



## Sustaining energy for the future

www.wallarrah.com.au

### New Look Project

This newsletter has been prepared specifically for the community. It is the first under the banner *Wallarrah No 2 Coal Project* through which we will keep you informed.

Many of you will know that the NSW Government originally granted exploration licences in 1995 to the Wyong Areas Coal Joint Venture for the two areas east and west of the F3 Freeway.

This newsletter explains how we now intend only to seek approval to mine under parts of the western area over a total period of more than 40 years (Figure 1).

In this and future editions of the newsletter we hope to provide answers to the questions that people have been putting to us throughout the exploration process and to provide wherever possible plain English explanations of what can be complicated technical statements.

We know that if the mine proceeds there are the tangible community benefits of employment, of income generation, of opportunities for suppliers and service providers. We also know that it is not possible for us to proceed unless we are open and honest in our dealings with the community.

We believe we can develop a viable mine that can bring value to the community and we ask only that you judge us and the project on our merits.

*Insik Kim*

General Manager  
Wallarrah No 2 Coal Project

### Coal Project Plan Ready Within a Year

An environmental assessment report for the coal licence area west of the F3 Freeway is scheduled to be submitted to the NSW Government within a year.

The company, Wyong Areas Coal Joint Venture, has been undertaking additional investigations and assessment over the past year in order to develop an environmentally responsible project that will meet or exceed environmental, economic and community expectations.

The proposed underground mine has been designed to minimise its impact on the environment, particularly the local community. The extent of proposed underground mining has been significantly reduced as a result of geological data and the views of the community. The mine plan extends beneath a portion of the Hue Hue rural residential area and the Dooralong Valley before progressively mining beneath the State Forest area. Longwall mining will not take place directly beneath the Wyong River nor within the vast majority of the flood plain of the Yarramalong Valley.

The company will seek approval to extract coal from seams that are between 350 and 650 metres below the surface. There are no plans to mine the eastern area beneath Tuggerah Lake.

Under the proposal, coal would be mined over 42 years and brought by a four-kilometre underground drift to the pit top at Tooheys Road near the intersection of the Doyalson Link Road and the F3 Freeway. A drift is an inclined access tunnel. Coal will be moved from the site by rail as shown on Figure 2 (over page).

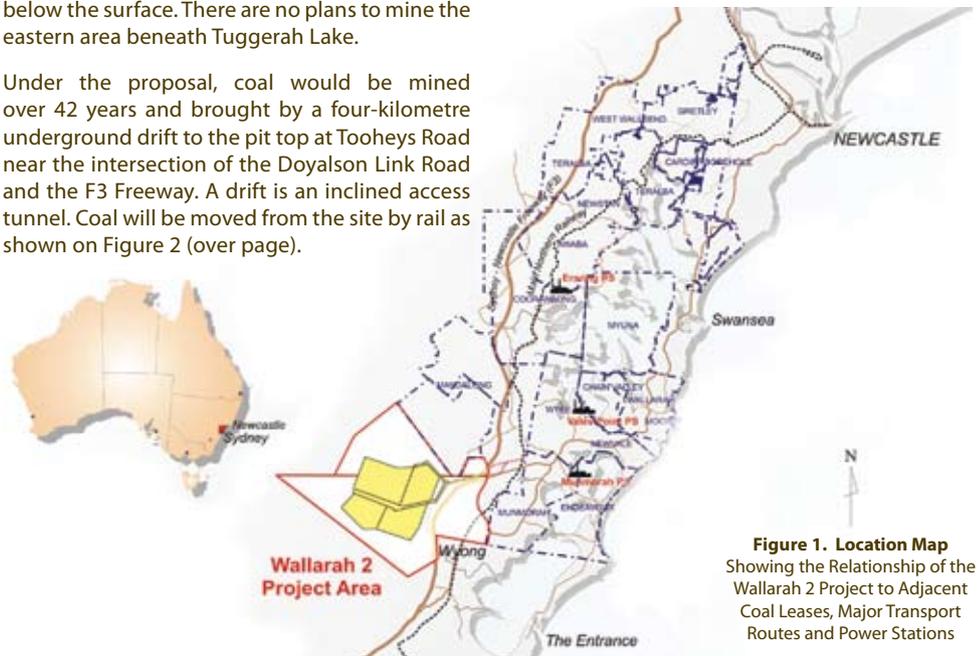
The Wyong community has been kept informed throughout the project, under project leaders Coal Operations Australia and BHPBilliton and this will certainly continue as the project gears up under the new leadership of founding shareholder Kores Australia.

