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3.1 INTRODUCTION

This Chapter describes the approach that will be taken to develop the project in a sustainable manner. This will be achieved largely through the identification of potential impacts on the natural and socio-economic environment, assessing impacts using best environmental practice methodologies. By identifying those actions, Waratah Coal has advanced sustainability goals. This approach reflects the existing practices of Waratah Coal to strive towards environmentally, socially and culturally acceptable project development.

The principles of sustainable development, including Ecologically Sustainable Development (ESD) plays an integral role in Waratah Coal's decision-making processes with respect to the planning and design of the project. Waratah Coal is committed to continuing to implement the principles of ESD throughout the construction, operation, decommissioning and rehabilitation phases of the project.

This purpose of this section is to:

- provide an overview of the concept of ESD and outline the legislative and planning framework under which it is assessed;
- outline the sustainability objectives that have been identified for the project under this framework;
- describe how these objectives have been integrated throughout the EIS process and into all future phases of the project such as detailed engineering design, environmental management and Waratah Coal's annual environmental reporting; and
- provide a review of the project against relevant Commonwealth and Queensland legislation and planning documents including the National Strategy for ESD and in particular the Mining Sector Specific ESD Objectives.

3.2 LEGISLATIVE AND PLANNING FRAMEWORK

3.2.1 BACKGROUND

Over the last 30 years, there has been increasing global awareness of the concept of sustainable development. In 1987 the United Nations World Commission on Environment and Development, through the Brundtland Report *Our Common Future* adopted what has become a popular definition of sustainable development being:

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

In recognition of the importance of sustainable development, Agenda 21, as the global blueprint for sustainability that was agreed at the United Nations Conference on Environment and Development in 1992, the Commonwealth Government in 1992, developed the National Strategy for Ecologically Sustainable Development (NSED). The NSED has been adopted by all levels of government.

The NSED defines 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 goal of NSED 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.”

The core objectives of the NSED are to:

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

The NSED recognises that the participation of all levels of government, business and the community is essential to facilitate the implementation of ESD in Australia.

Part 1 of the NSED provides:

- *“Private enterprise in Australia has a critical role to play in supporting the concept of ESD while taking decisions and actions which are aimed at helping to achieve the goal of this Strategy. Many have already been active participants in the ESD process, including taking significant individual steps to ensure that Australia's economy and production base are put on an ecologically sustainable footing.”*

The principles of ESD have been enacted by Commonwealth legislation through the EPBC Act.

3.2.2 PRINCIPLES OF ESD

The principles of ESD can be defined into five key concepts:

- long term and short term economic, environmental, social and equitable considerations;
- the precautionary principle;
- Inter-Generational equity;
- conservation of biological diversity and ecological integrity; and
- improved valuation, pricing and incentive mechanisms.

Each of these five key concepts is discussed in detail below.

3.2.2.1 Long Term and Short Term Economic, Environmental, Social and Equitable Considerations

The principles of ESD require the effective integration of environmental considerations and resources in decision making. This may include consideration of ecosystems; people; communities; natural and physical resources; the qualities and characteristics of locations, places and areas; and the social, economic and cultural aspects of these things in the present and the future.

The concept of equitable considerations may include the idea of intra-generational equity, being that the present generation should ensure the health, diversity and productivity of the environment is maintained or enhanced for its own generation.

3.2.2.2 The Precautionary Principle

Environmental Impact Assessment (EIA) involves predicting what the environmental outcomes of a development are likely to be. The precautionary principle reinforces the need to take risk and uncertainty into account when making those decisions.

The precautionary principle states that *the lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage*. This requires taking a conservative approach to EIA and management so that the proponent is prepared for the worst case scenario that may arise as a result of the project.

3.2.2.3 Inter-Generational Equity

Inter-generational equity is the concept that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

3.2.2.4 Conservation of Biological diversity and ecological Integrity

Biological diversity (biodiversity) is considered to be the number, relative abundance, and genetic diversity of organisms from all habitats (including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are a part) and includes diversity within species and between species, as well as diversity of ecosystems. For the purposes of this EIS, ecological integrity is considered in terms of ecological health.

