Whitehaven

2025

Maules Creek Continuation Project

Environmental Impact Statement

Section 2
Strategic Context

TABLE OF CONTENTS

2 Strategic Context

This section outlines the strategic need for each component of the Project as well as potential benefits of the Project, with regard to the natural and built environment, and relevant strategic plans and policies.

The Project comprises three key components.

Mine Site: The continuation of mining operations at the MCCM would result in:

- Continued and expanded employment opportunities of the MCCM workforce for an additional 10 years beyond the currently approved limit on mining operations (end of December 2034).
- An additional 10 years of social and economic community benefits associated with ongoing operation of the MCCM in regional NSW.
- Contribution of an additional $818 million in royalties to NSW in net present value terms where the Project is approved.
- Extraction of thermal and metallurgical coal, supporting both current and anticipated future global energy and steelmaking demand.

Landscape Revegetation Zones: The establishment of the Landscape Revegetation Zones would:

- Establish native woodland within the approximate 2,300 ha Landscape Revegetation Zones, compared to a Project disturbance of approximately 683 ha.
- Establish positive outcomes for biodiversity over the life of the Project.
- Provide a larger benefit (net gain) in biodiversity values than the prescribed mine site rehabilitation and biodiversity offsets alone.
- Improve the native woodland cover that currently exists in the local region of the Leard State Forest.
- Expand the native habitat adjacent to Leard State Forest and restore linkages between remnant woodland /existing conserved areas.

Water Transfer Pipeline: The construction and operation of a water transfer pipeline between the MCCM water pipeline network and the approved VCM to TCM pipeline would:

- Allow for efficient water use and storage between Whitehaven operations.
- Reduce reliance on supplementary supply from alluvial groundwater sources, and the Namoi River.

2.1 Project Strategic Context

The MCCM has been operating since 2014 and has played an important role in the region from a social and economic perspective.

The existing MCCM has an estimated average workforce of approximately 865 people with approximately 70% of the employees based in local communities.

Approximately 14% of permanent MCC employees at the MCCM identify as Aboriginal and/or Torres Strait Islander.

The MCCM produces thermal and coking coals (Section 2.2.2). The high calorific value (CV) thermal coal supports global energy security as it can be used in HELE power stations. The greenhouse gas emissions produced from the burning of the Project's thermal coal per megawatt hour of electricity generated can be less than the lower-CV coal products produced by many overseas thermal coal mines producing lower-CV coal. Coking coal produced by the MCCM plays an important role in the transition to a low-carbon economy, given its critical input in construction of renewable energy infrastructure (Whitehaven, 2024a).

2.1.1 JUSTIFICATION FOR THE PROJECT

Mine Site

The continuation and extension of mining operations is required in order to support the existing operations at MCCM.

The proposed open cut pit extension is located within existing mining tenements and immediately adjacent to the approved MCCM mining area, which is forecast to become operationally constrained around 2028. The Project proposes the re-orientation of the mining direction from the current north-west to south-east direction to a west to east direction. This would improve mining efficiency compared to the approved MCCM as it provides a larger length of available open cut face (i.e. strike length) and increases the operating areas for the mobile fleet. This improvement in mining efficiency would facilitate the proposed 1 Mtpa increase in the maximum ROM coal mining rate.

The design of the Project Mining Area to recover resources within the existing mining tenements reflects discussion in the Maules Creek Coal Project Environmental Assessment (Hansen Bailey Environmental Consultants Pty Ltd [Hansen Bailey], 2011) regarding potential future development of the MCCM beyond the currently approved open cut extent.

Due to both the current and anticipated future demand for thermal coal and metallurgical[1] coal, the Project would provide the opportunity to maintain continuity of open cut mining and increase ROM coal production at the MCCM. This would facilitate the continuation of the existing workforce as well as an increase in the workforce to an average of approximately 940 people.

The Project would ultimately assist Whitehaven's customer countries in achieving their decarbonisation goals as they continue to preferentially use higher-CV thermal coal as an energy source.

High-CV coal has the benefit of requiring less coal to generate the equivalent amount of electricity, when compared to the lower-CV coal produced by many overseas thermal coal mines. The low ash content of the MCCM high-CV coal increases a power station's combustion efficiency, with higher heat output and lower particulate emissions.

Landscape Revegetation Zones

MCC would plant between approximately 500 to 800 ha of trees in the planting season per year for the first three to five years of the Project, upon its approval and commencement. This initiative would establish approximately 2,300 ha of native woodland in the vicinity of the MCCM to improve biodiversity values in the region. Key benefits of the Landscape Revegetation Zones are described in Section 2.1.2.

Water Transfer Pipeline

MCC is seeking to construct and operate a new water transfer pipeline between the MCCM water pipeline network and the approved VCM to TCM pipeline.

The bi-directional transfer of water between MCCM and TCM and/or VCM via the proposed water transfer pipeline is required to meet water supply and storage requirements for the MCCM including the Project Mining Area.

2.1.2 KEY PROJECT BENEFITS

The MCCM creates direct and indirect jobs and helps to diversify the regional economy, sustain local communities, provide skilled jobs and support global energy security, steelmaking processes and economic development.

The Project would allow for the continuation of the MCCM and its associated benefits for an additional 10 years beyond the currently approved limit on mining operations (end of December 2034).

The key benefits of each component of the Project are explained below.

[1] Metallurgical coal and coking coal have been used interchangeably throughout this EIS.

Mine Site

The Project would enable extraction of thermal and metallurgical coals until 2044.

Specifically, the proposed extension of mining operations would:

- Provide ongoing and incremental economic benefits to NSW, such as continued royalties and economic flow-on effects.
- Promote the conservation of biodiversity in NSW, including threatened species and communities, through the establishment of Landscape Revegetation Zones, suitable biodiversity offsets, and rehabilitation of the mine site.
- Continue the employment of the existing MCCM workforce and provide employment opportunities for an additional 75 people (on average).
- Allow for the continuation of economic contributions to local businesses in North West NSW.
- Facilitate the establishment of a final landform and post-mining land uses that create environmental values consistent with those of the areas surrounding MCCM (i.e. native vegetation).
- Improve the mining efficiency compared to the approved MCCM, extracting the maximum proposed ROM coal whilst minimising the area of land impacted.
- Provide a source of high-CV, low emissions coal to satisfy the forecast thermal coal market demand.
- Continue international export of thermal and coking coals which assists Whitehaven's customer countries to achieve their decarbonisation goals while meeting steel production requirements.

Landscape Revegetation Zones

Key benefits of the Landscape Revegetation Zones include the following:

- Provide a larger area of native vegetation cover than currently exists in the local region of Leard State Forest.
- Complement the existing Leard Forest Regional Biodiversity Strategy, by expanding habitat adjacent to Leard State Forest and restoring linkages between woodland patches/existing conserved areas.
- Provide a larger biodiversity benefit (net gain) compared to offsetting alone (i.e. it would be additional/in excess to prescribed biodiversity offset/credit requirements).
- Target establishment of self-sustaining woodland vegetation communities that are likely to have once occurred prior to clearance, considering soil, landscape position, topography and surrounding native vegetation.

Water Transfer Pipeline

The water transfer pipeline would allow water sharing between Whitehaven's MCCM, TCM and VCM to provide the following benefits:

- Facilitate opportunities to reduce external water use from the Namoi River and groundwater bores.
- Allow excess water from one operation to be transferred to another operation with spare capacity.
- Allow for the benefical use of the water stored in the TCM final void (post-closure).

2.1.3 KEY PROJECT AVOIDANCE AND MINIMISATION MEASURES

The Project design incorporates a number of avoidance and minimisation measures, as described below.

