

G | Standard Criteria

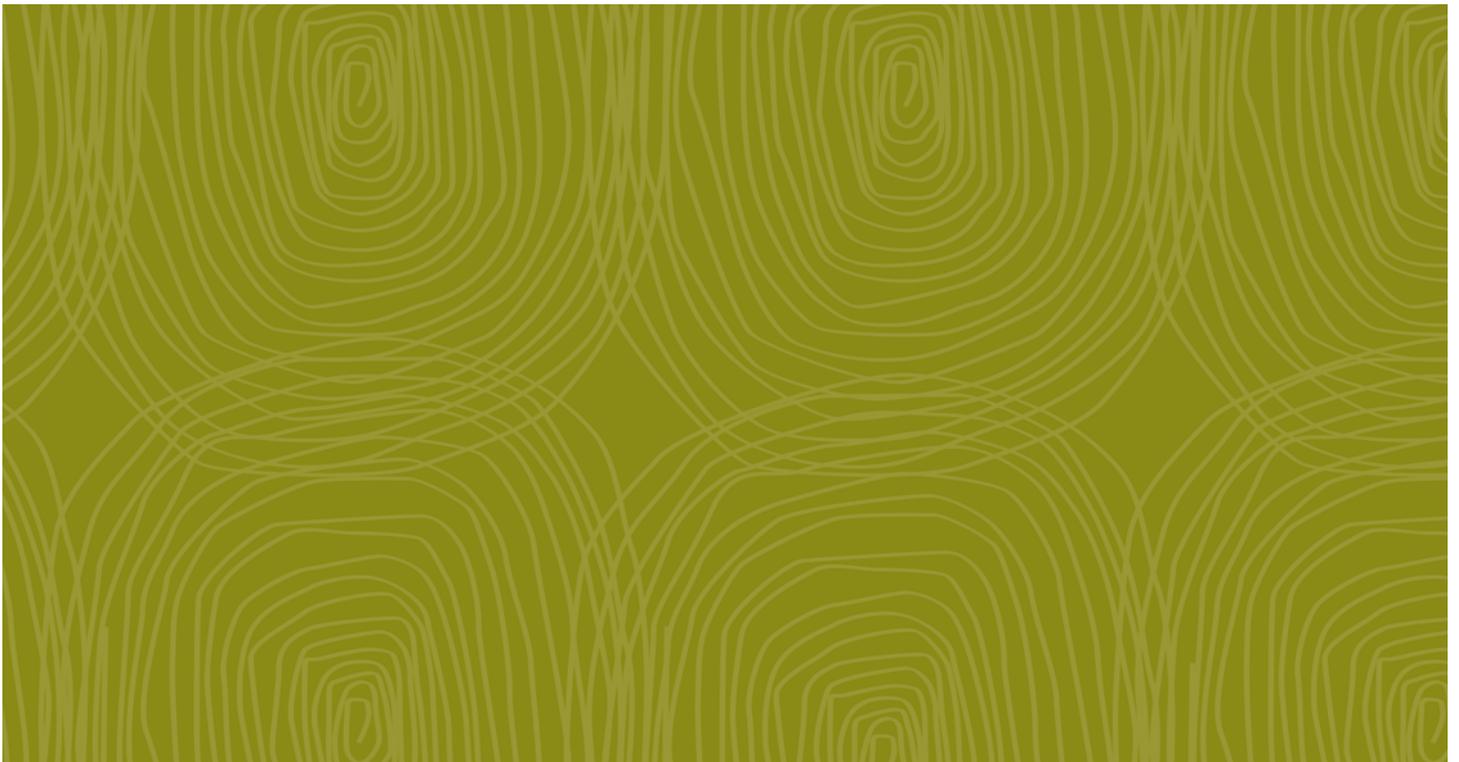


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Appendix G Standard Criteria

G.1 Introduction

Section 58 of the *Environmental Protection Act 1994* requires that the standard criteria be considered when preparing an Environmental Impact Statement (EIS) Assessment Report.

The standard criteria are:

- (a) the principles of ecologically sustainable development as set out in the National Strategy for Ecologically Sustainable Development (NSES) (Commonwealth Government, 1992);
- (b) any applicable environmental protection policy;
- (c) any applicable Commonwealth, State or local government plans, standards, agreements or requirements;
- (d) any applicable environmental impact study, assessment or report;
- (e) the character, resilience and values of the receiving environment;
- (f) all submissions made by the applicant and submitters;
- (g) the best practice environmental management for activities under any relevant instrument, or proposed instrument, as follows:
 - (i) an environmental authority;
 - (ii) a transitional environmental management program;
 - (iii) an environmental protection order;
 - (iv) a disposal permit;
 - (v) a development approval
- (h) the financial implications of the requirements under an instrument, or proposed instrument, mentioned in paragraph (g) as they would relate to the type of activity or industry carried out, or proposed to be carried out, under the instrument;
- (i) the public interest;
- (j) any applicable site management plan;
- (k) any relevant integrated environmental management system or proposed integrated environmental management system; and
- (l) any other matter prescribed under a regulation

G.2 Alpha Coal Project Environmental Impact Statement Compatibility with the Standard Criteria

The compatibility of the Alpha Coal Project EIS with the Standard Criteria (b) – (k) are summarised below.