3.2.2.5 Improved valuation, pricing and incentive mechanisms

The principles of ESD require that environmental factors be included in the valuation of assets and services. This may include concepts such as:

- polluter pays – those who generate pollution and waste should bear the cost of containment, avoidance or abatement;
- the users of goods and services should pay prices based on the full lifecycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste; and
- environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

This principle reflects the idea that if the real value of natural resources is incorporated into the cost of using those resources, it is more likely that those resources will be used in a sustainable manner, adequately managed, and not wasted.

3.2.3 ESD UNDER COMMONWEALTH LEGISLATION

3.2.3.1 *Environment Protection and Biodiversity Conservation Act 1999*

Section 3 of the EPBC Act articulates the objects of the Act. S.3(1) provides:

The **objects** of this Act are:

- a. to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance;
- b. to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources;
- c. to promote the conservation of biodiversity;
- d. to provide for the protection and conservation of heritage;
- e. to promote a co-operative approach to the protection and management of the environment involving governments, the community, land holders and indigenous peoples;
- f. to assist in the co-operative implementation of Australia's international environmental responsibilities;
- g. to recognise the role of indigenous peoples in the conservation and ecologically sustainable use of Australia's biodiversity; and
- h. to promote the use of indigenous people's knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.

The **principles** of ESD are set out in s.3A of the EPBC Act that states:

The following principles are principles of ecologically sustainable development;

- a. decision making processes should effectively integrate both long-term and short-term economic, environmental social, and equitable considerations;
- b. if there are any 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;

- c. the principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of our environment is maintained or enhanced for the benefit of future generations;
- d. the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making; and
- e. Improved valuation, pricing and incentive mechanisms should be promoted.

The EPBC Act (s. 136) sets out general considerations and factors the Minister must take into account in deciding whether to grant approval to a project and states:

Mandatory considerations

- 1) In deciding whether or not to approve the taking of an action, and what conditions to attach to an approval, the minister must consider the following, so far as they are not inconsistent with any other requirement of this Subdivision:
 - a. Matters relevant to any matter protected by a provision of Part 3 that the Minister has decided is a controlling provision for the action;
 - b. Economic and social matters.

Factors to be taken into account

- 1) In considering those matters, Minister must take into account:
 - a. The principles of ecologically sustainable development.

In addition, s.391 of the EPBC Act provides that:

- 1) The Minister must take account of the precautionary principle in making a decision to the extent that he or she can do so consistently with the other provisions of this Act.

Precautionary Principle

- 1) The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.

S.391(3) requires the Minister to take into account the precautionary principle including any decision to approve the taking of an action controlled under the EPBC Act.

3.2.3.2 Energy Efficiency Opportunities Act 2006

The object of the *Energy Efficiency Opportunities Act 2006* (EEO Act) is to improve the identification and evaluation of energy efficiency opportunities by large energy using businesses. The EEO Act requires businesses to undertake an assessment of their energy efficiency opportunities (a minimum standard) to improve the way in which opportunities are identified and evaluated; and to report publicly on the outcomes of their assessment to demonstrate to the community that their energy use is being effectively managed.

Corporations which use more than half a pet joule of energy per year must apply on the Register of Corporations for the Energy Efficiency Opportunities Scheme. Registered corporations are required to submit assessment plans every five years. The assessment plan must:

- set out a proposal for assessing the opportunities for improving energy efficiency; and
- set out a deadline for doing all of the action set out for assessing energy efficiency opportunities. The Regulations may set out requirements relating to the carrying out of the proposal to better assess opportunities for improving energy efficiency opportunities. They may include requirements for communication of objectives about energy use; the measurement and analysis of energy use; and the identification and evaluation of opportunities for improving energy efficiency.

Waratah Coal will undertake the annual reporting and prepare an assessment plan every five years as part of the project. Waratah Coal will also use best practice technologies to increase every opportunity for energy efficiency throughout the life of the project.

