Japan) accounted for a further 34%.

In the SDS, China, India and Indonesia make up 90% of 2040 Asia Pacific coal demand. These countries are all significant coal producers, and accounted for just 12.7% of Whitehaven's FY19 revenue.

Growth expectations unrealistic

Whitehaven is looking "to take advantage of the substantial growth in coal-fired power generation in Southeast Asia." However, recent developments in Southeast Asian markets suggest this view is unreasonably optimistic. Falling renewable energy prices, stricter climate change and pollution policies, and the rapid shift in global financial markets away from coal contradict Whitehaven's expectations of Southeast Asian coal demand.

The pipeline of proposed new coal power stations in Southeast Asia has halved from 2015 to 2019, while construction starts fell 85% from 2016 to 2019. Japan plans to close around 100 of its 140 coal-fired power plants by 2030. Korea is phasing out domestic and overseas coal financing. Vietnam's latest Power Development Plan will see half of the country's planned coal power plant capacity cancelled or shelved. Bangladesh is reviewing 26 of its 29 planned coal plants, stating the country's intention to "move from coal-based power."

Increasing stranded asset risk

Whitehaven's current plans threaten to waste investor capital on projects that are incompatible with a Paris-aligned energy transition, and unrealistic in light of market shifts already underway.

Whitehaven states: "We expect to grow our portfolio from a managed level of approximately 22Mt in 2019 to over 40Mt by 2030." To achieve this, Whitehaven plans to spend a combined AU\$1.9 billion on the Vickery and Winchester South expansion projects. These projects have a combined run-of-mine (ROM) production capacity of

25Mtpa across 25 year lifetimes. With the Maules Creek and Narrabri mines proposed to operate until 2055 and 2045 respectively, Whitehaven's current plans would see the company producing up to 43Mtpa ROM well beyond 2040.

If Whitehaven continues producing 80% thermal and 20% coking coal, and sustains 75% of its planned production capacity from 2030-2050, we are set to produce over 500Mt of thermal coal that could not be sold into our current markets. At current coal prices this represents nearly AU\$40 billion revenue that is expected but cannot be generated.

Capital preservation

With climate action expected to usher in sustained low coal demand and prices, capital in our company must be preserved. Recent periods of low demand and prices, in 2020 due to the COVID-19 pandemic and throughout FY14-17, provide insight into the risk facing Whitehaven's production plans. In 2015, when thermal coal prices averaged around US\$60/t, Whitehaven wrote down AU\$355 million of exploration assets due to the "changed coal market conditions."

After averaging US\$100/t through FY18-19, the thermal coal price fell to US\$66/t in December 2019 and US\$52/t in May 2020. An average of the latest major analyst forecasts available in July 2020 (including JP Morgan, UBS, Bofa Securities, and Macquarie, among others) shows coal prices are expected to remain below US\$75/t out to 2024. Analysts forecast Whitehaven's revenue and EBITDA will remain well below FY19 levels out to 2022.

Many commentators recognise the thermal coal sector is in terminal decline, and is no longer cyclical. Under the SDS, Japan thermal coal import prices are projected to be US\$65/t in 2030 and US\$69/t in 2040. As noted above, a 1.5°C scenario would see global thermal coal demand effectively reach zero by 2040. By contrast, Whitehaven's economic assessment for the Vickery Extension Project assumes long term thermal coal prices of US\$85/t and an operating life to at least 2045.

Shareholders are interested in the preservation of capital, maximising future company value, and ensuring sites of operations are restored and employees supported in the energy transition. All shareholders are strongly encouraged to support this resolution.