Standard Criteria (b), (c), (g), (h), (j), (k) and (l) relate to compliance with applicable legislation, standards, licences/authorities, best practice environmental instruments, site management plans, environmental management systems or related documentation. The Hancock environmental policy (Standard Criteria (b)) is presented in Volume 4, Appendix E of the Alpha Coal Project EIS.

All applicable legislation and documented instruments have been assessed and discussed for each of the various components within the EIS. Volume 1, Section 1.11 Approvals Process, provides details of the regulatory documents and their requirements that were incorporated into the EIS development.

Commonwealth, State and local government legislation and policy requirements (Standard Criteria (c)) are discussed in:

- Volume 1, Section 0.15 - Relevant Legislation and Policy requirements;
- Volume 1, Section 0.16 - Commonwealth Environmental Legislation;
- Volume 2, Section 1.10 - Project Approvals;
- Volume 3, Section 1.11 - Project Approvals; and
- Volume 3, Section 1.12 - Planning Assessment.

Standard Criteria (d) and (e) relate to the knowledge and understanding of the existing environmental values relevant to the Alpha Coal Project. The EIS documents baseline information relating to characteristics of the receiving environment potentially impacted by the Alpha Coal Project and assesses the impact the project will have on that environment. This documentation is discussed for each component within the EIS, with detailed technical reports, which are specific to the Alpha Coal Project, attached as appendices.

Standard Criteria (f) and (i) relate to stakeholder and community issues and submissions, along with a wider consideration of the public interest. A consultation program was undertaken throughout the EIS process to inform the public about the Alpha Coal Project and to obtain feedback from the public on their concerns and interests relating to the project. Consultation reports for the Coal Mine and Railway Corridor are provided in Volume 5, Appendix O and Volume 6, Appendix M of the EIS, respectively.

Standard Criteria (g) will be addressed by the issuing of an environmental authority and development approval conditions by the appropriate regulatory agencies on the successful approval of the project mine and rail components. As part of this process, a site or environmental management plan that includes reference to an environmental management system (Standard Criteria (j) and (k)) will be approved.

The compatibility of the Alpha Coal Project with Standard Criteria (a), which relates to Ecologically Sustainable Development (ESD), is detailed in the following sections. Further details relating to how the Alpha Coal Project conforms to ESD Objectives and Principles is provided in Volume 2, Section 23 and Volume 3, Section 23 of the EIS.

G.3 Ecologically Sustainable Development Goals

G.3.1 Objectives and Principles

The Commonwealth Government's key goal of ESD is "*Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends*" (<http://www.environment.gov.au/about/esd/publications/strategy/intro.html>).

The core objectives of ESD are:

- 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 ecological processes and life-support systems.

The guiding principles of ESD are:

- Decision-making processes should effectively integrate both long- and short-term economic, environmental, social and equity considerations;
- Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- The global dimension of environmental impacts of actions and policies should be recognised and considered;
- The need to develop a strong, growing and diversified economy that can enhance the capacity for environmental protection should be recognised;
- The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;
- Cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms; and
- Decisions and actions should provide for broad community involvement on issues that affect them.

The objectives and principles of ESD should be considered in conjunction and no objective or principle should predominate over the others.

G.4 Challenges and Objectives of Ecologically Sustainable Development Relevant to the Mining Sector

The NSESD (Commonwealth Government, 1992) outlines some of the challenges for each major economic sector in meeting objectives and principles of ESD. The challenge for the mining sector (Part 2, Chapter 5) is:

“To further develop the mining industry in a way which manages the renewable and non-renewable resources on which it depends in an efficient manner which is also consistent with the principles of ESD”.

The NSESD also outlines objectives to meet the challenges posed to the mining industry in addressing objectives and principles of ESD. These objectives are:

1. To ensure mine sites are rehabilitated to sound environmental and safety standards, and to a level at least consistent with the condition of surrounding land;
2. To provide appropriate community returns for using mineral resources and achieve better environmental protection and management in the mining sector; and
3. To improve community consultation and information, improve performance in occupational health and safety, and achieve social equity objectives.

The Alpha Coal Project will meet these objectives through mitigation and management strategies as outlined throughout the EIS. In particular, refer to the following sections:

- Volume 2, Section 20 - Social;
- Volume 2, Section 21 - Health and Safety;
- Volume 2, Section 23 - Sustainability;

- Volume 2, Section 25 - Decommissioning and Rehabilitation;
- Volume 2, Section 26 - Environmental Management Plan;
- Volume 2, Section 27 - Social Impact Management Plan;
- Volume 3, Section 20 - Social;
- Volume 3, Section 21 - Health and Safety;
- Volume 3, Section 23 - Sustainability;
- Volume 3, Section 25 - Decommissioning and Rehabilitation;
- Volume 3, Section 26 - Environmental Management Plan;
- Volume 3, Section 27 - Social Impact Management Plan;
- Volume 5, Appendix O - Consultation Report
- Volume 5, Appendix P - Environmental Management Plan
- Volume 6, Appendix M - Consultation Report

Please note that revised Environmental Management Plans are presented as part of this Supplementary EIS (SEIS) document in Appendix V (Coal Mine) and Appendix AC (Railway Corridor).