3.2.4 ESD UNDER RELEVANT STATE LEGISLATION

Development assessment in Queensland is guided by the SP Act. The *Sustainable Planning Act 2009* (SP Act) replaced the *Integrated Planning Act 2007* (IPA) and guides development in Queensland through the Integrated Development Assessment Scheme (IDAS) process.

The SP Act defines ecological sustainability as:

a balance that integrates –

- a) protection of ecological processes and natural systems at local, regional, State and wider levels; and
- b) economic development; and
- c) maintenance of the cultural, economic, physical and social wellbeing of people and communities.

The SP Act further states that:

The purpose of the SP Act is to seek to achieve ecological sustainability by:

- a) managing the process by which development takes place, including ensuring the process is accountable, effective and efficient and delivers sustainable outcomes;
- b) managing the effects of development on the environment, including managing the use of premises; and
- c) continuing the coordination and integration of planning at the local, regional and State levels.”

The SP Act seeks to achieve this goal by advancing the purpose of the SP Act. This includes:

- a) ensuring decision-making processes:
 - i. are accountable, coordinated, effective and efficient;
 - ii. take account of short and long-term environmental effects of development at local, regional, State and wider levels, including, for example, the effects of development on climate change;
 - iii. apply the precautionary principle; and
 - iv. seek to provide for equity between present and future generations;
- b) ensuring the sustainable use of renewable natural resources and the prudent use of non-renewable natural resources by, for example, considering alternatives to the use of non-renewable natural resources;

- c) avoiding, if practicable, or otherwise lessening, adverse environmental effects of development, including, for example:
 - I. climate change and urban congestion;
 - II. adverse effects on human health; and
- d) considering housing choice and diversity, and economic diversity;
- e) supplying infrastructure in a coordinated, efficient and orderly way, including encouraging urban development in areas where adequate infrastructure exists or can be provided efficiently;
- f) applying standards of amenity, conservation, energy, health and safety in the built environment that are cost-effective and for the public benefit; and
- g) providing opportunities for community involvement in decision making.

The principles of ESD are also a fundamental objective of the EP Act. The *Environmental Protection Act 1994* (EP Act) states

“The object of this Act is to protect Queensland’s environment while allowing for 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 (ecologically sustainable development)”.

The Queensland Government is committed to sustainability and the principles of ESD through the introduction of a number of programs and initiatives aimed at increasing the awareness of sustainability amongst businesses and the general community. Programs that relate to sustainability include the annual Queensland Sustainable Industries awards and the declaration of 2010 as the *“Year of Environmental Sustainability”*.

3.3 GLOBAL CONTEXT OF THE PROJECT

3.3.1 MARKET DEMAND FOR ENERGY

The provision of adequate, reliable and affordable energy is essential to meeting the needs and aspirations of people in both developed and developing countries.

While there is strong global demand for energy, at the same time we are challenged with demands for

resource conservation, the need to reduce global greenhouse gas emissions (GHG) and minimise climate change; a time of significant population growth and the rapid expansion of under-developed economies. The global population continues to rise and is anticipated to reach between 8 billion and 10.5 billion people by 2050 (United Nations 2008).

The International Energy Agency (IEA) notes that between 2006 and 2030, global energy demand is expected to rise by between 32% and 45% (IEA 2008) depending on the degree of energy efficiency improvements that are implemented. Global energy demand expressed in millions of oil-equivalent barrels per day is expected to increase on average by 1.3% per year from 2005 to 2030; even with significant efficiency gains are included into the modelling.

Eighty percent of increased demand is expected to be from developing countries (e.g. China and India), where economies are growing most rapidly. Even at the lower end of the scale, this illustrates the huge growth in demand created by rising populations and technological development.

3.3.2 INCREASED DEMAND FOR COAL

Thermal coal is used to generate almost 40% of the world’s electricity. Global demand for thermal coal is expected to grow by at least 3% per annum over the next 10 to 15 years. Future world demand is driven by developing Asian and Indian markets and the international market sees Australian coal as a secure energy supply that is produced in a stable economic and political environment.