Peter Smith, Environment and External Affairs Manager for Wallarah No 2 Project, and other senior officers have briefed the Community Liaison Committee, Wyong Council and officers, and Members of Parliament and government agencies.

The project application will reflect the stringent requirements for environmental management that the local and wider NSW communities expect in the 21st Century.

*“ Various project modifications and exciting new initiatives are being explored and, as has been done right through this process, we will keep the community informed as the facts become available. ”*

says Peter Smith.



**Figure 1. Location Map**  
Showing the Relationship of the Wallarah 2 Project to Adjacent Coal Leases, Major Transport Routes and Power Stations

### Project Named Wallarah No 2

As is the tradition in the mining industry, the project has reached the stage where there is confidence a mine can be developed and so it is given a name. It is called **Wallarrah No 2 Coal Project**.

The word Wallarah has strong historical links in the region's coal industry. It is the name of the major seam in which this mine will operate. It is also the name of the former Wallarah Colliery in the northern part of Wyong and a ship that was used to carry coal from the Catherine Hill Bay mines to Newcastle.

Minority shareholder Kores replaced BHPBilliton as the majority shareholder in 2005.

Mining industry specialist company, Minarco, is progressing the feasibility and environmental studies on behalf of Kores Australia. A final mine plan will depend on the results of these continuing studies.

## Some Basic Facts

- ▶ Mining proposed only in a small section of the Western area
- ▶ No mining beneath Tuggerah Lake
- ▶ Surface facilities located away from residential areas and within proposed future industrial precincts
- ▶ Mine plan to minimise impacts of subsidence
- ▶ No washplant or associated waste disposal issues
- ▶ Commitment to protect water supplies
- ▶ Coal movement underground and then by rail
- ▶ 300 direct jobs
- ▶ 750 indirect jobs
- ▶ Construction costs in excess of \$750 Million

## Some Background Information

- ▶ **Kores Australia** is a wholly owned subsidiary of the Korea Resources Corporation, a mining and investment agency of the Government of the Republic of Korea. Kores has been a shareholder in this project since its inception.
- ▶ With SK Corporation, Kores also owns 50% of the **Springvale Colliery** near Lithgow and holds a minor interest in the **Togarah North** coal project in Queensland.
- ▶ The exploration licence of the Wyong project was awarded initially to **Coal Operations Australia Limited**. That company later became part of the **Ingwe** coal group, which in turn became part of the **Billiton** group. Following a merger **BHPBilliton** became the majority shareholder.
- ▶ Most of the coal from the Wallarah No 2 mine will be exported through the **Port of Newcastle** to Korean and Japanese markets. Korea relies entirely on imported coal.
- ▶ Over \$60 million has already been invested in the exploration and investigations process for the project.

## Mine Subsidence Areas

In recognition of the high quality resource within the Hue Hue area and its likelihood of being mined in the foreseeable future, a Mine Subsidence District was proclaimed in 1988.

An additional Mine Subsidence District was proclaimed in 1997 covering the Wyong State Forest, Dooralong Valley and Yarramalong Valley.

The purpose of the Mine Subsidence Districts is to ensure that housing and other development takes into account the potential subsidence effects from future resource extraction, as set by procedures and standards established by the NSW Government's relevant agency for subsidence, the Mine Subsidence Board.

The Board is funded by a government levy on the coal industry and is entirely independent. Its tasks include funding repair and restoration of damage caused by subsidence.

## Project Overview

The project will involve the extraction of up to 5 million tonnes per annum of export quality thermal coal by underground longwall mining methods. The mine will be served by surface facilities located away from residential areas.

There will not be a coal washing plant because coal quality is suitable for both the export and local thermal markets without the need for additional processing. Accordingly, there will be no coal waste materials produced. All coal produced will be railed off site, generally to Newcastle for export.

The coal resource is suitable for use in electricity generation.

### The key elements of the project are:

- ▶ An underground longwall mine
- ▶ A coal handling plant and storage facilities
- ▶ Rail loop and loading infrastructure
- ▶ An underground drift entry
- ▶ Ventilation shafts, and
- ▶ Gas management facility

All of these surface facilities except the ventilation shafts will be located on company owned land between the Doyalson link road and the F3. The initial ventilation shafts will be on company owned land near the Buttonderry Land Waste Management Facility. The second shaft site will be located within the State Forest away from residential areas.

