# **INVESTOR BRIEFING**

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### Whitehaven Coal (ASX: WHC) & New Hope Corporation (ASX: NHC)

### **Shareholder proposals: Capital protection**

Despite the rapid and continuing shift away from coal power generation, and the steep declines in coal demand required to limit global warming in line with the Paris Agreement, Whitehaven Coal (WHC) and New Hope Corporation (NHC) plan to spend a combined AU\$2.9 billion on new and expanded mines.

The International Energy Agency (IEA) has confirmed what climate scientists have been saying for years: reaching net-zero carbon emissions by 2050 means "no new coal mines or mine extensions are required." With major policy and market shifts to align with the net-zero by 2050 goal occurring almost daily, the risk of stranded coal assets is increasingly clear.

Instead of wasting shareholder capital on new projects that would be stranded by the energy transition already underway, WHC and NHC must responsibly manage down their current assets to protect and preserve shareholder capital, align with climate goals, and support workers in the net-zero transition.

Investors are therefore urged to vote for these resolutions at the upcoming WHC and NHC AGMs.

#### **Resolution: Capital protection**

Shareholders request the company disclose, in subsequent annual reporting, information that demonstrates how the company's capital expenditure and operations pertaining to its coal assets will be managed in a manner consistent with a scenario in which global energy emissions reach net zero by 2050.

This information should include:

- Details of how the company's capital expenditure will facilitate the efficient managing down of coal operations and assets;
- Production guidance for the lifetime of coal assets;
- Plans and capital expenditure requirements for decommissioning and rehabilitating coal asset sites at the end of their lifetimes;
- Plans for how employees of the company will be informed of coal asset closures, and employee transition plans, including any compensation for job losses, training and support in seeking future employment; and
- Details of how the company's remaining capital will be redeployed, or returned to investors.

# **Executive summary**

### WHC and NHC's markets will rapidly decline and ultimately disappear in a net-zero by 2050 scenario

- The IEA's Net Zero Emissions by 2050 scenario (NZE2050) models:
  - Unabated coal demand falling by over 98% by 2050
  - Coal power phased out in developed economies by 2030 and globally by 2040
  - "No new coal mines or mine extensions are required"
  - "Demand for coking coal falls at a slightly slower rate than for steam coal, but existing sources of production are sufficient to cover demand through to 2050"
- 76% of WHC's and 70% of NHC's FY21 revenue is derived from sales to countries committed to achieving net-zero emissions by 2050

# Emerging markets will not step in to fill the demand gap as current markets move rapidly away from coal power to meet their net-zero commitments

- The global pipeline of proposed coal-fired power plants has collapsed by 76% since the Paris Agreement was signed in 2015
- Japan, and South Korea have commitmented to end financing for overseas coal power projects,
  while China announced it would stop building coal power plants abroad
  - These countries accounted for 95% of public finance for overseas coal projects since 2013
- Globally, renewable energy generation is now cheaper than 77% of operating coal generation
- By 2026 new renewable energy will be cheaper than 98% of existing coal power plants

# WHC and NHC plan to spend a combined AU\$2.9 billion on new and expanded coal mines that are incompatible with net-zero emission by 2050

- WHC plans to almost double coal production to 2030 and spend a combined AU\$2 billion on new and expanded mines
- NHC plans to spend AU\$900 million on its New Acland Stage 3 expansion, which would increase the company's equity-adjusted production capacity by 62.5%

To justify their expansion plans, NHC and WHC regularly refer to scenarios consistent with the failure of the Paris Agreement. They are betting shareholder capital against these climate goals, with significant value destruction and unmanaged social and environmental impacts at stake.

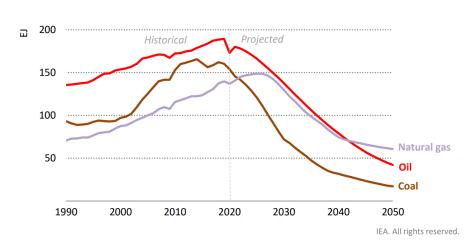
Any investor that supports the goals of the Paris Agreement and net-zero emissions by 2050 must therefore vote in favour of these resolutions.