3.4 SUSTAINABILITY COMMITMENT

3.4.1 WARATAH COAL’S CORPORATE VISION AND VALUES

Waratah Coal recognises its responsibilities for implementing sound environmental stewardship of the environment in which it operates. We care for the environment and will manage it to deliver environmental better practice outcomes. Our Commitment extends to all of those who work with and for Waratah Coal.

In executing our environmental policy we will:

- **comply** with all relevant legislation and regulations;
- **incorporate** environmental better practice into our core business plans and management processes;

- **provide** adequate resources to meet our commitments;
- **train** our workforce and contractors to meet our standards;
- **communicate** our planned actions, targets and results to all stakeholders;
- **identify, minimise and mitigate** environmental disturbance throughout our business;
- **measure** our performance;
- **enforce** our standards with partners and contractors; and
- **improve** our performance through continuous planning.

3.4.2 STRATEGIC APPROACH TO SUSTAINABILITY

Waratah Coal is committed to operating in a sustainable manner. We will ensure that we:

- work with government, industry and other stakeholders to address climate change issues as a fundamental aspect of our operations;
- promote the efficient use of resources by setting and achieving targets for energy efficiency and Greenhouse Gases (GHG) and reducing and preventing environmental pollutants;
- avoid, minimise and offset potential biological impacts resulting from operations;
- engage openly with stakeholders to achieve the best possible outcomes for surrounding communities and foster sustainable development with the community;
- uphold ethical business practices and meet or exceed all applicable legislation and legal requirements;
- do not compromise the safety or health of our employees or contractors; and
- regularly review our environmental performance and report on our progress.

3.4.3 PROJECT SPECIFIC INITIATIVES

Waratah Coal undertook to make sustainability a fundamental aspect of the project. We did this by encouraging sustainable thinking and inputs through all stages of the project's planning and design, with inputs from across the project team and from stakeholders. Project team members included Waratah Coal employees (engineering, environment and community relations), mine planning engineering consultants,

infrastructure and Coal Handling Preparation Plant (CHPP) design engineers, environmental consultants, and community and social consultants.

Throughout the EIS process, a number of sustainability initiatives were identified and implemented into the project planning. These are broken down into three broad categories – environment, social and community and resource use efficiency. Examples of the initiatives identified are included below and listed via their category.

3.4.3.1 Environment

- 1) establish a GHG reduction and mitigation plan;
- 2) carry out an energy efficiency assessment plans and regular reporting. This will include, but not be limited to, requirements for communication of objectives about energy use, the measurement and analysis of energy use, and the identification and evaluation of opportunities for improving energy efficiency;
- 3) manage water to minimise releases and maximise reuse including the use of storm water tanks at temporary worksites and at permanent work camps;
- 4) we will plan for closure and consider final landforms, rehabilitation and sustainable end land uses at the outset; and
- 5) avoid or minimise potential environmental impacts through planning and using best practice construction and operation techniques.

3.4.3.2 Social and Community

- 1) fully engage the community by holding information sessions during planning and construction phases of the project;
- 2) invest in the community to build business capacity. Where possible all food and other disposable materials will be purchased from local industry;
- 3) engage the indigenous community through procurement, training and employment;
- 4) attract and retain workforce through construction and operation; and
- 5) improve infrastructure in the local area where practicable (i.e. provision of improved water infrastructure).

3.4.3.3 Resource use efficiency

- 1) maximise synergies between the project and existing mines and infrastructure and other planned mining projects in the region;
- 2) influence the supply chain towards sustainability. For example where possible, recycled and recyclable materials will be favoured over those without any re-use potential; and
- 3) understand the sustainable use of the coal resource including actively participating in the development of new technologies for cleaner use of coal as an energy source.

These commitments represent the outcomes of a process designed to incorporate sustainable thinking throughout the planning process. These principles are reflected in the project design and mitigation measures identified in the EIS. Implementing sustainability in this fashion ensures it is considered throughout the lifecycle of the project.