G.5 Achievement of Ecologically Sustainable Development Objectives and Principles

The Proponent's (Hancock Prospecting Pty Ltd) vision for sustainable development is to incorporate ESD considerations throughout design, construction, operation and decommissioning of the Alpha Coal Project. In doing so, the project will balance the needs of individuals with the need for a strong economy, a clean environment and a secure future. The application of each of the core objectives and guiding principles of ESD to the design and development of the Project is analysed in the Sustainability Sections in Volume 2, Section 23, (see Table 23-1) and in Volume 3, Section 23 (see Table 23-1) of the EIS and repeated below in Tables G-1 and G.2. The EIS for the Alpha Coal Project has demonstrated an iterative planning approach to the design and development of the Project, effectively integrating both environmental and social considerations into decision making, and supporting the objectives of ESD.

Table G-1 Application of key objectives and guiding principles of Ecologically Sustainable Development (Coal Mine)

ESD Objective/ Principle	Conformance	Application	Relevant Section	EIS
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.	Yes	<p>The Project will result in significant social and economic benefits for the local and regional community through the development of employment opportunities and investment in infrastructure.</p> <ul style="list-style-type: none"> • Economic stimulus throughout the life of the Project estimated to be \$47 billion, of which a substantial portion of the operating inputs are purchased in the State. • Increased employment, training and economic development opportunities. • New or improved support service industries established in the region. • Upgrades to road and airport infrastructure. • Introduction of significant supply infrastructure into the region, including raw water and power. <p>These benefits are likely to result in flow-on effects for individual and community well-being and quality of life.</p> <p>The Proponent is committed to ongoing consultation in accordance with a detailed Community and Stakeholder Engagement Plan to ensure local communities and stakeholders are engaged in a way that encourages active participation and safeguards the welfare of current and future generations. This process has already commenced and will continue according to the Social Impact Management Plan (Volume 2, Section 27 of the EIS).</p> <p>In addition, the Proponent has developed the Hancock Community Support Program to develop long-term partnerships that assist the communities in achieving independent growth and promoting future economic and community development.</p>	<p>Volume 2, Section 20 Social</p> <p>Volume 2, Section 21 Health and Safety</p> <p>Volume 2, Section 22 Economics</p> <p>Volume 2, Section 27 Social Impact Management Plan</p>	

ESD Objective/ Principle	Conformance	Application	Relevant Section	EIS
<p>To provide for equity within and between generations.</p> <p>Inter-generational equity requires the present generation to ensure the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.</p> <p>Intra-generational equity considers equity within the present generation – i.e. the people within the present generation having equal rights to benefit from the use of natural resources and from the enjoyment of a clean and healthy environment.</p>	<p>Yes</p>	<p>The Alpha Coal Project (Mine) was developed considering environmental and socioeconomic protection for future generations. The EIS identifies management and mitigation measures to ensure that the development of the Project will not reduce or degrade the health, diversity and productivity of the environment or adversely affect current and future generations.</p> <p>The planning process has provided for broad community involvement on issues that affect them. This feedback included a comprehensive assessment of potential impacts and appropriate avoidance, mitigation and management measures to be implemented during design, construction, operation and decommissioning of the Project.</p> <p>In addition to protecting the existing environment from potential adverse impacts, the following Project initiatives may provide other benefits to current and future generations.</p> <ul style="list-style-type: none"> • Increased economic growth over 30-year project life. • New infrastructure through upgrades of roads, airport, water supply and power. • Increased employment and training opportunities. <p>Specific environmental management plans, monitoring and auditing, and community consultation will assist in integrating the principles of inter- and intra-generational equity values at all stages of the Project life cycle.</p> <p>Development of the Galilee Basin will lead to benefits for the region extending beyond the 30-year life of the Alpha Coal Project.</p>	<p>All EIS</p>	

ESD Objective/ Principle	Conformance	Application	Relevant EIS Section
<p>To protect biological diversity and maintain essential ecological processes and life-support systems.</p>	<p>Yes</p>	<p>The conservation of biological diversity and ecological integrity has been a fundamental consideration in development of the Project as required by legislative obligations under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>.</p> <p>The results from the ecological studies were input into Project planning and development, including nature conservation and rehabilitation strategies. As a result, the following design and management measures were considered and where possible adopted to protect the biological diversity and ecological integrity of the Project site.</p> <ul style="list-style-type: none"> • Location of the mining and infrastructure areas to minimise local-scale impacts (e.g. vegetation clearing) and maintain habitat connectivity. • Staff induction to raise awareness of nature conservation values, native species identification and management. • Erosion control to prevent sedimentation of remaining habitat. • Progressive revegetation with seed from native species sourced on-site to ensure long-term stability and rehabilitation success. • Rehabilitation strategy to recover the biological diversity and ecological integrity of the area. • Control of populations of pest and weed species. • Engagement of ecologist/fauna spotter prior to clearing of vegetation to ensure adequate protection of local fauna. <p>A detailed Environmental Management Plan (EM Plan) has been developed (refer to Volume 2, Appendix V, Section 3.4.5 of the SEIS) that identifies management and mitigation measures to protect biological diversity during the construction and operation of the Project.</p>	<p>Volume 2, Section 9 Terrestrial Ecology</p> <p>Volume 2, Section 10 Aquatic Ecology and Stygofauna</p> <p>Volume 5, Appendix P Environmental Management Plan</p>