Mine Site

The mining component of the Project has been designed to avoid and minimise potential environmental and amenity impacts, by:

- utilising existing infrastructure which services the existing MCCM, including the MIA, CHPP, rail loop, water infrastructure, regional accommodation villages and ancillary infrastructure;
- maximising emplacement of waste rock in-pit and on top of the approved out-of-pit emplacement rather than constructing new out-of-pit emplacements in previously undisturbed areas;
- implementing a setback at least 200 metres (m) from open cut extension and overburden emplacement areas from the mapped top-of-bank of Back Creek;
- minimising the size of the infrastructure to reduce impacts on mapped threatened ecological communities (TECs);
- maximising the use of existing easements and cleared areas for the proposed water transfer pipeline;
- implementing a water management system to manage clean water, sediment laden water and mine water; and
- using geomorphic design principles (such as GeoFluv™) to create a natural final landform design aimed at achieving long-term erosional stability, reduce maintenance and increase biodiversity in, and the aesthetic value of, rehabilitated landforms.

Landscape Revegetation Zones

Revegetation within the Landscape Revegetation Zones would target areas that:

- are on Whitehaven-owned land to be managed by MCC;
- comprise land that was historically cleared and is currently Category 1-Exempt Land (under the NSW *Local Land Services Act 2013* [LLS Act]) or derived native grassland; and
- are not higher quality agricultural areas and locally significant properties and facilities.

Water Transfer Pipeline

The water transfer pipeline has been designed to avoid impacts on canopy vegetation through a combination of trenching, underboring and placing sections of pipeline directly on-ground. This would be achieved by:

- laying sections of the pipe on-ground where it can be located away from Rangari Road;
- designing the alignment and laydown areas to avoid the felling of trees; and
- underboring mature tree roots where it is not practical to lay the pipe on-ground.

For road and driveway crossings, and avoidance of mature tree roots, the pipeline would be installed in a borehole which would be directionally drilled underneath the roads or tree roots (i.e. underboring). Underboring of trees would be at least 2 m below surface to minimise interaction with tree roots.

2.1.4 CONSIDERATION OF ALTERNATIVES

The locations of the Project Mining Area, water transfer pipeline and the Landscape Revegetation Zones have been subject to constraints which informed the current Project design.

Specifically, the location and extent of the Project Mining Area has been designed in consideration of key spatial constraints, including:

- the location of existing mining and exploration tenements (namely to the east);
- existing disturbance limits of emplacement areas and existing infrastructure areas;
- the standoff from Back Creek (to the north); and
- the existing vegetated corridor (to the south).

The Project alternatives as described below have not been adopted as they were not considered economically or operationally feasible, and the potential outcomes would not have aligned with stakeholder expectations and MCC's objectives for the Project (Section 1.2).

Further consideration of alternative mine plans with respect to potential biodiversity impacts is provided in the BDAR (Appendix C).

Mine Site

A summary of the alternatives to the Project Mining Area is provided below.

Alternative Open Cut Mining Locations

If the previously mentioned spatial constraints were not considered, the Project could recover additional coal resources; however, these alternatives were not adopted because:

- There would be an increase in environmental impacts due to the increase in the disturbance footprint outside of existing tenements with uncertain economic benefits (i.e. there is limited exploration information on the coal resource outside of the existing tenements).
- Mining through the vegetated corridor would not be consistent with the intent of the existing MCCM approvals (e.g. PA 10_0138 and EPBC 2010/5566 require the vegetated corridor to be conserved).

Reducing the Open Cut Extension Area

An objective of the Project is to maximise the extraction of coal resources within the existing mining and exploration tenements. Whilst a further reduction of the open cut extension area beyond the current setback from Back Creek would avoid impact on biodiversity (particularly TECs), it would also reduce the amount of ROM coal recovered by the Project and sterilise residual coal resources.

Sterilisation of coal resources would result in negative economic impacts including reduced royalties and tax payments to the State of NSW, and reduced social benefits through Project-related expenditure such as the employment of local contractors and businesses.

A mine plan that reduces the open cut pit extension area would reduce the ROM coal recovered and result in a significant reduction in economic and community benefits.

Alternatives to Project Waste Rock Emplacement Area within Existing Rehabilitation Area

An alternative to disturbing the existing northern rehabilitation area was considered whereby the waste rock material generated by the Project would be placed on top of the approved southern emplacement area.

However, emplacement of additional waste rock material on the existing emplacement area would increase the landform's elevation, forming steeper slopes (with unacceptable safety and geotechnical consequences), and would risk achievement of the desired post-mining land use.

In addition, the proposed emplacement area has been designed to avoid expansion of the existing overburden emplacement laterally, and in particular:

1. to the north across Back Creek;
2. to the east outside of the existing MCCM mining and exploration tenements; or
3. to the south within the existing vegetated corridor.

These three alternatives were not considered reasonable or feasible due to the increased environmental impacts and/or potential sterilisation of coal resources.

Alternative Mine Life and Coal Processing Rate

MCC considered no extension in mine life and cessation of the MCCM in 2034. However, cessation of mining operations in 2034 would result in negative socio-economic impacts to MCCM stakeholders and employees, as well as local businesses receiving direct and indirect benefits from the MCCM, relative to extending and expanding MCCM's operations (via the Project) for a further 10 years. That is, MCCM stakeholders and employees, as well as local businesses, would be deprived of the socio-economic benefits that are associated with a further 10 years of operations at the MCCM.

Cessation of mining in 2034 would also see the sterilisation of approximately 117 Mt of ROM coal.

Further, MCC considered no change in the annual coal processing rate (13 Mtpa), however this alternative would prevent the optimised extraction of coal resources using the existing infrastructure servicing the MCCM (e.g. rail capacity, CHPP capacity, etc).

Alternative Project Mining Method

Establishing an underground mine within the current exploration and mining tenements would reduce coal resource recovery, and would be less economically attractive due to the small resource size (as constrained by the current tenements) and substantial capital costs of approximately $800 million. Further, an underground mine within the MCCM tenements would not be able to operate at a production rate suitable for efficient use of the existing MCCM infrastructure (e.g. rail, CHPP and water management infrastructure).

An underground mine would also reduce the number of target seams that could be mined and therefore likely sterilise coal resources in the Project Mining Area. The total ROM coal recovered by an underground longwall mine in the Project Mining Area would be approximately 7.4 Mt. The mining efficiency benefits associated with re-orientation of the open cut mining operations described above would also not be realised for the currently approved MCCM (e.g. MCCM coal production and workforce would be progressively reduced).

This alternative would be inconsistent with the Project objectives (as per Section 1.2) of maximising the extraction of coal resources within the existing mining and exploration tenements. It would also be unlikely to produce positive economic outcomes, due to the substantial capital costs involved and limited resource that could be recovered within the existing tenements.

Alternative Final Landform

An alternative final landform for the Project has been considered where no final void remains following completion of mining.

MCC determined that backfilling the final void at the end of mining would have a significant impact on the economics of the Project. The additional operating cost is estimated to be approximately $2 billion on account of the significant and protracted rehandling of significant volumes of material. Additionally, it would potentially result in worse environmental outcomes as the open cut void would likely not act as a groundwater sink if partially or completely backfilled. Backfilling operations would take approximately 6 years to complete, with an estimated 357 million cubic metres (M^3) of overburden being moved to backfill the void. Amenity and environmental impacts would continue for an additional 6 years.

Landscape Revegetation Zones

A number of alternative size and locations were considered for the Landscape Revegetation Zones.

However, these alternative areas were not pursued as they would impact higher agricultural productivity areas and/or sterilise potential coal resources surrounding the MCCM. Areas that would provide limited linkage to existing remnant revegetation (including the Leard State Forest) were also not pursued.