3.4.4 PROJECT SUSTAINABILITY INDICATORS

Sustainability will be incorporated and monitored through a number of plans developed through the EIS process. These include:

- individual Environmental Management Plans (EMPs) will be developed for the three components of the project that include mitigation measures for the construction, operation, decommissioning and rehabilitation phases of the project;
- offsets plans for unavoidable impacts to flora and fauna and native habitat resulting from the project; and
- GHG reduction and mitigation plan.

The implementation and monitoring of these plans will ensure that the project is constructed and operated in a sustainable manner throughout its lifecycle.

3.5 ANALYSIS AGAINST NATIONAL SUSTAINABILITY STANDARDS

This section provides a comparative analysis of how the project conforms to the objectives of the NSESD. This analysis considers the cumulative impacts of all elements of the project (coal mine, rail network and coal terminal) across the entire project lifecycle, from design and construction to operation and decommissioning.

The elements of the NSESD framework consist of the statement of a **goal**, **core objectives** and **guiding principles** and the **Mining specific ESD objectives**. These are addressed below.

3.5.1 ALIGNMENT WITH THE NSESD GOAL

The NSESD goal 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.

The project's purpose aligns with this goal:

Waratah Coal will create value for our stakeholders by delivering environmentally, socially and economically responsible energy from Waratah Coal's resources in the Galilee Basin. We will achieve this through teamwork, innovation, integrity and the application of safe and sustainable practices the match or exceed industry standards. We will not compromise the safety and well-being of our employees or local communities in delivering our vision.

The NSESD goal can be separated into two overriding components: **'improving the quality of life'**; and **'maintaining ecological processes'** to allow further comparative analysis.

3.5.1.1 Improving quality of life

Contributions to an improved quality of life will be made directly by the project, and indirectly through payment of taxes to the government which is subsequently distributed more widely in society. The project seeks to deliver enduring direct benefits to a broad range of stakeholders over the longer term.

The opportunities for project employment and long-term career pathways are extensive. Shareholders will gain dividends and potential for capital growth. Customers will be provided with secure, long-term energy. Communities will obtain social investment, and contributions to improved infrastructure, education and training, employment and business opportunities.

Indirectly, taxes will be returned to government, benefiting Queenslanders and Australians in general. For more information, refer to **Chapter 17, Volumes 2 and 3**.

3.5.1.2 Maintaining ecological processes

The project will adhere to sustainable practices and contribute direct benefits to the natural environment by avoiding areas of high ecological value, minimising impacts to biodiversity, rehabilitation and offsetting unavoidable impacts. This process has been adhered to throughout the EIS process.

3.5.2 ALIGNMENT WITH THE NSESD CORE OBJECTIVES

The NSESD core objectives are:

- to enhance individual and community wellbeing 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 NSESD core objectives can be separated into the components: *‘wellbeing and welfare’*, *‘inter-generational equity’*, *‘intra-generational equity’* and *‘biological diversity’* to allow further comparative analysis as follows.

3.5.2.1 Individual and Community Well-being and Welfare

Individual and community wellbeing and welfare will be enhanced through employment opportunities, community investment programs, improved infrastructure and services, education and training, business opportunities and economic flow through effects.

The project will provide significant benefits to the wider community in terms of income generation, employment and increased Government revenues and reinvestment, as detailed in **Chapter 17, Volumes 2 and 3**. The project is expected to provide an additional 4600 direct jobs over the construction and operation phases.

The Proponent’s measures to improve social well-being and welfare are outlined in **Chapters 16, Volumes 2 and 3** of the EIS. The Proponent has and will continue an ongoing Community Partnerships Program, this being a regional program that will support initiatives and activities that promote involvement with government, training and welfare organisations and the communities. The program is divided into five key areas:

- youth development;
- Waratah Coal’s economic development / business and skills training;
- community development and welfare;
- community safety, sport, well-being and recreation; arts, entertainment and cultural development; and
- environment and ESD.