ESD Objective/ Principle	Conformance	Application	Relevant Section
Guiding Principles			
<p>Decision-making processes should effectively integrate both long- and short-term economic, environmental, social and equity considerations.</p>	<p>Yes</p>	<p>The principle of integration requires mutual consideration of the components of sustainable development – that is, environmental protection and social values are considered in making economic development decisions.</p> <p>The EIS demonstrates that an iterative planning approach to the design and development of the Project was adopted to effectively integrate both environmental and social considerations into decision making. The Project aims to positively influence and benefit the Alpha community and the surrounding Barcaldine Region.</p> <p>Potential environmental and social effects over the Project life were identified on the basis of detailed understanding of the existing environment and community context, past experience with similar projects and input from community consultation.</p> <p>Leading experts were engaged to carry out comprehensive specialist studies to assess the potential environmental and social impacts that may occur as a result of the Project development. Where potential impacts could not be avoided, mitigation measures were proposed.</p> <p>The outcomes of each of these studies demonstrate how the Project accounted for the cost to the environment and the influence on social development, supporting the objectives of ESD.</p>	<p>All EIS</p>

ESD Objective/ Principle	Conformance	Application	Relevant EIS Section
<p>Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.</p>	<p>Yes</p>	<p>The EIS indicates that serious or irreversible environmental damage is likely to be low due to the nature of the Project; the existing environment; and avoidance, mitigation and management measures identified.</p> <p>To fulfil the requirements of the precautionary principle, the Project has included the following measures.</p> <ul style="list-style-type: none"> • Detailed research, planning and investigative studies will be used to increase scientific certainty about the threat of serious or irreversible environmental damage. Outcomes have been and will continue to be fed back into the Project design by incorporating an appropriate margin for error and avoidance, mitigation and management measures. • Management plans will be prepared and implemented to assist in the avoidance, mitigation and management of potentially serious or irreversible damage to the environment and social development. • Monitoring will assess the implementation and effectiveness of measures to demonstrate compliance with evaluation objectives and performance criteria. Compliance will verify that the residual risks associated with the Project are low and manageable. • Extensive consultation opportunities have been provided to local communities and stakeholders since 2008. <p>On this basis, the EIS was prepared, and the resulting management approach is outlined in Volume 5, Appendix P Environmental Management Plan.</p>	<p>All EIS Volume 2, Section 26 Environmental Management Plan Volume 5, Appendix P Environmental Management Plan</p>

ESD Objective/ Principle	Conformance	Application	Relevant EIS Section
The global dimension of environmental impacts of actions and policies should be recognised and considered.	Yes	<p>Climate Change: The potential impacts and vulnerabilities to climate change are assessed in Volume 2, Section 14 Greenhouse Gas Emissions and Climate Change of the EIS. This assessment presented an analysis of the potential greenhouse gas emissions to be produced as a result of the construction and operation phases of the Project and highlighted mitigation options to reduce the quantity of greenhouse gas emissions and the global impact of climate change.</p> <p>World-heritage: There are no world-heritage properties directly affected by the Project, although the Burdekin catchment flows into the Great Barrier Reef World Heritage Area and Bowling Green Bay Ramsar Wetland (over 400 km from the Project site). Mitigation and management measures proposed to protect the indirect impacts upon the world heritage and wetland areas, including migratory species, are detailed in Volume 2, Section 9 Terrestrial Ecology.</p>	<p>Volume 2, Section 9 Terrestrial Ecology</p> <p>Volume 2, Section 11 Surface Water</p> <p>Volume 2, Section 14 Greenhouse Gas Emissions and Climate Change</p> <p>Volume 5, Appendix P Environmental Management Plan</p>
The need to develop a strong, growing and diversified economy that can enhance the capacity for environmental protection should be recognised.	Yes	<p>The Project represents a significant development within the local, regional and state context facilitating the export of 30 Million tonnes per annum (Mtpa) of product coal. Both construction and operation will result in major stimulus to the Queensland economy across a range of industry and service sectors.</p> <p>The Project will result in significant social and economic benefits for the local and regional community through the development of employment opportunities and investment in infrastructure.</p> <ul style="list-style-type: none"> • Economic stimulus throughout the life of the Project estimated to be \$47 billion, assuming all operating inputs are purchased in the State. • Increased employment, training and economic development opportunities. • New support service industries established in the region. • Upgrades to road and airport infrastructure. • Introduction of additional water and power supply into the region. 	Volume 2, Section 22 Economics