Water Transfer Pipeline

An alternative water transfer pipeline alignment was considered in the original project design, however upon further review, MCC concluded that a revised alignment would serve the same use/function whilst also avoiding canopy vegetation.

2.1.5 CONSEQUENCES OF THE PROJECT NOT PROCEEDING

In the absence of the Project:

- Mining operations at the MCCM would cease in 2034, at the latest.
- There would be sterilisation of approximately 117 Mt of ROM coal targeted by the Project, currently in high demand internationally for electricity generation and for use in the steelmaking process.
- It is anticipated that international demand for thermal coal would be met by the lower quality thermal coal produced by many overseas thermal coal mines, likely leading to higher overall global greenhouse gas emissions from the burning of lower-CV coal.
- Substantial royalty payments and taxes associated with the Project would not be generated.
- Social benefits and expenditure at businesses within the Narrabri LGA and Gunnedah Local Government Area (Gunnedah LGA) (and surrounds) related directly to the Project would not be realised.
- Operational employment of the MCCM workforce and direct flow-on economic effects would cease in 2034.
- Improved habitat linkages to the Leard State Forest and overall enhancement of biodiversity values associated with the Landscape Revegetation Zones would not be realised.
- Amenity impacts at private receivers including noise and dust would cease earlier (i.e. in 2034).

2.2 International Strategic Context

The main international consideration for the Project is the balance between a long-term global response to global warming and the forecast demand for affordable and reliable baseload electricity generation from thermal coal, and demand for steel produced from metallurgical coal.

Over the life of the Project, the international demand for thermal coal is expected to remain stable, partly due to developing countries, including in South East Asia, seeking to provide their communities with access to electricity to support economic growth and improve quality of life (NSW Government, 2020). The International Energy Agency (IEA) predicts that global coal demand is expected to reach an all-time high of approximately 8.87 billion tonnes by 2027, and then plateau (IEA, 2024a).

While coal demand in advanced economies continues to shrink, this decline is offset by growth in demand for coal in developing economies, such as China, India, Indonesia and Vietnam, where the additional energy demand associated with economic growth and population growth (see below) is set to be met from a variety of sources, including coal (IEA, 2024a). According to the IEA, coal continues to be the largest source of electricity generation globally (IEA, 2024b), despite growth in other energy sources.

The United Nations *World Population Prospects 2024 – Summary of Results* (2024) reports that the world's population is expected to continue growing, with the total population increasing from approximately 8.2 billion in 2024 to approximately 9.8 billion in 2054 (United Nations Department of Economic and Social Affairs, Population Division, 2024).

The Project presents an opportunity to provide thermal and metallurgical coals to existing and new customers to meet their energy and steel production demands in the context of their economic growth, growing populations and general efforts to alleviate poverty, while alternative energy sources and cleaner steelmaking processes become more available internationally in the next several decades.

Demand for MCCM products is expected to remain steady during the multi-decade energy transition.

Whitehaven recognises that energy production associated with the consumption of fossil fuels contributes to global warming through the release of greenhouse gas emissions. Whitehaven also recognises that, in the international context, coal will play a critical role in supporting a just energy transition over the coming decades.

In relation to those greenhouse gas emissions over which Whitehaven has a level of control, Whitehaven continues to set an overall Scope 1 greenhouse gas emissions intensity reduction target aligned with its obligations under the Safeguard Mechanism, which supports Australia's national climate targets which align with the goals of the Paris Agreement.

2.2.1 PARIS AGREEMENT

The *Paris Agreement* is a treaty on climate change under the United Nations Framework Convention on Climate Change (UNFCCC). Australia is party to this treaty. The *Paris Agreement* entered into force on 4 November 2016. Its goal is to limit the increase in global temperature to well below 2 degrees Celsius (°C) when compared to pre-industrial temperatures.

Whitehaven's key markets across its NSW and Queensland (Qld) coal mining operations in Financial Year (FY) 2024 comprised of Japan, Korea, Taiwan and Malaysia.

Approximately 78% of Whitehaven's export-managed sales (tonnes) in FY2024 were to customers that have made net zero by 2050 commitments and set interim emissions reduction targets (Whitehaven, 2024a).

The *Paris Agreement* requires parties to the Agreement to prepare, communicate and maintain nationally determined contributions (NDCs), including on planned greenhouse gas emission reductions, and to pursue domestic measures to achieve them (UNFCCC, 2024a; UNFCCC, 2024b). The NDCs, which as the term suggests are purely nationally determined, are to be communicated every five years, with each successive NDC to represent a progression beyond a country's previous NDC. Updated NDCs were most recently submitted starting in 2020, with further rounds of updated NDCs due to be submitted in 2025 and 2030 (UNFCCC, 2024b).

The NDCs of the main countries to which Whitehaven currently exports coal and the main countries to which coal from the MCCM is expected to be exported under the Project (Expected Export Countries) are described in Appendix J. Coal imported into Expected Export Countries (including Project coal) and used for energy and industrial processes will generate greenhouse gas emissions in the Expected Export Countries which those countries will account for (as Scope 1 emissions) in their national greenhouse gas inventories pursuant to the *Paris Agreement* and the UNFCCC. The Expected Export Countries' use of the imported coal will be subject to their greenhouse gas mitigation policies and their NDC targets.

2.2.2 DEMAND FOR COAL

After having grown by more than 1.2 billion tonnes since 2020, global demand for coal is set to plateau in the next three years reaching approximately 8.87 billion tonnes by 2027 (IEA, 2024a).

While coal demand in advanced economies is set to decline or plateau, this decline is expected to be offset by growth in developing economies, such as India, Indonesia and Vietnam, where the additional energy demand associated with economic growth is set to be met with a variety of sources, including coal (IEA, 2024b).

Therefore, whilst renewable energy is an important and growing part of the global energy mix, coal also has a continuing and important role, particularly in developing countries which are facing an increase in coal demand as they also continue to develop and expand their renewable energy capacity (NSW Minerals Council, 2025).

Demand for energy continues to grow as the world's population grows and will require a mix of energy (combination of coal and renewable energy) to efficiently power homes and businesses.

Global Demand for Thermal Coal

Coal production is a significant industry globally that generates jobs and provides royalties that contribute to important social infrastructure.

Approximately 85% of the NSW thermal coal production is exported internationally, predominately to countries in South East Asia, which provides a stable and reliable source of energy for major economies and trading partners including Japan, Korea, China and Taiwan, as well as generating valuable export revenue for NSW's economy (NSW Government, 2020; NSW Minerals Council, 2025).

Australian thermal coal exports were strong in 2024, reaching 209 Mt, the highest export volume on record. Favourable supply conditions and high demand from Japan, India and China provided support to Australian exporters (Commonwealth of Australia, 2025).

Demand for NSW thermal coal is increasing in countries like India, Vietnam and Bangladesh as they seek to expand their own electricity networks in order to grow their economies and provide energy to a growing population (NSW Minerals Council, 2025).

The Japanese, South Korean, and Taiwanese markets, which together accounted for just under 25% of world trade in 2024, are expected to provide relatively stable import demand. In this context, Australian exports are expected to hold up relatively well, noting Australia's higher calorific value and established export markets (Commonwealth of Australia, 2025).

Notably, Japan's 7th Strategic Energy Plan recognises the indispensable role of traditional energy sources (including thermal coal) in ensuring a stable and reliable energy supply during the renewable energy transition period (Ministry of Economy, Trade and Industry [METI], 2025). Furthermore, the 7th Strategic Energy Plan forecasts a greater reliance on thermal coal (30-40% of Japan's energy generation mix in 2040) relative to its predecessor, the 6th Strategic Energy Plan, which estimated that thermal coal would contribute 26% of Japan's energy generation mix in by 2030 (METI, 2025).