Gas is a normal by-product of coal mining while providing safe and well ventilated working areas. It will be extracted from the mine and brought to the surface facilities by underground pipeline and used either on site to generate power or transferred into the general gas grid.

The project proposes to extract 185 million tonnes of coal from within the total western resource of approximately 878 million tonnes. Over half of the proposed mining area lies beneath the Wyong State Forest and surrounding ranges. Part of the mining area lies beneath the Dooralong Valley, while smaller portions of the resource extend beneath parts of the Yarramalong Valley and the Hue Hue area.

**Benefits to the community** will include the provision of around 300 direct jobs, around 70% of which could be recruited locally. In addition, a substantial annual allowance has been made for activities such as youth employment, health workshops and recreational support facilities. Some 750 new jobs could be expected to be supported in the local and regional economy stemming from the indirect effects of the new project.

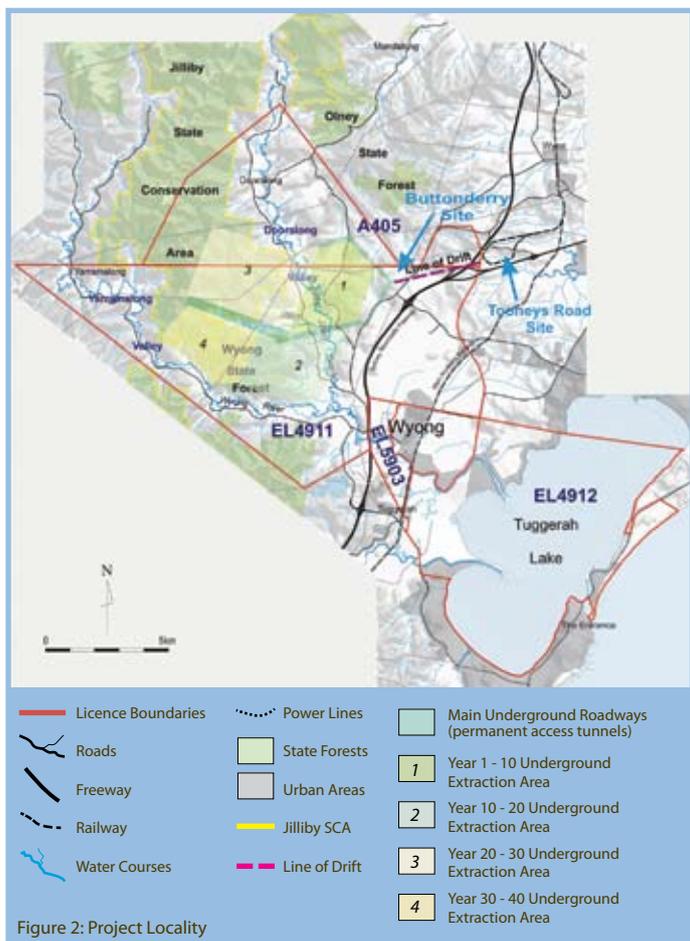
**Total revenue to Government** is estimated to be in the order of \$1 billion over the project life and substantial indirect economic benefits will arise from ongoing expenditure on services, maintenance, plant and equipment and flow-on employment effects.



## Mine Location and Extraction Sequence

The indicative mine layout and development features are shown in **Figure 2**. Evaluation of the alternate layouts indicates that the proposed mine plan is the superior layout. The mine layout incorporates a variety of longwall panel widths and extraction heights in order to optimize economic reserve recovery taking into account environmental and subsidence constraints, including:

- ▶ special subsidence limitations to protect structures in the Hue Hue Mine Subsidence District
- ▶ existing flood-prone valleys and structures
- ▶ management of surface water and groundwater, including water catchment functions for community water supplies.



## The Planning & Development Process



Note: There are no plans to mine the eastern area

## Community Consultation

Kores is committed to effective and transparent consultation with the community throughout the project development and approval process. Key government agencies have also been involved in the consultation process and have received regular updates on community issues.

There have been several beneficial outcomes from the consultation process, which have led to modifications to the project design.