ESD Objective/ Principle	Conformance	Application	Relevant EIS Section
<p>The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised.</p>	<p>Yes</p>	<p>Once fully operational, the Project will produce approximately 30 Mtpa of coal exports valued at approximately \$3 billion per annum.</p> <p>The Project meets Queensland Government objectives in realising the timely development of the Galilee Basin whilst ensuring the community benefits and environmental objectives are supported.</p> <p>Queensland will benefit from the development of the mine and associated port and rail infrastructure through long-term contributions of royalties to the State economy, employment, improvement to local infrastructure, and small business opportunities in surrounding areas.</p> <p>The development of the Project in accordance with the design and management measures identified in the EIS would ensure that international competitiveness is enhanced in an environmentally sound manner.</p>	<p>Volume 2, Section 22 Economics</p>
<p>Cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.</p>	<p>Yes</p>	<p>The EIS planning process identifies the short- and long-term external environmental costs of the Project over the full project life cycle. Environmental and social values and potential impacts are assessed in relevant sections of the EIS. This planning process has accounted for both the discrete and cumulative impacts, both beneficial and adverse, over the Project life to achieve a net positive outcome.</p> <p>Project development takes into account the full life cycle of costs of development to decommissioning and rehabilitation, including ultimate disposal of any waste, into the total Project cost. From the earliest stages of project planning, the Project has acknowledged and accounted for the cost of a progressive and final rehabilitation program to be implemented to achieve the desired landscape performance goals and ensure the post-mining landscape is safe, stable and suitable for the designated future use. Financial assurance is to be put aside to demonstrate commitment to these outcomes.</p> <p>Community and stakeholder engagement will remain an integral component of the Project – e.g. accurate and timely environmental, social and economic information will be provided to surrounding communities and stakeholders to demonstrate compliance.</p>	<p>All EIS, specifically: Volume 2, Section 22 Economics Volume 2, Section 27 Social Impact Management Plan Volume 5, Appendix N Economics</p>

ESD Objective/ Principle	Conformance	Application	Relevant Section	EIS
Decisions and actions should provide for broad community involvement on issues that affect them.	Yes	<p>The planning process has provided for broad community involvement on issues that affect them. This feedback included a comprehensive assessment of potential impacts and appropriate avoidance, mitigation and management measures to be implemented during the Project life.</p> <p>The Proponent is committed to ongoing consultation in accordance with a detailed Community and Stakeholder Engagement Plan to ensure local communities and stakeholders are engaged in a way that encourages participation and feedback. This process has already commenced. The development and implementation of the Social Impact Management Plan (refer to Volume 2, Section 27 of the EIS) will actively promote community participation at all stages.</p> <p>In addition, the Proponent developed the Hancock Community Support Program to develop long-term partnerships that assist the communities in achieving independent growth and promoting future economic development of the community.</p>	<p>Volume 2, Section 20 Social</p> <p>Volume 2, Section 27 Social Impact Management Plan</p>	
Mining Sector Objectives				
To ensure mine sites are rehabilitated to sound environmental and safety standards, and to a level at least consistent with the condition of the surrounding land.	Yes	<p>The Project design and sequencing will enable progressive rehabilitation of the environment disturbed by the Project to comply with rehabilitation goals and objectives of the Queensland Department of Environment and Resource Management (DERM) Guideline 18: Rehabilitation Requirements for Mining Projects in Relation to Intergenerational Equity, Polluter Pays Principle, Protection of Biodiversity and Maintenance of Essential Ecologically Processes (DERM, 2007).</p> <p>The strategies for mine rehabilitation will involve progressive landform preparation and revegetation to create a stable post-mining landform and use consistent with the surrounding environment (refer to Volume 2, Section 25 of the EIS). A financial assurance is to be put aside to provide guarantee for long-term land use outcomes.</p>	<p>Volume 2, Section 25 Decommissioning and Rehabilitation</p> <p>Volume 5, Appendix P Environmental Management Plan</p>	

ESD Objective/ Principle	Conformance	Application	Relevant EIS Section
<p>To provide appropriate community returns for using mineral resources and achieve better environmental management and protection in the mining sector.</p>	<p>Yes</p>	<p>Through the EIS planning process and community consultation, the Proponent has committed to provide appropriate community returns to the advantage of both current and future generations.</p> <ul style="list-style-type: none"> • Economic stimulus throughout the life of the Project estimated to be \$47 billion, assuming all operating inputs are purchased in the State. • Increased employment, training and economic development opportunities. • New support service industries established in the region. • Upgrades to road and airport infrastructure. • Introduction of additional water and power supply into the region. • Adoption of best practice technology and management to improve the efficiency and sustainability of the Project. • Financial assurance to be put aside to guarantee appropriate decommissioning and rehabilitation of the Project site. <p>Active community participation and feedback will be encouraged during all stages of Project development.</p>	<p>Volume 2, Section 22 Economics Volume 5, Appendix N Economics Volume 2, Section 27 Social Impact Management Plan</p>
<p>To improve community consultation and information, improve performance in occupational health and safety, and achieve social equity objectives.</p>	<p>Yes</p>	<p>The Proponent is committed to ongoing consultation in accordance with a detailed Community and Stakeholder Engagement Plan to ensure local communities and stakeholders are engaged in a way that encourages participation and feedback. This process has already commenced.</p> <p>Active community participation at all stages of the Project life cycle will be facilitated according to the development and implementation of the Social Impact Management Plan (refer to Volume 2, Section 27 of the EIS).</p> <p>In addition, the Proponent developed the Hancock Community Support Program to develop long-term partnerships that assist the communities in achieving independent growth and promoting future economic development of the community.</p>	<p>Volume 2, Section 20 Social Volume 2, Section 27 Social Impact Management Plan</p>