The Association of Southeast Asia Nation (ASEAN) Energy Investment (AEI) forecasts an approximately 73% increase in energy demand in Southeast Asia by 2050.

Thermal coal continues to play a vital role in Southeast Asia's energy mix and is forecast to increase until nearly 2030 before stabilising (AEI, 2024).

Global Demand for Metallurgical Coal

Metallurgical coal is used to make approximately 70% of the world's steel, which is produced using the blast furnace-basic oxygen furnace route (BF-BOF), with the remaining approximate 30% produced using the electric arc furnace (EAF) route (World Steel Association, 2023). The EAF route is limited by the need for high-quality iron ore grades and the availability of scrap steel, while the alternative BF-BOF can use a wide range of iron ore qualities.

With low-emissions alternatives to steelmaking still requiring significant technological evolution, and considering the inherent limitations to the EAF route, metallurgical coal is expected to be required in the long-term, albeit at a declined rate compared to previous years (World Steel Association, 2025).

Steel will also continue to play an important part in the transition to a low-carbon economy given it is a critical input required to build renewable energy infrastructure, including solar, wind, hydro and electricity transmission lines (IEA, 2023).

Global steel demand is expected to grow, driven by urbanisation and economic development underway in developing economies, particularly in India and South East Asia. All steel capacity additions planned in India, the second largest steel producing country after China, are of the BF-BOF, which requires metallurgical coal (Commodity Insights, 2024).

Wood Mackenzie forecasts an approximately 15% increase in global seaborne demand for metallurgical coal by 2050 (Wood Mackenzie, 2024). Asian seaborne demand for metallurgical coal will grow by 29% by 2050, with Australian seaborne supply to increase by 15% to approximately 190 Mtpa by 2050 (Wood Mackenzie, 2024).

Australia is the world's largest exporter of metallurgical coal, accounting for about 45% of global exports (Commonwealth of Australia, 2024).

With its proximity to key Asian steelmaking markets, Australia is expected to remain a reliable and cost-competitive supplier to steelmaking customers overseas.

Project Need to Meet Global Coal Demand

The Project presents an opportunity to provide thermal and metallurgical coals to existing and new customers overseas to meet their energy and steel production demands while alternative energy sources and cleaner steelmaking processes are given time to become more available internationally.

The existing MCCM produces some of the highest quality seaborne thermal coal available on the international market. The MCCM produces high-CV, low ash and low suphur thermal coal. As discussed earlier, the greenhouse gas emissions produced from the burning of coal per megawatt hour of electricity generated is less for high-CV coals than low-CV coals. In addition, the low ash content increases a power stations' combustion efficiency, with higher heat and lower particulate emissions (Whitehaven, 2024a).

Metallurgical coal produced at the MCCM is low in impurities including ash, sulphur and phosphorus. This low-impurity coal can be used to offset the impurities in hard coking coals purchased by Whitehaven's customers.

There is a trend of increasing impurities in hard coking coal that is expected to continue; thus the demand for low impurity coal at the MCCM is expected to remain for blending purposes (Whitehaven, 2023b).

2.3 National Strategic Context

The following section details the policy framework applicable to nationally relevant development, and how that context relates to the Project.

2.3.1 NATIONAL STRATEGY FOR ECOLOGICALLY SUSTAINABLE DEVELOPMENT

In recognition of the importance of sustainable development, the Commonwealth Government developed a National Strategy for Ecologically Sustainable Development (NSESD) (Commonwealth of Australia, 1992). It defines Ecologically Sustainable Development (ESD) as:

> *using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.*

The NSESD was developed with the following core objectives:

- to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations;
- to provide for equity within and between generations; and
- to protect biological diversity and maintain essential processes and life support systems.

Accordingly, Project design, planning and assessment has been carried out applying the principles of ESD, through:

- responsible development of resources, enhancing community welfare and economic development;
- safeguarding intergenerational equity during the transition to low carbon energy sources (e.g. if the Project were not to proceed, future generations would not receive the socio-economic benefits as a result of the Project);

- minimisation of impacts through efficient use of existing infrastructure;
- improvement of biodiversity values in the region through the establishment of Landscape Revegetation Zones;
- avoidance and mitigation of impacts to biological systems via stream setbacks and habitat clearing constraints;
- incorporation of risk assessment and analysis at various stages in the Project design and environmental assessment and within decision-making processes;
- adoption of high standards for environmental and occupational health and safety performance; and
- consultation with regulatory and community stakeholders.

Further detail on how the principles of ESD have been considered in development of the Project is provided in Section 7.

2.3.2 NATIONAL GREENHOUSE GAS EMISSIONS

The potential impacts of greenhouse gas emissions from all Australian sources are collectively managed at a national level, through initiatives implemented by the Commonwealth Government (as a party to the *Paris Agreement*, as detailed further in Section 2.2.1).

The Commonwealth *National Greenhouse and Energy Reporting Act 2007* (NGER Act) introduced a single national reporting framework for the reporting and dissemination of corporations' greenhouse gas emissions and energy use.

Additionally, the Safeguard Mechanism (underpinned by the Commonwealth *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015*) (the Safeguard Rule) was established through the NGER Act.

The Safeguard Mechanism provides baseline emissions and offset requirements for applicable facilities, whereby facilities are required to achieve this baseline or otherwise account for emissions in exceedance of the baseline (e.g. carbon offsets).

The MCCM is a facility that is subject to the Safeguard Mechanism, as it emits more than 100,000 tonnes of carbon dioxide equivalent (t CO_2-e) covered emissions per year. The facility is subject to a baseline for emissions. Where the baseline is exceeded in a given year, it is necessary for the responsible emitter to manage the excess emissions through a prescribed means (for example, purchase and surrender of Australian Carbon Credit Units [ACCUs] or Safeguard Mechanism Credit Units).

Greenhouse gas emissions from the MCCM are currently measured and reported annually, which would continue for the Project, using a site-specific Scope 1 fugitive emissions intensity. The site-specific Scope 1 fugitive emissions intensity is calculated in accordance with Method 2 of the Commonwealth *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (NGER Measurement Determination) based on detailed gas content and composition testing.

Commonwealth Climate Change Act 2022

The Commonwealth *Climate Change Act 2022* (Climate Act) outlines Australia's greenhouse gas emissions reduction targets. Clause 10 of Part 2 of the Climate Act states:

> *(1) Australia's greenhouse gas emissions reduction targets are as follows:*
>
> *(a) reducing Australia's net greenhouse gas emissions to 43% below 2005 levels by 2030:*
>
> *…*
>
> *(b) reducing Australia's net greenhouse gas emissions to zero by 2050.*

Safeguard Mechanism Reforms

The Commonwealth *Safeguard Mechanism (Crediting) Amendment Act 2023* was introduced by the Australian Parliament in April 2023, and amends relevant Acts (including the NGER Act) to alter the Safeguard Mechanism to facilitate progressive declines in greenhouse gas emissions, consistent with the objects of the Climate Act.

The reforms to the Safeguard Mechanism apply a declining rate to facilities' baselines so that they are reduced gradually on a trajectory consistent with achieving Australia's net emission reduction targets of 43% below 2005 levels by 2030 and net zero by 2050 (Commonwealth Department of Climate Change, Energy, the Environment and Water [Cth DCCEEW], 2025a). The reformed Safeguard Mechanism came into effect on 1 July 2023.