# Markets will disappear under net-zero by 2050 scenario

Recognising the unacceptable financial risks global warming poses, investors managing more than US\$43 trillion in assets have committed to the goal of net-zero greenhouse gas emissions by 2050 or sooner. Globally, 120 countries, as well as thousands of cities, businesses and financial institutions have joined the largest ever alliance – representing over 50% of global GDP – committed to achieving net-zero carbon emissions by 2050.

In FY21, 81% of WHC's <u>revenue</u> (p 64) was sourced from thermal coal, while both of NHC's operating mines are thermal coal (p 8). The rapid energy transition required to achieve net-zero emissions by 2050 presents existential risks for pure play coal companies like WHC and NHC.

The <u>IEA's landmark Net Zero Emissions by 2050 scenario</u> (NZE2050) – modelled to provide just a 50% chance of limiting global warming to 1.5°C – underscores these risks, projecting steeply declining coal demand over the next three decades.



Coal, Oil and Natural Gas Production in NZE2050

Source: <u>IEA Net Zero by 2050, May 2021</u> (p 101)

In this scenario, WHC and NHC's current coal markets are set to significantly evaporate over the coming decade, and almost completely disappear by 2040.

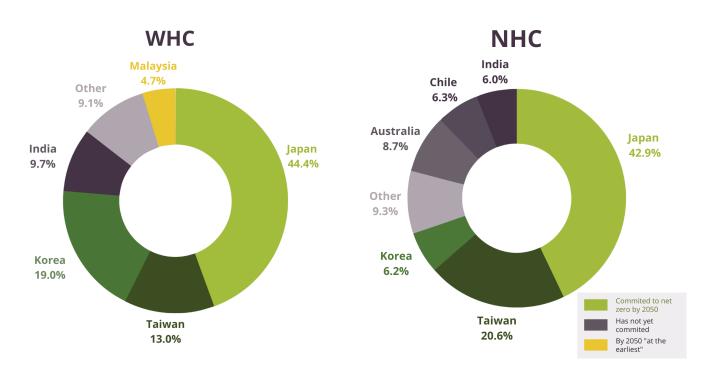
NZE2050 sets out key milestones (p 20) required to achieve net-zero emissions by 2050, including:

- 2021 No new unabated coal plants and no new coal mines or mine extensions approved for development.
- 2030 Phase out of unabated coal in advanced economies.
- 2035 Overall net-zero emissions electricity in advanced economies.
- 2040 Phase out of unabated coal power plants globally, net-zero emissions electricity globally.

NZE2050 models global energy supply sourced from unabated coal falling by over 98% (p 195) – from 154EJ in 2020, to just 3EJ in 2050. Even including NZE2050's highly optimistic assumptions for coal abated by carbon capture, utilisation and storage (CCUS) – a technology that to date has been a spectacular economic and technical failure – total energy supplied by coal globally falls by 89% to 2050.

In <u>NZE2050</u>, "Demand for coking coal falls at a *slightly* slower rate than for steam coal, but existing sources of production are sufficient to cover demand through to 2050" (p. 103). **Any capex to expand or extend thermal or coking coal production would therefore also be incompatible with NZE2050.** 

National net-zero commitments indicate current major markets for WHC and NHC in Asia are set to rapidly shrink. In total, 76% of WHC's and 70% of NHC's current revenue (FY21) is derived from sales to countries committed to achieving net-zero emissions by 2050. Both <u>Japan</u> and <u>Korea</u> have committed to achieve net-zero emissions by 2050. These two countries alone represented 63% of <u>WHC's</u> (p 64) and 49% of <u>NHC's</u> (p 34) FY21 revenue. <u>Taiwan</u> – representing 13% of WHC's and 21% of NHC's FY21 revenue – has also signalled its commitment to net-zero emissions by 2050. In addition, **China**, which prior to the recent ban on Australian coal imports represented 4% of WHC's and 9% of NHC's revenue in FY19, has announced <u>plans</u> to achieve net-zero emissions by 2060.



FY21 Revenue and Net-Zero by 2050 Commitments

Sources: WHC (p 64) & NHC (p 34) FY21 Annual Reports.

These long-term commitments are already shifting nearer-term policies. Japan's latest energy policy aims for coal power's proportion of the energy mix to fall by over 40% (from approximately 32% to 19%) by 2030. Meanwhile, <u>Japan</u>, and <u>South Korea</u> announced commitments this year to end financing for overseas coal power projects, while <u>China</u> announced it would stop building coal power plants abroad. Combined, these three countries account for <u>95%</u> of public finance for overseas coal projects since 2013. These commitments will further shrink the coal power pipeline, which has <u>collapsed</u> by 76% since the Paris Agreement in 2015.