Table G-2 Application of key objectives and guiding principles of Ecologically Sustainable Development (Railway Corridor)

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant Section	EIS
Core Objective				
To enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations.	Yes	<p>The Project will have significant social and economic benefits to the local and regional community through development of employment and investment in infrastructure. The overall Project will deliver the following substantial economic benefits:</p> <ul style="list-style-type: none"> • Inject approximately \$3 billion per year into the Queensland economy. • Generate approximately 2,500 jobs at peak construction, and 1,500 at full production over the 30 plus years life of the Alpha Coal Mine, together with increased employment opportunities for local communities. • Establish support service industries for the Alpha Township and surrounding regions in rural Queensland (Hancock Prospecting Pty Ltd, 2010). • Upgrade existing infrastructure such as the Alpha airport and local roads. <p>Hancock Prospecting Pty Ltd (HPPL) is committed to engaging the community and stakeholders in developing the Project. HPPL will follow a detailed Community and Stakeholder Engagement Plan to ensure local communities and stakeholders are engaged in a proactive and open manner that encourages and facilitates active consultation and involvement. This process has already commenced.</p> <p>To assist in enhancing individual and community well-being HPPL in conjunction with the Barcaldine Regional Council (Queensland) developed the Hancock Community Support Program. The essence of this program is to assist the communities in which HPPL operates to achieve independent growth and long-term sustainability. A priority for HPPL is to develop partnerships that promote the future economic development of these communities and to contribute to community growth.</p>	<p>Volume Section Social</p> <p>Volume Section Economics</p>	<p>3, 20</p> <p>3, 22</p>

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
To provide for equity within and between generations.	Yes	<p>Project-specific management and mitigation measures have been proposed in the EIS to ensure the Project will not reduce or degrade the health, diversity and productivity of the Queensland environment or affect current and future generations.</p> <p>The Project has a design life of at least 30 years. Third party usage of the Project railway line is expected. As a result, this will increase the expected life of the railway, and it will remain available for use by future generations. Some of the key measures in relation to protecting environmental resources for future generations include:</p> <ul style="list-style-type: none"> • Rehabilitation is intended to progressively occur following installation of the rail line. Areas at high risk of erosion such as the banks of drainage lines / creeks / streams and rivers, areas of steep and / or sustained slopes, and areas of high erosive soils are required to be stabilised and rehabilitated as soon as practical following construction in those areas. • The final landform of the Project corridor will ensure the surface water runoff is managed and that the areas other than the rail line itself are restored to a condition that resembles the pre-disturbance landscape as close as possible. • As the Project construction phase approaches completion, temporary construction camps will be decommissioned and rehabilitated. All unnecessary buildings and workshops will be removed. Haul roads and unnecessary access tracks will be rehabilitated. Sediment basins constructed along the Project corridor for sediment treatment may be given permanent status if landowners request they stay as small water reservoirs. If this is requested and agreed with by the relevant stakeholders, additional stabilisation works will ensure the sediment basins remain structurally sound. • Details of vegetation clearing are detailed in Volume 3, Section 9 of the EIS. Clearing has been minimised as far as possible in the design phase by locating the Project footprint in areas that have been previously cleared or degraded by past land use practices. Vegetation offsets will be provided for all vegetation that is identified as having conservation value (threatened ecological communities under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>, and endangered and of concern regional ecosystems under the <i>Queensland Vegetation Management Act 1994</i>; A greenhouse gas (GHG) assessment has been undertaken for the Project (refer to Volume 3, Section 14 of the EIS). Mitigation options have been developed for the construction and operation phases in order to reduce the quantity of GHG emissions arising from the Project. 	<p>Volume 3, Section 25 Decommissioning and Rehabilitation</p> <p>Volume 3, Section 9 Terrestrial Ecology</p> <p>Volume 3, Section 14 Greenhouse Gas Emissions.</p>

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
To protect biological diversity and maintain essential ecological processes and life-support systems.	Yes	<p>Biological diversity and cumulative impacts on biological diversity are detailed in Volume 3, Sections 9 and 10 of the EIS.</p> <p>A detailed Environmental Management Plan (EM Plan) has been developed (refer to Volume 3, Section 26 of the EIS) that identifies management and mitigation measures to protect biological diversity during the construction and operation of the Project.</p>	<p>Volume 3, Section 9 Terrestrial Ecology</p> <p>Volume 3, Section 10 Aquatic Ecology</p> <p>Volume 3, Section 26 Environmental Management Plan</p>
Guiding Principles			
Decision-making processes should effectively integrate both long- and short-term economic, environmental, social and equity considerations.	Yes	<ul style="list-style-type: none"> The Project will enable further development of the currently underdeveloped Galilee Basin and its coal resources, and the demand for good quality thermal coal from Australia. The Project meets Queensland Government objectives in realising the timely development of the Galilee Basin whilst ensuring the community benefits and environmental objectives are supported. Queensland will benefit from development of the mine and associated port and rail infrastructure through long-term contributions of royalties to the State economy, employment, improvement to local infrastructure, and small business opportunities in surrounding areas. The Project aims to positively influence and benefit the Alpha community and the surrounding Barcaldine Region. 	All Volume 3 sections
Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	Yes	<p>An assessment of the threats and impacts on the environment from the Project has been detailed in the relevant sections of the EIS. The findings of these assessments have been used to formulate appropriate management and mitigation measures, which are outlined in Volume 3, Section 26 of the EIS.</p> <p>These management and mitigation measures will be used throughout the construction, operation and decommissioning of the Project to prevent serious or irreversible environmental damage from the Project.</p>	Volume 3, Section 26 Environmental Management Plan