Whitehaven Greenhouse Gas Policy

Whitehaven continues to set an overall Scope 1 greenhouse gas emissions intensity reduction target aligned with its obligations under the Safeguard Mechanism scheme, thus supporting Australia's national climate targets, which are themselves aligned with the goals of the *Paris Agreement*.

Whitehaven has also implemented sustainable actions, including:

- Whitehaven acknowledges Australia's commitment to net zero carbon emissions by 2050 and aligns its decarbonisation ambition and business practices with the emissions reduction obligations set by the Australian Government, which support Whitehaven's national climate targets and align with the goals of the Paris Agreement.
- In alignment with the Safeguard Mechanism, Whitehaven has established a Scope 1 emissions intensity reduction target of 43% by FY2030. These strategies are reviewed and updated to ensure successful progress.
- Whitehaven has outlined specific actions to reduce Scope 1 emissions intensities through site-specific emissions abatement initiatives and carbon offsets.
- Whitehaven has already contracted electricity supply for its NSW operations (including in respect of the MCCM) from a nationally accredited carbon-neutral electricity supplier and intends to continue to adopt this approach in tandem with considering the role of off-grid carbon neutral energy, as we are currently doing in respect of the Narrabri Coal Mine. Whitehaven acknowledges the importance of taking appropriate steps to ensure Scope 2 emissions in NSW are minimised or reduced to nil on a net basis where appropriate and commercially feasible.
- The above actions are components of Whitehaven's decarbonisation roadmap, consisting of current and potential site-based decarbonisation levers for the short, medium and long-term. In addition, Whitehaven has established a framework of climate-related risks and mitigation activities that it implements.
- Whitehaven regularly reports its greenhouse gas emissions data through the NGER Act and annually publishes a sustainability plan disclosing details on emissions, waste, and the management of these factors.
- Whitehaven aims to support its workforce, communities and other stakeholders for the transition to a low-carbon economy. This is through career conversations, reskilling and/or upskilling training, career transition support and regular updates on closure plans (Whitehaven, 2023b).

2.4 State Strategic Context

The following section describes the key NSW Government policies and advice relevant to mining developments in NSW, and outlines how the mining component of the Project represents a mining proposal that aligns with the objectives of the policy.

2.4.1 STRATEGIC STATEMENT ON COAL EXPLORATION AND MINING IN NSW

In 2020, the NSW Government released the *Strategic Statement on Coal Exploration and Mining in NSW* (the Strategic Statement on Coal), which describes the planned areas of action for a responsible long-term transition to low carbon energy sources.

The Strategic Statement on Coal recognises the importance of coal production to NSW, including how regional NSW communities depend on the industry, which provides more than 110,000 direct and indirect jobs in the State as well as royalties (approximately $2 billion in 2018-2019) that are used to fund public services and infrastructure (NSW Government, 2020).

A balanced approach is described in the Strategic Statement on Coal, setting a clear and consistent policy framework that supports investment certainty while giving coal-reliant communities time to adapt to a global transition to low carbon energy sources.

The Strategic Statement on Coal describes the NSW Government's four areas for action within the coal sector, as follows:

1. Improving certainty about where coal mining should not occur.
2. Supporting responsible coal production in areas deemed suitable for mining.
3. Addressing community concerns about the impacts of coal mining.
4. Supporting diversification of coal-reliant regional economies to assist with the phase-out of thermal coal mining.

The Project is considered to align with the Strategic Statement on Coal through the following:

- The MCCM is not located within areas marked as 'coal mining prohibited' on the Strategic Statement on Coal's accompanying map ('*Areas in NSW available and excluded from future coal exploration and mining*') (NSW Government, 2022a).
- The Project would support responsible coal production (Section 2.4.6).
- The Project would provide continued employment of the MCCM workforce, generate royalties and support local businesses in the region and State.

Additional consideration of a range of other strategic planning documents of potential relevance to the Project is provided in Attachment 5. Additional justification for the Project is provided in Section 7.

2.4.2 NET ZERO PLAN STAGE 1: 2020-2030

The *Net Zero Plan Stage 1: 2020-2030* (NSW Government, 2020) (the Net Zero Plan) provides a framework for NSW to reach net zero emissions by 2050.

Two updates reporting the State's progress within this framework have been released: the *Net Zero Plan Stage 1: 2020-2030 Implementation Update* (NSW Department of Planning, Industry and Environment [DPIE], 2021), and the *Net Zero Plan Implementation Update 2022* (NSW Office of Energy and Climate Change, 2022).

The *Net Zero Implementation Update 2022* states that (as at 2022) NSW is on track to achieve the goal of reducing its emissions by 70% below 2005 levels by 2035. Furthermore, new policies and programs introduced since 2021 are aiming to deliver emissions reductions of 55.2 Mt of carbon dioxide equivalent (Mt CO_2-e) by 2035.

The NSW Government has also established a *NSW Net Zero Emissions Dashboard* (2022b) which compiles historic data and the trend analysis of greenhouse gas emissions data (NSW Office of Energy and Climate Change, 2022).

2.4.3 NSW CLIMATE CHANGE (NET ZERO FUTURE) ACT 2023

The NSW Government passed the NSW *Climate Change (Net Zero Future) Act 2023* (the Net Zero Future Act).

The Net Zero Future Act enshrines in law NSW's emissions reduction targets, which are:

- a 50% reduction on 2005 emissions by 2030;
- a 70% reduction on 2005 emissions by 2035; and
- net zero emissions by 2050.

The latest projections from the NSW Department of Climate Change, Energy, the Environemnt and Water (NSW DCCEEW) show a risk that NSW is not on track to meet its 2030 and 2035 targets (NSW Government, 2025).

In response to these projections, the NSW Government has introduced additional policy changes to address climate change, predominately climate change assessment requirements and guidelines for high-emitting projects.

2.4.4 NSW ENVIRONMENT PROTECTION AUTHORITY – GUIDE FOR LARGE EMITTERS

Under its Climate Change Policy and Action Plan, the NSW Environment Protection Authority (EPA) is taking further action to help the NSW Government achieve its greenhouse gas emission reduction targets.

In January 2025, the EPA released a revised *NSW Guide for Large Emitters - Guidance on how to prepare a greenhouse gas assessment as part of NSW environmental planning processes* (EPA, 2025) (the Guide). The Guide requires proponents of major greenhouse gas emitting projects to assess emissions and mitigation opportunities, both in the short- and long-term.

The Guide sets out a description of NSW's emission reduction objectives, types of greenhouse gases, and the EPA's suggested greenhouse gas assessment and mitigation requirements to be addressed in an EIS.

The Guide also includes a description of how measures to avoid or reduce emissions should be identified and evaluated, including setting out the NSW greenhouse gas mitigation hierarchy.

The MCCM produces only modest levels of fugitive emissions, with the majority of mined seams having in-situ gas contents of less than 1 m^3 of gas per tonne of ROM coal, and the in-situ gas typically also having a low methane (CH_4) content (Coalbed Energy Pty Ltd, 2024).

Current Scope 1 emissions at the site are therefore dominated by the combustion of diesel in off-road mining equipment.

Accordingly, the existing MCCM has a relatively low Scope 1 emissions intensity compared to other NSW mining operations (Appendix J).

A Greenhouse Gas Assessment has been prepared for the Project which estimates the greenhouse gas emissions produced by the Project.

As part of the Greenhouse Gas Assessment, a Greenhouse Gas Mitigation Options Identification and Evaluation Report (Evaluation Report) (Appendix B of Appendix J) has been prepared to support Whitehaven's identification, ranking and planned adoption of appropriate, reasonable and feasible Scope 1 greenhouse gas emission abatement measures for the Project. The Report extends this effort to Scope 2 emissions as well.