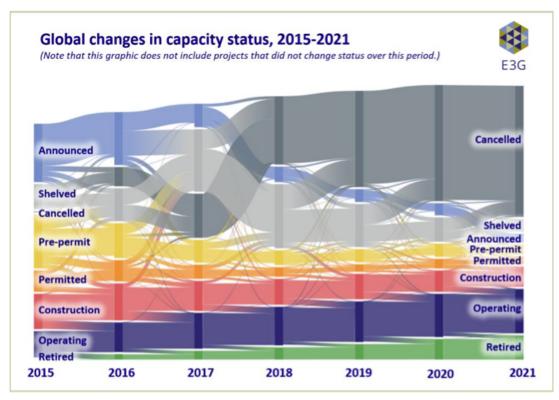


Figure 5: Sankey diagram showing global changes in capacity status, 2015-2021. Note that graphic does not include projects that did not change status over this period.

Source: E3G, No New Coal by 2021 (p 16)

WHC and NHC have not disclosed any assessment of the existential risks posed to their business under a net-zero by 2050 scenario.

Instead, NHC and WHC regularly refer to scenarios consistent with the failure of the Paris Agreement when projecting future coal demand and discussing their future business prospects (NHC 2020 Annual Report p 5; WHC 2021 Results Presentation p 7-10 & 13, citing Wood Mackenzie base case).

# **Unrealistic growth predictions**

Emerging markets will not replace falling demand as current markets move rapidly away from coal power to meet their net-zero commitments. Both WHC (p 4) and NHC (p 4) predict future coal demand will be underpinned by coal-fired power generation across Asia. However, developments globally and in these Asian markets demonstrate this expectation is unrealistic.

In South Asia (India, Sri Lanka, Bangladesh and Pakistan), the coal power pipeline has contracted by 87% since 2015. Sri Lanka and Pakistan have both stated that they will no longer pursue new coal power. Sri Lanka's updated June 2021 nationally determined contribution (NDC) formally committed the country (p iv) to no new coal power capacity. Pakistan's Prime Minister announced in December 2020 that the country "will not have any more power based on coal". Meanwhile, Bangladesh's pipeline has collapsed, with 10 coal power plants scrapped in the first half of 2021 alone.

In South-East Asia (incorporating Indonesia, Vietnam and the Philippines) there has been a 63% decrease in the coal pipeline since 2015. All planned coal power plants in Malaysia and Myanmar have now been cancelled, with Malaysia announcing in June 2021 its commitment to no new coal power plants. Even in Vietnam, which has the third largest coal pipeline in the world at 19.4GW (behind India and Indonesia), there has been 33GW of coal-fired power cancelled since 2015.

The continuation of these trends consistent with a net-zero by 2050 scenario would see markets for WHC and NHC's coal disappear.

A key factor driving the cancellation of coal power plants is the rapidly falling price of renewable energy. Renewable energy is now cheaper than 77% of operating coal when comparing the levelised cost of energy (LCOE) with the long run marginal cost (LRMC) of existing coal. By 2026 new renewable energy will be cheaper than 98% of existing coal-fired power plants. In Asia, new renewable energy is currently cheaper (p 14) than existing coal in the major economies of China, India and South Korea. This threshold is expected to be reached (p 30) by 2022 in Japan and 2024 in ASEAN countries (including Thailand and Vietnam).



"Phasing out coal from the electricity sector is the single most important step to get in line with the 1.5 degree goal." United Nations Secretary-General, António Guterres

## Increasing stranded asset risk

The transition to net-zero emissions by 2050 threatens to leave investment in new coal developments, and even some existing projects, stranded. Under NZE2050 (p 21), "there is no need for investment in new fossil fuel supply" and "no new coal mines or mine extensions are required". Recent modelling (p 35) by the Reserve Bank of Australia (RBA) highlights that under all scenarios except for the current policies (baseline) scenario, "Australian coal-related investments are at risk of becoming 'stranded assets' as lower export volumes and prices weigh on firm profitability". The RBA report also notes that under its "Net Zero and Below 2°C" scenarios "there is potential for 'stranding' even if there is no investment into new mines" (p 35). Under the RBA's analysis, even existing coal mines are at risk of becoming stranded under net-zero scenarios.

