



# PROJECT OVERVIEW

**KEPCO Bylong Australia (KEPCO) proposes to develop the Bylong Coal Project (the Project) located approximately 55km north-east of Mudgee. Exploration work to date has defined a mineable coal resource and KEPCO is now seeking development consent under the New South Wales (NSW) *Environmental Planning and Assessment Act 1979*.**

In December 2010, KEPCO acquired Authorisations (A) 287 and A342 in the Mid-Western Regional Council local government area of NSW. Since this time, KEPCO has carried out exploration activities in these areas to define the resources for potential future mining.

The proposed coal mine will recover up to 6.5 million tonnes per annum (Mtpa) of run of mine (ROM) coal to produce a high quality thermal coal product for the export market. The mine will include two open cut mining areas and an underground mining area. Subject to the grant of development consent and other approvals, construction is proposed to commence in 2019. The Project life is approximately 25 years comprising a two year construction period and 23 year operational period. Open cut operations are proposed to commence following construction and last about nine years (including two years decommissioning) with the operation of an underground mine commencing in around the seventh year of the Project.

Coal will be transported from the Project site to the Port of Newcastle via rail. This will require the construction of a rail loop connecting to the existing Sandy Hollow to Gulgong Railway Line which runs through the Project area. The mine is likely to employ up to approximately 650 people at peak construction and provide direct employment for up to approximately 450 workers during operations.



Exploration activities

## PROJECT FAST FACTS

<b>Local Government Area</b>	<ul style="list-style-type: none"> <li>Mid-Western Regional Council</li> </ul>
<b>Open cut mine</b>	<ul style="list-style-type: none"> <li>Two open cut mining areas.</li> <li>Contemporary open cut excavator and truck mining techniques supported by other ancillary mining equipment</li> </ul>
<b>Underground mine</b>	<ul style="list-style-type: none"> <li>Longwall mining techniques with primary access provided via two drifts</li> <li>Supported by above-ground infrastructure</li> </ul>
<b>Supporting facilities</b>	<ul style="list-style-type: none"> <li>Coal handling and preparation plant, administration buildings, workshop, bathhouse, explosives magazine, fuel storage facilities, sewerage treatment systems, communications and electricity reticulation infrastructure and other mining related facilities</li> </ul>
<b>Mine life</b>	<ul style="list-style-type: none"> <li>Total life of the Project - 25 years</li> <li>Open cut mine operations – 9 years</li> <li>Underground mine operations – 20 years</li> </ul>
<b>Coal production</b>	<ul style="list-style-type: none"> <li>Up to 6.5 Mtpa of ROM coal</li> <li>~119.8 Mt of ROM coal over 23 years</li> </ul>
<b>Workforce requirements</b>	<ul style="list-style-type: none"> <li>650 (approximately) full time equivalent at peak construction</li> <li>450 (approximately) full time equivalent at peak operation</li> </ul>
<b>Workforce source</b>	<ul style="list-style-type: none"> <li>Workers will be sourced locally, regionally and from across NSW and supplemented with workers from interstate if required</li> </ul>
<b>Workforce accommodation</b>	<ul style="list-style-type: none"> <li>Employees will be encouraged to reside locally and source accommodation in the local area</li> </ul>



## MINING METHODS

The mine planning process has involved the completion of a number of distinct study phases. Each mine planning phase was assessed in terms of key economic criteria, set by KEPCO, with relevant consideration of applicable constraints (such as environmental and social) to the Project.

The planning process identified that the majority of the Project's coal resources would be most suited to underground mining methods. However, the initial stages of the Project will involve the use of open cut mining methods to recover portions of the coal resource located in the lower parts of the Valley, where the coal deposit is too shallow to be safely recovered using underground techniques. Two open cut mining areas are proposed for the efficient recovery of approximately 28 Mt of ROM coal. The open cut operations are required to ensure the economic viability of the Project, sustain a lower cost of production, and offset the capital intensive underground operation that will provide the bulk of production. The open cut mining areas also provide an appropriate receptacle for the storage of the coarse and fine reject materials generated from the processing of ROM coal recovered by underground mining methods. This effectively avoids the need for the Project to construct and manage a tailings dam on the land surface.

The underground mining operations will recover approximately 91 Mt of ROM coal utilising longwall mining techniques.

The Project seeks to recover approximately 119 Mt of ROM coal over its operational life.

## REHABILITATION

KEPCO is committed to rolling out an industry leading rehabilitation program and is developing a long-term rehabilitation strategy. The majority of the areas to be disturbed by open cut operations and associated infrastructure will be rehabilitated to include a mix of pasture, fodder cropping and native vegetation areas. The final landform will reinstate an equivalent amount of higher quality agricultural lands (i.e. Class 3 and 4) to mitigate the impacts of mining activities.

Rehabilitation of the open cut mining areas will commence progressively in Project year 3 (following construction), minimising the time that land will be removed from productive use. Early progressive rehabilitation will ensure that the majority of the open cut mining areas will be rehabilitated, and returned to a landform consistent with pre-mining conditions, within 10 years of the Project commencing. The balance of the open cut mining area will be progressively backfilled and rehabilitated with reject materials generated through the underground mining operations.



*Example of coal handling and stockpiling facilities*

## KEPCO

KEPCO Bylong Australia Pty Ltd (KEPCO) is the proponent and 100% owner of the Project. KEPCO is a subsidiary of Korea Electric Power Corporation, which is responsible for the generation of 80% of South Korea's electricity.