Reference is made to the Guide, where relevant, in the Evaluation Report and elsewhere in the Greenhouse Gas Assessment (Appendix J).

2.4.5 NSW AQUIFER INTERFERENCE POLICY

The *NSW Aquifer Interference Policy* (NSW Government, 2012) (AIP) applies State-wide and provides for the licensing and assessment of aquifer interference activities, including mining activities. The assessment of proposed aquifer interference activities for the purposes of the EP&A Act is undertaken in accordance with the AIP.

In particular, proposed aquifer interference activities are assessed by reference to Table 1 in the AIP, which sets out "minimal impact considerations" in relation to potential water table, water pressure and water quality related impacts.

Appendix A assesses the potential groundwater impacts of the Project in consideration of the AIP and the AIP is also addressed in Section 6 and Attachment 6.

2.4.6 GUIDING PRINCIPLES FOR RESPONSIBLE MINING IN NSW

The NSW mining industry recognises that meeting the expectations of the community in relation to the management of environment, social and governance (ESG) opportunities is a vital part of the industry's future success.

The *Guiding Principles for Responsible Mining in NSW* (NSW Minerals Council, 2023) provide both a roadmap for strong ESG performance and examples of how these principles are applied in practice in NSW.

Whitehaven demonstrates the embodiment of the guiding principles in its practice including:

- **Ethical business** through the enforcement of a Code of Conduct as well as compliance with the Financial Stability Board's Task Force on Climate-related Financial Disclosures and the Sustainability Accounting Standards Board's Coal Operations Standard.

- **Respect** through regular consultation with stakeholders and communities, providing opportunities to contribute perspectives.
    - Whitehaven also holds an agreement with First Nations People through the Maules Creek Native Title Agreement.
    - Whitehaven has implemented representation targets to establish diversity and inclusion in the workplace.
- **Environment** through the prioritisation of appropriate waste management, minimising waste, and maximising recycling opportunities. In FY2023 and FY2024, 100% of hazardous waste was recycled. Whitehaven also implements air quality and noise management strategies to minimise the impacts on local communities.
- **Safety and inclusivity** through the establishment of a Health, Safety and Environment Policy and Strategy to ensure the continuous improvement of Whitehaven's approach to reduce incident risk in the workplace and embedding psychological wellness. Whitehaven conducts ongoing education on safe work practices and positive coping strategies to target the wellbeing of the workforce.
- **Climate support** through global energy security and customers' decarbonisation goals through investment in technologies and initiatives to decarbonise their operations. Whitehaven has established a decarbonisation roadmap to reduce its Scope 1 emissions, which it also extends to Scope 2 emissions.
- **Community contribution** through $462 million spent on regional suppliers in North West NSW as well as $17 million spent on 14 Indigenous businesses in NSW (Whitehaven, 2025a). Furthermore, approximately 70% of the employees are based in local communities.
- **Aboriginal and Torres Strait Islander employment**: In FY2024, approximately 14% of permanent MCC employees at the MCCM identify as Aboriginal and/or Torres Strait Islander (Whitehaven, 2024a).
- **Future opportunities** through the progressive rehabilitation at the MCCM to minimise adverse impacts on the habitat of local species as well as consideration of the functionality and visual amenity of rehabilitated areas (Whitehaven, 2023b).

2.5 Regional Strategic Context

Mining is a significant industry in the New England North West Region, which is reflected in strategic planning statements and policies for the region. The Project would responsibly develop resources within the Narrabri LGA of the New England North West Region, while managing potential impacts on the surrounding areas.

Mining contributed to approximately $1.45 billion to the region in 2019, representing approximately 11.52% of the economic contribution to the region (DPE, 2022b). The *New England North West Regional Plan 2041* states that mining helps to diversify the regional economy, sustain local communities, produce important resources and provide skilled jobs both directly and indirectly for the people of NSW (DPE, 2022b).

Approximately 7.2% of workers in the Narrabri LGA were employed in coal mining in 2021 (compared to 0.6% of workers in NSW) (Australian Bureau of Statistics [ABS], 2021a).

The Project would allow for the continuation of existing benefits, including continued royalties, ongoing employment and economic flow-on effects in the region.

The following sections summarise how the Project would fit into the existing mining industry of the Narrabri LGA in the New England North West Region, including its consistency with the framework of existing regional planning instruments.

2.5.1 NEW ENGLAND NORTH WEST REGIONAL PLAN 2041

The *New England North West Regional Plan 2041* (DPE, 2022b) (the Regional Plan) is a 20-year strategic land use plan prepared in accordance with section 3.2 of the EP&A Act. The Regional Plan aims to protect and enhance the region's assets and plans for a sustainable future.

The Regional Plan targets the New England North West Region which applies to several LGAs, including the Narrabri Shire LGA and therefore encompasses the Project.

The Regional Plan aims to provide a framework for decision-making whilst balancing social, economic and environmental objectives.

Through Objective 4 (Responsibly manage mineral resources), the Regional Plan acknowledges that mining plays an important role in regional employment and delivers resources for technological innovation required for delivering renewable energy infrastructure.

The Project would be generally consistent with the relevant planning priorities and objectives of the Regional Plan, with further discussion provided in Attachment 5.

2.5.2 NARRABRI LOCAL ENVIRONMENTAL PLAN 2012

The Narrabri LGA is subject to the Narrabri LEP. Clause 1.2 of the Narrabri LEP outlines the general aims of the plan. The particular aims relevant to the Project include:

> *(a) to encourage the orderly management, development and conservation of resources by protecting, enhancing and conserving —*
>
> *(i) land of significance for agricultural production, and*
>
> *(ii) timber, minerals, soil, water and other natural resources, and*
>
> *(iii) areas of high scenic or recreational value, and*
>
> *(iv) native plants and animals including threatened species, populations and ecological communities, and their habitats, and*
>
> *(v) places and buildings of heritage significance*
>
> *…*
>
> *(c) to facilitate development for a range of business enterprise and employment opportunities,*
>
> *(d) to ensure that development is sensitive to both the economic and social needs of the community, including the provision of community facilities and land for public purposes.*

The Project is generally consistent with the aims of the Narrabri LEP, as per the following:

- Development would be undertaken in a manner that minimises potential impacts to rural and agricultural land, as well as natural resources such as soil and water (Sections 6.4, 6.5 and 6.14).
- Potential impacts on places of Aboriginal and non-Aboriginal heritage significance would be minimised (Sections 6.12 and 6.13).
- Potential impacts on native threatened species, populations and ecological communities have been considered, and the requirement for a biodiversity offset strategy has been determined (Section 6.3).
- Mining operations and nearby agricultural enterprises have co-existed since the commencement of operations at the MCCM, and this would continue for the Project.
- The Project would facilitate extension of employment for the existing workforce as well as additional expenditure in the region (Sections 3.17, 6.17 and 6.18).
- Erosion and sediment control measures would be incorporated to mitigate impacts on downstream watercourses (Sections 3.12, 3.13 and 6.5).

Further discussion on the Narrabri LEP, including permissibility and special provisions, is provided in Attachment 6.

2.5.3 2022/2032 NARRABRI SHIRE COMMUNITY STRATEGIC PLAN

The NSC's *2022/2032 Community Strategic Plan* (Narrabri Shire CSP) was developed by implementing the main priorities for the Narrabri LGA identified through the Narrabri Shire Community Engagement Strategy. The community was consulted to develop a strategy to achieve the community's long-term vision for the future over a 10-year period (NSC, 2022).

As described in the Narrabri Shire CSP, the NSC's community vision statement is as follows:

> *The Narrabri Shire will continue to be a strong and vibrant regional economic growth centre providing a quality living environment for the entire community.*

The mining industry is the primary employment sector in the Narrabri LGA, with the 2021 Census stating that 7.2% of the working population was employed in mining (ABS, 2021a).

