

# Advanced Energy



## ***Wilpinjong Extension Project On-site PAC Briefing***

***28 November 2016***

***Blair Jackson – General Manager***

***Micheal Alexander – Director Projects & Portfolio Management NSW***

***Ian Flood – Manager Project Development and Approvals***

**Peabody**  
ENERGY

## *Agenda*

1. Peabody overview
2. Wilpinjong Coal Mine overview
  - Video flyover
3. Overview of the Extension Project
4. Land ownership
5. Environmental studies
6. Aboriginal Heritage
7. Biodiversity
8. Final landforms and rehabilitation
9. Wollar Plan
10. Closing remarks

# About Peabody Energy



*Peabody Energy is the world's largest private-sector coal company*

- Peabody globally has a leading position in United States' Powder River Basin and Illinois Basin and an Australian metallurgical and thermal coal platform to capture higher growth Asian markets. We serve customers in some 25 countries on six continents.
- In 2015 the company:
  - Set a new record for safety, with a 13 percent reduction in the global incidence rate
  - Sold 228.8 million tons of coal through sales, trading and brokerage activities
  - Delivered revenues totalling \$5.61 billion
  - Had 7.55 billion tons of proven and probable reserves
  - Had a global workforce of approximately 7,000
  - Rehabilitated 4,716 acres of mined lands and planted approximately 442,000 trees