3.5.2.2 Inter-Generational Equity

Inter-generational equity is addressed by focusing strategies on the short to long term and the intent to deliver sustainable benefits over time. Through the project’s stakeholder engagement process, Waratah Coal has sought to develop long-term relationships with communities. Waratah Coal recognises the need to develop these relationships and that successful relationships can only come from earning community trust.

With this in mind, Waratah Coal has committed extensive resources in the region to engage with and seek the views and opinions of communities and other stakeholders with a view to creating strong relationships with those likely to be affected by the proposed mine. The opportunities created by the project will have a long-term focus by seeking collaborations with community and government so that relationships are fostered and grown during the course of the project and beyond.

While some environmental impacts are unavoidable to an extent with any project of this scale, potential impacts have been identified through the EIS process and strategies put in place to avoid or manage these impacts. Where impacts are unavoidable, such as at the mine site, disturbed land will be rehabilitated to its previous condition and left in a stable, non-polluting condition once operations have been completed and revegetated with local provenance. It is not expected that the project will significantly reduce, or fail to maintain, the health, diversity and productivity of the Queensland environment or adversely affect future generations.

The mine will require some clearing of vegetation; however, this will mostly comprise grassland, with the clearing of remnant vegetation minimised through restrictions on the mine footprint and careful positioning of the rail alignment to avoid ecologically sensitive areas where practicable. Groundwater drawdown from the

mine pit excavation is also not expected to impact on remnant vegetation in the vicinity of the mine. Water management practices on site will ensure that water quality in the rivers downstream of the mine and rail is not adversely affected by the construction or operational phases of the project. Measures to protect water quality are detailed in the EMPs. Monitoring programs will be established through the EMPs to show that the discharges meet or exceed all relevant Guidelines and Standards.

3.5.2.3 Intra-Generational Equity

The project will provide for equity within generations by implementing programs specifically targeting under-represented groups to ensure project benefits are distributed widely. For example, Waratah Coal will have Indigenous employment policy and strategy, and Indigenous contracting guidelines and tendering criteria.

3.5.2.4 Biological Diversity

Waratah Coal will protect biological diversity and maintain essential ecological processes and life-support systems by adopting sustainable practices including:

- avoiding areas of high ecological value;
- minimising impacts to biodiversity in general;
- progressively rehabilitating disturbed ecosystems; and
- offsetting unavoidable impacts.

3.5.3 ALIGNMENT WITH NESD GUIDING PRINCIPLES

3.5.3.1 Decision-making considers environmental, social and equity considerations

From the commencement of the EIS process, Waratah Coal undertook to make sustainability a fundamental aspect of the project and encourage sustainable thinking and inputs throughout all stages of the project's planning and design. This is reflected in the number of programs and initiatives outlined in earlier section of this chapter to improve sustainability from both environmental and community perspectives.

3.5.3.2 Precautionary Principle

To address the precautionary principle, a risk and opportunity assessment process was applied to identify the level of risk of environmental damage. Detailed technical studies have been undertaken based on the level of risk identified to understand the potential

impacts better and to assemble information that may assist to reduce scientific uncertainty. These studies were conducted by teams of specialists and included gathering baseline environmental data, rigorous impact assessment, feeding back information to design teams through environmental design reporting so that project could be changed to reduce impacts, reviewing the impact assessment based on project changes, and identifying and agreeing appropriate mitigation measures.

Where technical studies found there was the potential for negative impacts, mitigation measures were identified to minimise the risk of environmental harm. These mitigation measures were built into the EMPs included in the EIS and will be used during the project as a basis for developing detailed construction and operational works.

3.5.3.3 Global Dimension

While the project is situated in one state of Australia, its size and breadth is significant on a global scale. Some impact areas that have been considered on a global scale include:

- supply of materials and equipment from overseas suppliers particularly during the construction phase;
- trade and economic flows between suppliers, the project and customers; and
- potential impacts to migratory species (i.e. China Australia Migratory Birds Agreement, Japan Australia Migratory Birds Agreement and the Republic of Korea Migratory Birds Agreement).