As the third largest industry by economic contribution (after rental, hiring and real estate services, and agriculture, forestry and fishing), mining plays an important role in the regional economy and society (DPE, 2022b).

The Narrabri Shire CSP aims to achieve its community vision by addressing four key outcomes:

1. *Society - An empowered, inclusive and connected community.*
2. *Environment - A sustainable and compatible natural and built environment.*
3. *Economy - A strong, diverse and sustainable economy.*
4. *Civic Leadership - Council as strong leaders for the community.*

The Project would be consistent with the objectives and principles of the Narrabri Shire CSP as:

- The Project would provide a continuation and extension of the current MCCM employment, benefiting the community through ongoing employment and the resulting economic effects on local businesses (Sections 3.17, 6.17 and 6.18).
- The Project is located within existing mining and exploration tenements.
- The Landscape Revegetation Zones involve MCC undertaking a revegetation program to establish approximately 2,300 ha of native woodland in the vicinity of the MCCM.
- The Project would include the development of a biodiversity offset strategy (Sections 3.4 and 6.3.6).
- The Project would protect the integrity of local water resources by implementing an offset of at least 200 m between the open cut pit and the mapped top-of-bank of Back Creek (Sections 2.1.3 and 3.4).
- The use of existing easements, cleared areas and a construction methodology which would avoid canopy vegetation would allow the water transfer pipeline to be integrated with the existing MCCM, with minimal impact on the surrounding environment (Section 3).
- The Project would not impact items or places of high Aboriginal or non-Aboriginal cultural heritage significance (Sections 6.12 and 6.13).
- Whitehaven would continue to contribute and support the community through funding and social programs.
- The waste rock mined during the development of the Project would be responsibly managed and optimally utilised to partially backfill the open cut (but not completely backfill, having regard to the discussion of the potential environmental consequences and significant costs associated with completely backfilling in Section 2.1.4 concerning alternatives considered in the Project's design).

2.5.4 NARRABRI RURAL LAND STRATEGY

The *Narrabri Rural Land Strategy* (NSC, 2024) was developed in accordance with the priorities identified in the *Narrabri Shire 2040 Local Strategic Planning Statement* (NSC, 2020) to enable a productive agricultural sector. The purpose of the *Narrabri Rural Land Strategy* (NSC, 2024) is to serve as a 'land use planning and management framework guiding decisions about rural land use in the Narrabri local government' as well as guiding local actions for the benefit of the Narrabri community, through the following key planning principles:

- *Protect the agricultural production value of rural land and ensure lawful agricultural enterprises can operate unencumbered.*
- *Establishing planning and implementation frameworks to maintain the profitability, productivity and innovation of rural economy.*
- *Minimise the potential for land fragmentation and land use conflict in rural areas, particularly between residential and other rural land uses.*
- *Expand agribusiness and diversify the rural economy through emerging sectors including renewable energy and food processing sectors.*
- *Encourage investment, increased productivity and value adding activities within the region.*
- *Encourage sustainable land use practices and ensure the ongoing viability of agriculture on rural land.*

The Project would be consistent with the objectives and principles of the *Narrabri Rural Land Strategy* as the Project would:

- have minimal impacts to regional agricultural resources and agricultural production value, decreasing annual production within the Narrabri LGA by approximately 0.2% (Section 6.14.3 and Appendix O);
- avoid impacts to Biophysical Strategic Agricultural Lands (BSAL) and, as discussed in Section 3, provide for some grazing activities within the Landscape Revegetation Zones once the woodland has reached maturity (Appendix C);
- include Landscape Revegetation Zones that are designed to minimise agricultural land fragmentation, avoid high capability land and align with the boundaries of existing agricultural properties (Section 3 and Appendix O);
- propose mitigation and enhancement measures to address the potential social impacts associated with the Project as per the existing measures in the MCCM SIMP (Whitehaven, 2024k, which maintains that the MCCM, and the Project would be developed in the context of local concern about changing land use and the loss of agricultural productivity due to direct or indirect impacts of resource extraction activities (Section 6.18.4 and Appendix E);
- have minimal impacts to agricultural resources, grazing, cropping, infrastructure and neighbouring agricultural activities (Section 6.14.3 and Appendix O);
- continue to provide opportunites for business in the local region, contributing to a diversified and resilient business community (Section 6.18 and Appendix E);
- continue to provide a range of investment opportunities for the community that contribute to local businesses and faciltiate development within the community as described in the *Stakeholder Engagement and Community Investment Strategy 2024-2026* (Whitehaven, 2024b) (Section 6.18 and Appendix E); and

2.5.5 LEARD FOREST REGIONAL BIODIVERSITY STRATEGY

The *Leard Forest Regional Biodiversity Strategy* (Umwelt Australia Pty Limited, 2017) was developed as a condition of approval in the PAs for all three coal mine projects that comprise the BTM Complex to:

> *Set out the long-term framework of management, monitoring and land-use security to be applied consistently across all biodiversity conservation areas in the region. It should have the scope and flexibility to accommodate new areas, as they may need to be provided to respond to future mining proposals or other significant land use changes.*

The *Leard Forest Regional Biodiversity Strategy* (Umwelt Australia Pty Limited, 2017) recognises a range of objectives of relevance to the Project, including:

- Identify options for offset security mechanisms considering project approval requirements and current NSW government policy.
- Identify funding mechanisms and management responsibilities to ensure that ongoing, long-term improve or maintain conservation outcomes are achieved.
- Identify the key regional biodiversity values of the study area, primarily relying on the analysis of existing mapping products to be provided by NSW office of Environment and Heritage (OEH) and the BTM Complex mines, ensuring the broader regional reference area is considered for context.
- Assess land uses that may be incompatible with biodiversity conservation (e.g. strategic agricultural land, current mining interests), primarily relying on the analysis of existing mapping products.
- Identify threatening processes that may hinder the achievement of conservation outcomes, and relevant actions to address such processes.

The Project would continue to be consistent with, and complement the objectives of the *Leard Forest Regional Biodiversity Strategy* by:

- implementing a revegtation program that would esablish approximately 2,300 ha of native woodland in the vicinity of the MCCM (Section 6.3.4 and Appendx C);
- expanding habitat adjacent to Leard State Forest and restoring linkages between woodland patches/existing conserved areas (Section 6.3.4 and Appendix C);
- continuing to maintain the 500 m biodiversity corridor between the MCCM and BCM (Section 6.3.3 and Appendix C);
- developing a Biodiversity Offset Strategy to address the potential residual impacts on biodiversity values associated with the Project (Section 6.3.6 and Appendix C);
- providing funding for a range of current and future rehabilitaiton research, modelling and trials, detailed in Section 9.1 of the RMP (Whitehaven, 2025b);
- updating the existing Biodiversity Management Plan to maintain a series of measures to mitigate and manage residual biodiversity imapcts (Section 6.3.4 and Appendix C); and
- maintaining regular inspections of rehabilitated areas to monitor the progress of, or allow for the early identificantion of any emerging threats to rehabilitaion objectives (Whitehaven, 2025b).

2.5.6 OTHER STRATEGIC PLANNING DOCUMENTS

Consideration of the following additional strategic planning documents is provided in Attachment 5:

- *New England North West Regional Plan 2041* (DPE, 2022b);
- *Narrabri Shire 2040 Local Strategic Planning Statement* (NSC, 2020); and
- *Gunnedah Shire Community Strategic Plan 2017 to 2027* (Gunnedah Shire Council [GSC], 2022);
- *Future 2040 – Gunnedah Shire Local Strategic Planning Statement* (GSC, 2020).