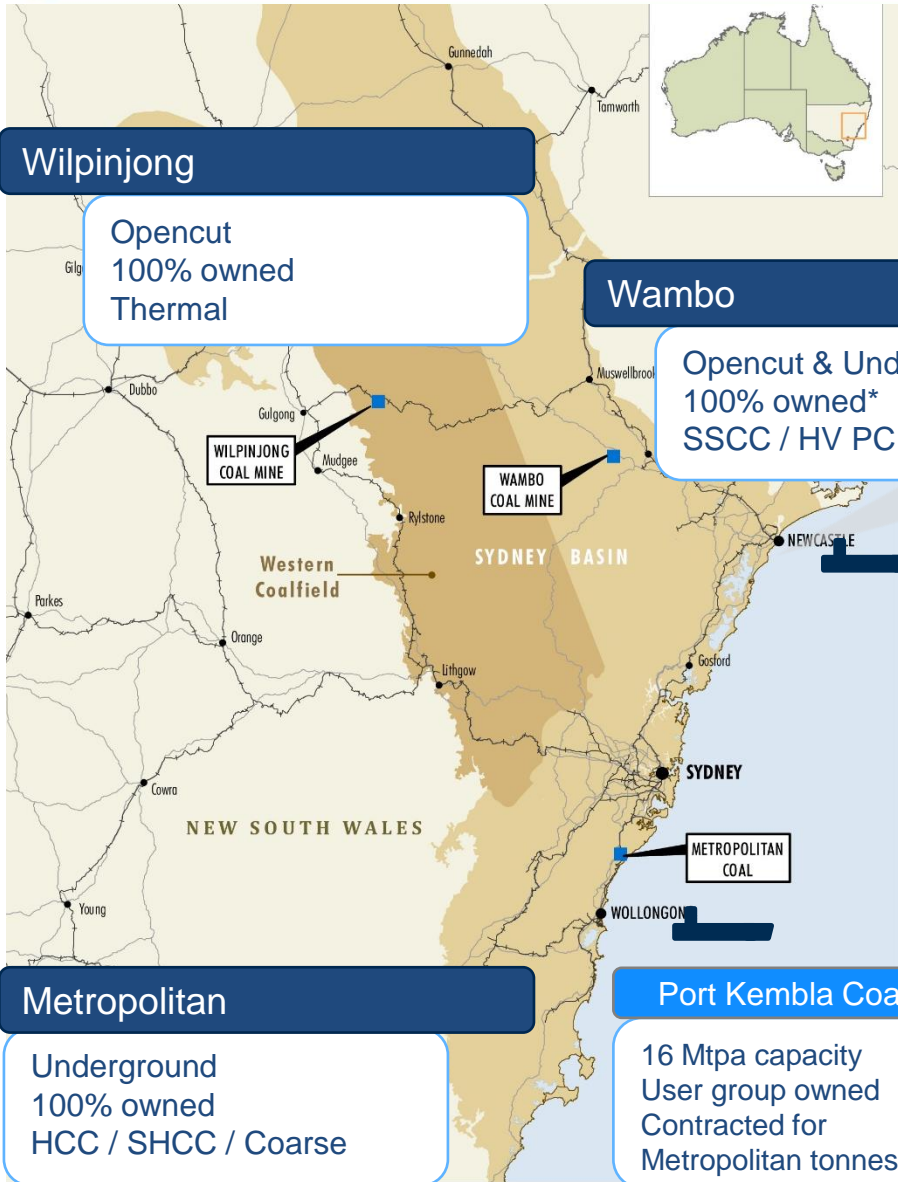
# About Peabody's Australia Platform



- In 2015, Peabody's Australian operations achieved total sales of 35.8 million tons primarily to steel producers and electricity generators in Australia and Asia
- Peabody has mining operations across Queensland and New South Wales employing over 3,500 people
  - Qld: North Goonyella, Burton, Millennium, Coppabella Moorvale and Middlemount (50%)
  - NSW: Metropolitan, Wambo OC, Wambo UG and Wilpinjong



# Peabody Energy – NSW Portfolio



NSW Platform produced 20 Mt saleable coal in 2015

## Wilpinjong

Opencut  
100% owned  
Thermal

## Wambo

Opencut & Underground  
100% owned\*  
SSCC / HV PCI / Thermal

## Newcastle Office

Marketing and Logistics office, managing the execution of sales/trade

## NCIG

66 Mtpa capacity  
User group owned, with Peabody shareholding currently 17.7%

## PWCS

145 Mtpa capacity  
User group owned

Contracted for existing and organic expansion potential from equity operations

## Metropolitan

Underground  
100% owned  
HCC / SHCC / Coarse

## Port Kembla Coal Terminal

16 Mtpa capacity  
User group owned  
Contracted for Metropolitan tonnes

\* Subject to Third party B Class Shareholding entitling 25% profit share 5

## *Progressing Through Chapter 11 Process*

- Received court approval on various motions allowing operations to proceed in ordinary course
  - \$800 million debtor-in-possession financing facility approved, providing access to capital
  - Uninterrupted employee payments and post-petition vendor payments approved
- Ongoing court process and stakeholder engagement over coming weeks and months
  - Largely to be expected given wide-array of stakeholders
- Continue to progress forward, repositioning the company for long-term success
  - Intend to work through the process as quickly as possible and have secured financing for up to 18 months
- Delivered Peabody Energy business plan in August 2016
- Delivery of Emergence Plan late 2016
- Complete reorganisation within the 12-month period contemplated for Chapter 11 cases (April 2017)

# Wilpinjong Overview

<b>Product</b>	<ul style="list-style-type: none"> <li>Thermal coal</li> <li>5610-6360 GAR, 10.0% moisture, 14.0-22.0% ash</li> </ul>
<b>Ownership</b>	<ul style="list-style-type: none"> <li>100% owned and operated</li> </ul>
<b>Location</b>	<ul style="list-style-type: none"> <li>Western coalfields of New South Wales, 40 kilometres northeast of Mudgee</li> </ul>
<b>Overview</b>	<ul style="list-style-type: none"> <li>Open cut mine utilizing dozer, excavators and trucks</li> <li>Workforce of up to 550 mainly residing in Mudgee and surrounds</li> <li>Important provider of low cost thermal coal to support NSW electricity supply (AGL)</li> </ul>
<b>Reserves (Mt)</b>	<ul style="list-style-type: none"> <li>Total reserves 154 Mt</li> </ul>
<b>Major Equipment</b>	<ul style="list-style-type: none"> <li>Excavators – 1 Liebherr 9400 and four 9350; Trucks – 19 CAT 789</li> </ul>
<b>Transportation</b>	<ul style="list-style-type: none"> <li>Railed to either Newcastle Coal Infrastructure Group (NCIG) or Port Waratah Coal Services (PWCS) at Newcastle; rail coal domestically</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Mining Ulan and Moolarben seams with seam thickness of 0.5 to 12 metres at depths of 5 to 40 metres</li> </ul>
<b>Coal Processing</b>	<ul style="list-style-type: none"> <li>1,250 tph heavy media wash plant</li> <li>9.2 Mtpa annual feed capacity</li> <li>Domestic quality coal is bypassed</li> </ul>