3.5.3.4 Strong Economy and International Competitiveness

The project will provide considerable economic benefits and help to grow the Australian, Queensland and local economies. It will strengthen Australia's energy export profile. These economic benefits will support the project, the community and government to have capacity to implement environmental protection measures both during and beyond the life of the project. The project's economic assessment is discussed in **Chapter 17, Volumes 2 and 3**.

In the economic assessment for this EIS, efforts have been made to include environmental values (costs and benefits) and provide a picture of overall project costs and benefits.

3.5.3.5 Community Involvement

Early and extensive engagement with communities and stakeholder were and continue to be pursued. The purpose of the engagement was to inform stakeholders about the project generally, and on issues of concern or interest to specific communities or groups, and to seek their feedback on Waratah Coal's direction.

Waratah Coal has sought to incorporate feedback from stakeholders in project planning and in the identifying appropriate strategies and commitments. A wide range of methods, forums, meetings and modes of communication have been used in an effort to ensure broad consultation.

3.5.4 MINING SECTOR SPECIFIC ESD OBJECTIVES

3.5.4.1 Mine site Rehabilitation

Disturbed land will be rehabilitated and left in a stable, non-polluting condition. The proposed post-mine land use for disturbed areas within the area is a mosaic of self sustaining vegetation communities and grazing land, using appropriate native tree, shrub and grass species, and improved pasture species as appropriate. This post-mine land use will be consistent with the land use of surrounding land.

3.5.4.2 Provide Appropriate Returns for Mineral Resources and Achieve Better Environmental Protection and Management in the Mining Sector

The project will produce a product that is subject to a high international demand for the foreseeable future and will provide significant revenues to Commonwealth, Queensland and Local Government. The coal resource has been subject to detailed investigations to define the extent of the resource and the feasibility of its extraction and processing.

The project will not adversely impact on other coal, gas and mineral resources in the region. Waratah Coal has undertaken a comprehensive EIA process to identify the opportunities to improve environmental protection and management. The EIS and detailed assessments that have been undertaken and the EMP outlines the proposed environmental management strategies to be employed. The project has the technical and financial support to establish and maintain these environmental management controls.

3.5.4.3 Improve Community Consultation, Improve Occupational Health and Safety, and achieve Social Equity Objectives

Waratah Coal has undertaken extensive community consultation prior to preparing the EIS, the outcomes of which are discuss in **Volume 1, Chapter 11**. The outcomes of the community consultation activities have been incorporated into the assessment of social impacts. Waratah Coal has also reviewed the risks to occupational health and safety posed by the project and proposed appropriate management measures.

3.6 CONCLUSIONS

Waratah Coal has developed an approach that establishes a strong foundation for the sustainable development of the project. Waratah Coal has developed and applied specific sustainability principles to the planning of the project. These principles, and the commitments and strategies identified when applying them to the impact areas, will be built on progressively as the project develops.

Specifically, this chapter meets the Terms of Reference (ToR) requirements as follows:

- it clearly demonstrates how the project conforms to the NSESD's objectives. This analysis has taken a life-of-project perspective and demonstrated that the project has strived to achieve a balance between environmental, social and economic development;
- the commitment of Waratah Coal to sustainability is clearly demonstrated. This sustainability commitment applies to the EIS and the life of the project; and
- explains how sustainability has been integrated into the project and EIS through the development and application of sustainability principles. This approach will be carried through for the project lifecycle, with sustainability considerations incorporated into management systems and plans and subject to continuous improvement.

Overall, this EIS demonstrates the sound sustainable basis for the project in that it:

- provides sustainable economic returns for Waratah Coal and its owners;
- provides sustainable social and economic benefits to stakeholders including Commonwealth and Queensland Governments, and the local and regional communities;
- minimises environmental impacts and continue to develop offset strategies to address residual impacts; and
- has applied a sustainability approach to guide planning, design, construction, operation and decommissioning of the project.