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
<p>The global dimension of environmental impacts of actions and policies should be recognised and considered.</p>	<p>Yes</p>	<p><u>Climate Change</u></p> <p>A GHG Assessment has been undertaken (refer to Volume 3, Section 14 of the EIS). This assessment presented an analysis of the potential GHG emissions that would be produced as a result of the construction and operation phases of the Project and highlighted potential means by which these emissions could be reduced or avoided.</p> <p>The emissions were categorised as construction - including embodied emissions of materials; transportation of materials to the Project sites, diesel use during construction; vegetation clearing; and operations, including emissions from diesel use during the operations phase.</p> <p>Overall, the diesel use in the Project is the largest source of emissions (44% of all emissions), with diesel use during operations and construction phases estimated to contribute 28% and 16% of all emissions, respectively. The embodied emissions of materials during the construction stage is also a large source of emissions, estimated to contribute 30% of all emissions, followed by the transportation of materials during construction (19% of all emissions).</p> <p>Mitigation options are detailed further in Volume 3, Section 14 of the EIS and will be deployed during the construction and operation phases in order to reduce the quantity of GHG emissions arising from the Project and the global impact of climate change.</p> <p><u>World Heritage Properties and Ramsar Wetlands</u></p> <p>There are no world heritage properties directly affected by the Project. However, the Burdekin Catchment flows into the Great Barrier Reef World Heritage Area (GBRWHA). The Great Barrier Reef (GBR) covers a total area of 348,000 km² and supports a variety of habitats, including seagrass beds, mangrove forests, sandy and muddy seabed communities, inter-reefal areas, deep oceanic water and island communities (Department of the Environment, Water, Heritage and the Arts [DEWHA], 2008).</p> <p>The catchment also flows into the Bowling Green Bay Ramsar Wetland via the Haughton River. The Bowling Green Bay Wetland is located 21 km north east of Ayr and has a total area of 35,500 ha. The wetland aggregation contains a diversity of habitats, including seagrass beds, coastal sand dunes, tidal flats, mangrove forests, highly saline supratidal salt pans, brackish to freshwater marshes, and lakes. The Bowling Green Bay Wetland is an internationally significant habitat for wader birds and provides important breeding and nursery habitat for commercially and recreationally important fish species such as barramundi.</p>	<p>Volume 3, Section 9 Terrestrial Ecology</p> <p>Volume 3, Section 10 Aquatic Ecology</p> <p>Volume 3, Section 14 Greenhouse Gas Emissions</p> <p>Volume 3, Section 26 Environmental Management Plan</p>

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
		<p>The Bowling Green Bay Wetland is located more than 100 km from the northern end of the Project.</p> <p>Mitigation and management measures are proposed to protect the indirect impacts upon the world heritage and wetland areas and these are detailed further in Volume 3, Section 26 of the EIS.</p> <p><u>Migratory Species</u></p> <p>The Caley Valley wetland supports a significant community of marine and migratory wetland birds. Twenty-six (26) migratory or marine bird species were found within the study area (11 birds and 1 reptile are predicted to occur). The Project is unlikely to substantially modify, destroy or isolate important habitat. Apart from Caley Valley, few permanent water sources will be affected by the Project.</p> <p>The Project is unlikely to result in invasive species becoming established in important habitat for migratory species. Most species are regionally abundant and an ecologically significant proportion of a species population is unlikely to occur within the study area.</p> <p>Mitigation and management measures are proposed to protect migratory species and these are detailed further in Volume 3, Section 26 of the EIS.</p>	

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
<p>The need to develop a strong, growing and diversified economy that can enhance the capacity for environmental protection should be recognised.</p>	<p>Yes</p>	<p>The Alpha Coal Project will deliver the following substantial economic benefits:</p> <ul style="list-style-type: none"> • Inject \$3 billion per year into the Queensland economy. • Generate approximately 2,500 jobs at peak construction, and 1,500 at full production over the 30 plus years life of the Alpha Coal Mine, together with increased employment opportunities for local communities. • Establish support service industries for the Alpha Township and surrounding regions in rural Queensland. • Upgrade existing infrastructure such as the Alpha airport and local roads. <p>The Project is of high significance within the local, state and national context. The Project will facilitate the export of up to 60 Mtpa of coal from the Alpha Coal Mine, and 30-50 Mtpa from other Galilee Basin coal mines.</p> <p>The construction phase of the Project is likely to result in a major stimulus to the Queensland economy. Project purchases will result in broadly distributed stimuli across various industry sectors. The purchase of materials, locomotives and wagons will result in a major stimulus to the manufacturing sector. The actual construction workforce is to reach approximately:</p> <ul style="list-style-type: none"> • 506 workers by 2011 • 1,911 workers by 2012 • 2,122 workers by 2013 • 534 workers by 2014 <p>Up to 350 workers will operate and maintain the railway. However, significant flow-on employment is anticipated throughout the economy, throughout the construction and operational phases of the Project.</p> <p>The economic impacts of the Project (beneficial and adverse) are detailed in Volume 3, Section 22 of the EIS.</p>	<p>Volume 3, Section 22 Economics</p>
<p>The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised.</p>	<p>Yes</p>	<p>The Project will enable the timely and efficient transport of coal from the Alpha Coal Mine to the Port at Abbott Point, without which the Galilee Basin coal resources would remain undeveloped for an extended period of time. The opportunity for shared rail and port facilities would be put at risk, which could jeopardise other developments in the area and cause Australia to lose market share with lower quality coals being provided to end users by the Asian market. In addition, potential future revenue to the State Government would not be realised, and further community development would be postponed.</p>	<p>Volume 3, Section 1.4 Project Rationale</p>