Residential workforce of ~ 550 employees

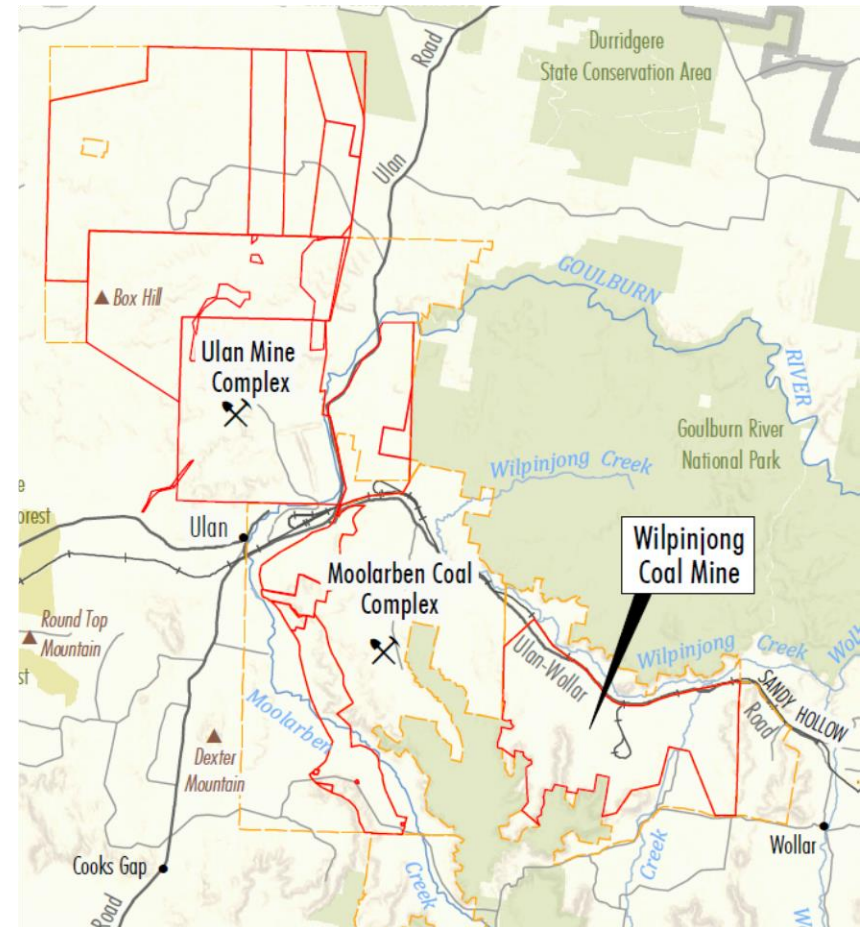


Truck, Excavator and Dozer mining

# Wilpinjong Overview

## *Wilpinjong is part of the established Western Coalfield*

- Wilpinjong is part of the Western Coalfield mining complex that provides ~ 20% of NSW coal and also some of the State's cheapest coal
- Located in close proximity to Ulan and Moolarben mining complexes
- Between the MGNR and G. River National Park
- Data sharing agreements:
  - Blasting schedules
  - Environmental monitoring data (noise, dust, weather etc.)
  - Traffic management
- Ulan Road Strategy (cumulative traffic mitigation)
- Environmental teams meet on a quarterly basis





## *Our social licence to operate is more valuable now than ever before*

- Environmental compliance and community engagement are key to retaining our social licence
- Community engagement via our CCC, meetings with Council and community play an important part in maintaining our reputation within our local community