2.5.7 THIRD PARTY AGREEMENTS

Whitehaven has an existing Planning Agreement under section 93F of the EP&A Act with the NSC for the approved MCCM. Whitehaven has engaged with the NSC regarding a Planning Agreement for the Project.

The Red Chief Local Aboriginal Land Council (RCLALC) owns a land parcel located within ML 1719. Whitehaven would continue to engage with RCLALC regarding the Project.

No changes to the existing product coal transportation limit (i.e. 12.4 Mtpa) is proposed for the Project. Rail and port agreements exist for MCCM. A further agreement would be required for the Project (i.e. for the use of the rail and port until 31 December 2044).

Whitehaven has an existing agreement with BCOPL and Boggabri-Maules Creek Rail Pty Ltd for use of the shared rail spur and access road. This agreement would be revised, or a separate agreement established, to incorporate the Project. Whitehaven would obtain the relevant licence and/or approval from NSW Crown Lands (Crown Lands) for the construction and use of the water transfer pipeline on Crown Land.

MCC has an existing agreement with the Forestry Corporation of NSW to compensate for mining operations within CL 375 and ML 1719 until 2034. This agreement would be revised, or a separate agreement established, to incorporate the Project.

Whitehaven makes financial contributions to a variety of non-Government and community organisations in the region such as providing $4.35 million in corporate community partnerships and donations, $183,000 to Whitehaven's Reconciliation Action Plan and $366,000 to support hospitals, schools and community facilities (Whitehaven, 2023b). Whitehaven would continue to provide support to selected community organisations through the Whitehaven Coal Community Partnership Program.

A Noise and Blasting Impact Assessment and an Air Quality Impact Assessment has been prepared for the EIS to identify any additional private landholders that may be entitled to acquisition and/or mitigation rights in accordance with the *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments* (NSW Government, 2018) (VLAMP).

Noise and air quality modelling and impact assessment undertaken for the Project have not identified any new private landholders that would require acquisition rights.

2.6 Local Strategic Context

The following sections describes the strategically relevant features of the local area surrounding the Project which have been considered when designing and assessing the Project.

2.6.1 NATURAL AND BUILT FEATURES

The Project boundary is located on the northern slopes of the Willow Tree Range which forms a broad south-west facing basin largely within an elevated area containing the Leard State Forest. To the north, there are a series of hills and ridges that separate the catchments of Back Creek and Maules Creek. Other surrounding areas generally consist of a series of ridges and narrow gullies.
The key natural features in the vicinity of the Project are the Leard State Forest (within and surrounding the MCCM), Leard Community Conservation Area Zone 3 State Conservation Area (Leard SCA) (approximately 4 km west) and the foothills of the Mount Kaputar National Park (located approximately 20 km north).

There are no significant built (i.e. non mine-owned) features or infrastructure within the local vicinity of the MCCM.

Leard State Forest

Mining within the Leard State Forest was comprehensively assessed by representatives from all key Government agencies as part of the development of the NSW *Brigalow and Nandewar Community Conservation Area Act 2005* (BNCCA Act).

The BNCCA Act provides for the conservation of large areas of land while also recognising the socio-economic benefits of the resources sector. The BNCCA Act defines a zone (Zone 4) in areas of State Forests within which mineral extraction can occur.

The Leard State Forest was defined as being within Zone 4, acknowledging the existing mining interests and approvals over the land. Zoning the Leard State Forest in this way was an outcome of balancing conservation and economic development potential (subject to merit assessment). At the time this Zone 4 determination over the Leard State Forest was made, the primary mining tenement for the MCCM (CL 375) was in place.

The existing MCCM, BCM, TCM and the Project Mining Area are situated on land largely occupied by the Leard State Forest (which has historically been utilised for forestry and mining).

The existing MCCM is approved to operate within the Leard State Forest and MCC has several biodiversity offset areas secured under Conservation Agreements that provide habitat linkages to the Leard State Forest. Mining at the BCM within the Leard State Forest commenced in 2006.

MCC is currently implementing a program to restore woodland within the biodiversity offset areas. As part of the Project, MCC is seeking to expand the revegetation program to include an additional 2,300 ha (approximately) of land to expand habitat adjacent to the Leard State Forest.

2.6.2 LAND USE

Existing land uses in the vicinity of MCCM are characterised by a combination of coal mining, agricultural enterprises, rural dwellings, forestry operations (Leard State Forest) and biodiversity conservation areas (including biodiversity offsets established for MCCM, BCM and TCM).

Freehold land in the immediate vicinity of the Project Mining Area is largely owned and/or managed by Whitehaven, with a small area of Crown Lands. The RCLALC owns a parcel of land within the existing MCCM operations.

The Project would be consistent with the surrounding land uses as it is located within the existing MCCM mining and exploration tenements and would be a continuation of an existing mine within a mining precinct.

The Project would also allow for establishment of additional Landscape Revegetation Zones to expand the native vegetation within and surrounding the Leard State Forest.

2.6.3 POPULATION CENTRES AND LOCALITIES

The nearest urban locality is the township of Boggabri, located approximately 17 km south of the MCCM, with an estimated population of 1,203 in 2021 (ABS, 2021b).

The town of Narrabri is located approximately 40 km north-west of the Project with a population of 7,327 in 2021 (ABS, 2021a) and is the major centre of the Narrabri LGA (Figure 1-1).

Maules Creek is a rural locality situated approximately 5 km north of the MCCM. It has a population of 87 (ABS, 2021c) and consists of a collection of rural properties containing the Fairfax Public School, a community hall and a church. The land uses are predominantly mixed farming.

Harparary is a suburb and locality approximately 10 km west of the Project consisting of a small residential population of 47 (ABS, 2021d) living on agricultural properties. The land uses include mixed farming and some irrigated cotton operations.

2.7 Key Risks and Hazards

Key risks and hazards for the Project are identified below, as well as sections where these risks and hazards are addressed in this EIS:

- land contamination (Section 6.14 and Appendices L and Q);
- bushfire (Section 6.19); and
- final landform and stability (Section 3.13, Attachment 7 and Appendix P).

2.8 Cumulative Impacts

Potential interactions between the Project and other existing and proposed major developments have been considered, including other nearby mining projects, in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPE, 2022c).

Key proposed or approved mining projects in the area that may potentially interact with the Project include:

- the existing approved MCCM;
- BCM (including proposed modification application [MOD10]);
- TCM;
- Narrabri Underground Mine as well as the approved extension by the NSW Independent Planning Commission (IPC); and
- VCM (including proposed modification application [MOD1]).

Figure 1-2 shows the locations of relevant existing mining developments.

Other smaller proposed and approved developments that may potentially interact with the Project have been considered in Section 6 and the relevant environmental studies conducted for the EIS.

The Project would result in a 1 Mtpa increase in ROM coal extraction. Therefore, the intensity and nature of mining operations from a cumulative perspective are considered minimal. However, due to the proposed open cut pit extension and continued mining operations for an additional 10 years, there would be a cumulative increase in biodiversity and amenity impacts from the Project when considering the impacts of the existing mining operations.

A number of other mines and quarries are located in the Narrabri LGA. Potential interactions with these mines are typically limited to shared use of the Werris Creek to Mungindi Railway Line and Shared Rail Spur, shared use of supporting contractors, contributions to regional background air quality and traffic movements, and socio-economic effects on the area (e.g. support industries based in Boggabri, Narrabri and other population centres in the region).

Further consideration of potential cumulative interactions between the Project and other proposed or approved projects is included in Section 6 as well as in the relevant environmental studies conducted for the Project EIS.