Key consultation activities have included newsletters and facts sheets, public displays, briefings, telephone information number, dedicated website, presentations to the Community Liaison Committee, community survey, and media.

We will maintain this regular consultation as well as provide up to date information on our web page: [www.wallarah.com.au](http://www.wallarah.com.au)



## Environmental Protection

Detailed environmental studies have been used to assess potential impact on the environment, both social and physical, and have been used to rank the degree of potential impact. These studies are continuing and to date have delivered a considerable bank of knowledge. Studies to date and community feedback have identified several key risk areas for detailed assessment:

- ▶ subsidence effects on structures;
- ▶ impacts on water supplies;
- ▶ groundwater, aquifers and streams; and
- ▶ flooding implications.

### Groundwater and water supplies

A hydrogeological investigation was begun in 1997, which investigated groundwater in Yarramalong and Dooralong Valleys. The study investigated groundwater extracted from monitoring wells and registered bores located within the area. Kores Australia has commissioned Mackie Environmental Research to further the groundwater investigations and in particular to assess the potential impacts on near-surface aquifers and groundwater systems.

Given some recent questions and comments it is important to address early the issue of protection of groundwater.

#### **All research to date shows that this project will not deplete groundwater.**

Groundwater that will be affected by the mine is well below that which is used for farming and domestic water supplies. Water in the mine will be pumped to the pit top at the surface. It is saline and unusable for any domestic or rural purpose without treatment.

In the early stages of the mine all water pumped out will be used on site for dust suppression. After this initial period there will be surplus water produced. In order to improve the quality of this water and make it suitable for other uses, we will be installing a water treatment plant. Once treated, it can then be available for other purposes including supplying the surface rivers for environmental flows or even directly into the water supply system.

This initiative will in fact increase the total usable water for both the community and the environment.

The Community Liaison Committee and Wyong Council have been briefed on these facts and this outcome.

### Subsidence

Both Strata Control Technology Pty Limited and Mine Subsidence Engineering Consultants Pty Limited are currently undertaking the subsidence assessment for the project. The use of two leading consultants for the subsidence assessment for this project reflects our desire to ensure that this is satisfactorily addressed during the finalisation of the mine plan design and subsequent environmental assessment.

The mine has incorporated a number of protection measures to safeguard against adverse impacts on the local community. The amount of coal to be extracted beneath the Hue Hue area has been significantly reduced to ensure that surface movement (referred to as subsidence), will be within the levels stipulated by the declared Subsidence District for effective management of impacts on structures.

Similarly, when crossing deep beneath the Dooralong Valley floodplain, which is necessary to access coal reserves within the surrounding State Forest, the mine design has been selected to reduce the subsidence effects. Such subsidence protection zones have been included in both the Yarramalong and Dooralong Valleys as well as the Hue Hue rural residential area.

### Flooding

Two preliminary flood studies of major catchments within the subsidence area have been prepared for the Project.

The baseline flood studies demonstrated that both the Yarramalong and Dooralong Valleys are significantly flood prone. The floodplain is subject to regular inundation to significant depths. Bridges and culverts are cut off regularly and for long periods during relatively small floods. Large sections of the main roads into both valleys are flood affected and many of the access roads pass through the floodplain.

The Hue Hue Creek floodplain is different as flood depths are significantly less. The majority of flood prone land is located in rural or public open space areas of the catchment rather than in rural residential area.

The next phase of the study is to undertake an assessment of subsidence impacts on the flooding regime and flood liable structures and include:

- ▶ flood affected dwellings and structures;
- ▶ flood liability;
- ▶ flood hazard assessment;
- ▶ property access;
- ▶ time of ponding; and
- ▶ proposed flood mitigation measures.

There remains further work to do to fully assess the project's implications on these and other environmental, social and economic factors. The community will be informed of progress in these studies via future newsletters and our website ([www.wallarah.com.au](http://www.wallarah.com.au)).



## Contact Us

We hope you find the newsletter valuable but as always we welcome your inquiries and comments that you can direct either by:

Telephone: 02 4352 7500  
Email: [info@wallarah.com.au](mailto:info@wallarah.com.au)  
Website: [www.wallarah.com.au](http://www.wallarah.com.au)

Interview: Our offices are at 25 Bryant Drive, Tuggerah.  
You are welcome to visit but it is advisable to telephone first to ensure the person who can best help is available.