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
Cost-effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms.	Yes	<p>HPPL is committed to fully investigating the economic, cultural, environmental and social implications of the Alpha Coal Project in accordance with Queensland and Commonwealth Government requirements.</p> <p>The Project team has already undertaken government relations activities at all levels of government, and to date has received support and encouragement for the Alpha Coal Project. At the Commonwealth level, briefings have taken place with the offices of the Australian Prime Minister, the Minister for Resources and Energy, and the Minister for Environment and Heritage.</p> <p>As the Alpha Coal Project continues, HPPL is committed to maintaining open lines of communication with all levels of the Commonwealth Government. Regular meetings between relevant government agencies and HPPL representatives are conducted on a fortnightly or monthly basis.</p>	Not applicable
Decisions and actions should provide for broad community involvement on issues that affect them.	Yes	<p>Community consultation activities in relation to the EIS are detailed in Volume 6, Appendix M of the EIS.</p> <p>The Alpha Coal Project will follow a detailed Community and Stakeholder Engagement Plan to ensure local communities and stakeholders are engaged in a proactive and open manner that encourages and facilitates active consultation and involvement.</p> <p>HPPL in conjunction with the Barcaldine Regional Council (BRC) developed the Hancock Community Support Program. The aim of this program is to assist the communities in which HPPL operates to achieve independent growth and long-term sustainability.</p> <p>HPPL has developed a Cultural Heritage Management Plan (CHMP) with affected traditional landowners and have commenced the Indigenous Land Use Agreement (ILUA) process and cultural heritage surveys.</p> <p>A priority for HPPL is to develop partnerships that promote the future economic development of these communities and to contribute to community growth.</p>	Volume 6, Appendix M Consultation Report
Objectives – mining sector			
To ensure mine sites are rehabilitated to sound environmental and safety standards, and to a level at least consistent with the condition of surrounding land.	NA	NA – refer to Volume 2, Alpha Coal Project (Mine) EIS.	NA – refer to Volume 2 of the Alpha Coal Project (Mine) EIS.

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
To provide appropriate community returns for using mineral resources and achieve better environmental protection and management in the mining sector.	NA	NA – refer to Volume 2, Alpha Coal Project (Mine) EIS.	NA – refer to Volume 2 of the Alpha Coal Project (Mine) EIS.
To improve community consultation and information, improve performance in occupational health and safety, and achieve social equity objectives.	NA	NA – refer to Volume 2, Alpha Coal Project (Mine) EIS.	NA – refer to Volume 2 of the Alpha Coal Project (Mine) EIS.
Objectives – energy use, energy production and transport sector			
To limit harmful emissions arising from energy production and distribution wherever economically efficient, and to promote alternative energy sources.	NA	NA – Project does not include energy production.	NA – Project does not include energy production.
To improve the energy efficiency of residential buildings and domestic appliances and to influence householders to become more economical in their use of energy, and to switch to energy sources with lower GHG emissions.	NA	NA – Project does not include energy production.	NA – Project does not include energy production.
To influence industries and businesses to adopt behaviour, practices, technology and equipment that make them minimise their energy use, or lead them to switch to energy sources with lower GHG emissions.	NA	NA – Project does not include energy production.	NA – Project does not include energy production.

Objective/Principle	Conforms	Cumulative Impacts (beneficial/adverse)	Relevant EIS Section
<p>To improve the technical and economic efficiency of urban and non-urban transportation; encourage switching to alternative transport technologies or modes where this reduces GHG emissions per passenger or unit of freight and to optimise the modal mix of transport to achieve greater economic, environmental and social benefits.</p>	<p>Yes</p>	<p>As detailed above, a GHG assessment has been undertaken (refer to Volume 3, Section 14 of the EIS). This assessment presented an analysis of the potential GHG emissions that would be produced as a result of the construction and operation phases of the Project and highlighted potential means by which these emissions could be reduced or avoided.</p> <p>Mitigation and management measures to improve the technical and economic efficiency of the rail operations are detailed further in Volume 3, Section 14 of the EIS and will be deployed during the construction and operation phases in order to reduce the quantity of GHG emissions arising from the Project and the global impact of climate change.</p> <p>The design grade of the alignment (1:320) delivers greater efficiencies for operation of the diesel locomotives.</p>	<p>Volume 3, Section 14 Greenhouse Gas Emissions</p>