Despite the clear risk of asset stranding, WHC and NHC are planning to expand coal production. WHC states (p 10), "We expect to grow our portfolio from a managed level of approximately 21Mt in 2020 to over 40Mt by 2030". To achieve this, WHC plans to spend a combined AU\$1.6 billion on the new Vickery (p 10) and Winchester South (p ES-4) coal mines, and a further AU\$400 million on the proposed Narrabri Stage 3 expansion. The Vickery and Winchester South mines would have a combined run-of-mine (ROM) capacity of up to 27 Mtpa across 25 and 28 year operating lifespans respectively, producing at least 40% thermal coal. Meanwhile, the Narrabri Stage 3 expansion proposes (p 10) an extension in mine life to 2045 and an increase in ROM coal production to 13 Mtpa. With the existing Maules Creek mine approved to operate until 2053, approved production (p 40) at WHC's mines could reach around 50 Mtpa beyond 2040.

Taking WHC's equity-adjusted marketable thermal coal <u>reserves</u> (p 3) and averaging production across its planned asset lives, the company plans to produce 273 Mt of thermal coal that could not be sold into current markets under NZE2050. Using WHC's estimated long-term thermal coal price of <u>US\$85/t</u> (p 23), this represents US\$23 billion in revenue that would be foregone under NZE2050.

NHC has expanded through acquisition of a 40% stake in the Bengalla thermal coal mine for AU\$865 million in FY16, and a further 40% for AU\$860 million in FY19. Bengalla has approval to produce up to 15 Mtpa ROM coal out to 2039. Meanwhile, the proposed AU\$900 million New Acland Stage 3 expansion would expand that mine's production capacity to 7.5 Mtpa ROM and extend its production life by 12 years. NHC is also continuing to spend heavily on exploration activities across other coal developments that will not be financially viable under a net-zero by 2050 scenario. NHC has assessed (p 2) 231 Mt of marketable reserves for its Lenton, Elimatta and Taroom coal tenements. Under NZE2050 there would be no market for this coal, making those assets worthless.

# **Capital preservation**

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 WHC and NHC due to the structural decline of the global coal market.

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. Largely due to that price volatility, WHC's EBITDA dropped 71% year-on-year in FY20, while NHC's EBITDA dropped 44% in the same period.

In its FY21 results, despite relatively high thermal coal prices, WHC announced a AU\$640 million impairment (p 2) on its Narrabri and Werris Creek coal mines, due to revisions of coal production and uncertainties in coal markets. In 2020, NHC impaired (p 21) AU\$157 million worth of coal exploration and evaluation assets due to changing "market conditions for coal exploration assets". In 2015, when thermal coal prices averaged around US\$60/t, WHC wrote down AU\$355 million of exploration assets due to the "changed coal market conditions" (p 132).

While the coal price has temporarily recovered, many commentators recognise the sector is in <u>terminal</u> <u>decline</u>. Under NZE2050, steam coal import prices are <u>modelled</u> (p 51) to fall to US\$57/t in Japan by 2030, and continue to fall thereafter. By contrast, <u>Whitehaven's economic assessment for the Vickery Extension</u> <u>Project</u> assumes long term thermal coal prices of US\$85/t and an operating life to at least 2045 (p 23).

In the last decade, WHC and NHC have considerably underperformed other companies on the Australian Securities Exchange, providing no comfort to investors concerned about the companies' ability to protect shareholder value over a period of escalating financial risks. WHC shareholders saw only 22% total return, and NHC's only 4%, on their investment between 2011 and 2021, compared with a 173% total return for the ASX200 over the same period.

#### Total Return Analysis for WHC, NHC and ASX200



# Investor support required

In the face of accelerating commitments towards achieving net-zero emissions by 2050, these resolutions seek to avoid the financial shocks of stranded assets, wasted capital and unpredictable revenues. They are also intended to ensure WHC and NHC meet their environmental rehabilitation obligations and responsibilities to staff.

The plans requested would avoid sudden and unplanned job losses as a result of market shocks as the global energy system decarbonises, affording employees the opportunity to be retrained, financially supported and assisted in finding future employment.

Investors are urged to vote in favour of these resolutions, and those that support the goal of net-zero emissions by 2050 are expected to offer their full support.