Wilpinjong - active mining areas and active rehabilitation areas

# Wilpinjong Overview

## *We are part of the local community and contribute in many ways*

- WCPL holds quarterly Community Consultative Committee (CCC) Meetings with key stakeholders
- Hold monthly Have-a-Chat session in Mudgee, Gulgong and Wollar
- Wilpinjong Coal donates around \$100K to the local community each year
  - Lifeskills Plus key project for the past two years
  - Lifeskills provides respite and educational services for people with disabilities in the local area
- Ulan Road Strategy contributions
- Wollar Progress Association
- Rural Fire Service



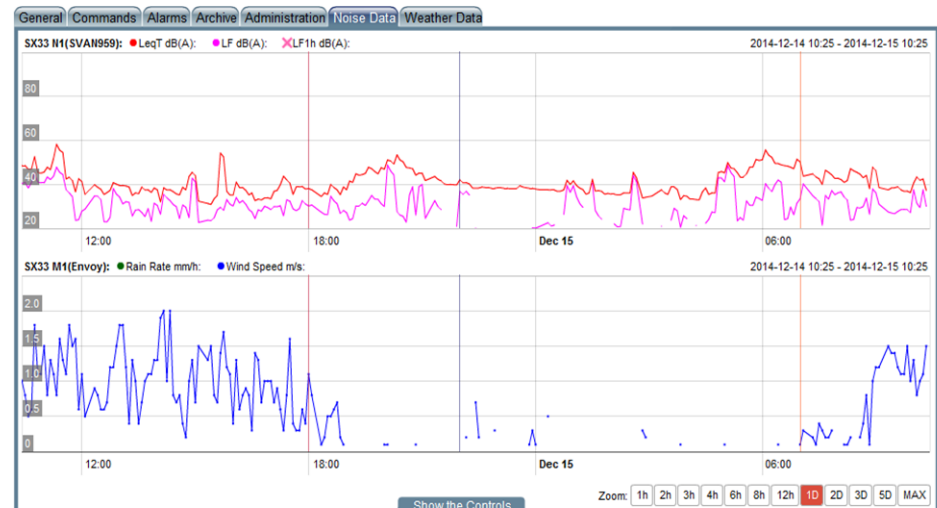
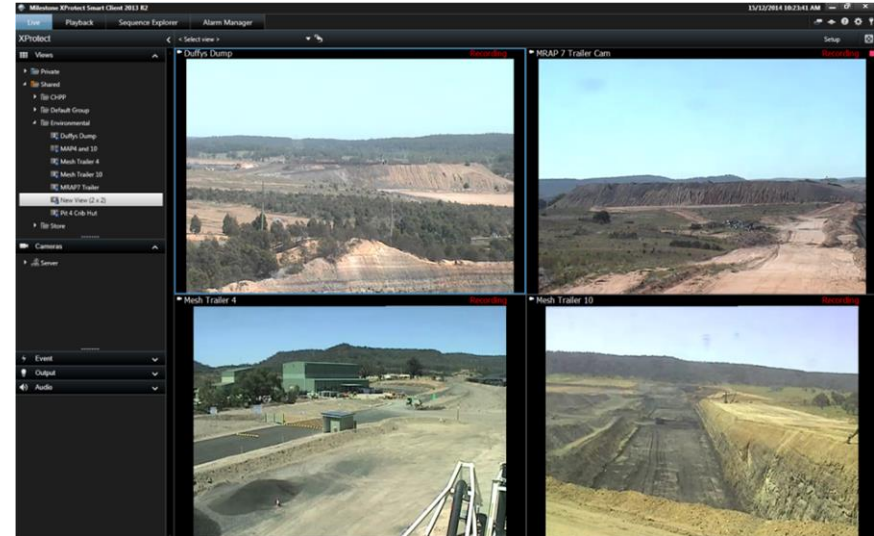
'PINK UP MUDGEE' – WCPL's Contribution

# Wilpinjong Overview

## Real-time monitoring is the key to our success

Dispatch Operators - 24 hours per day monitoring:

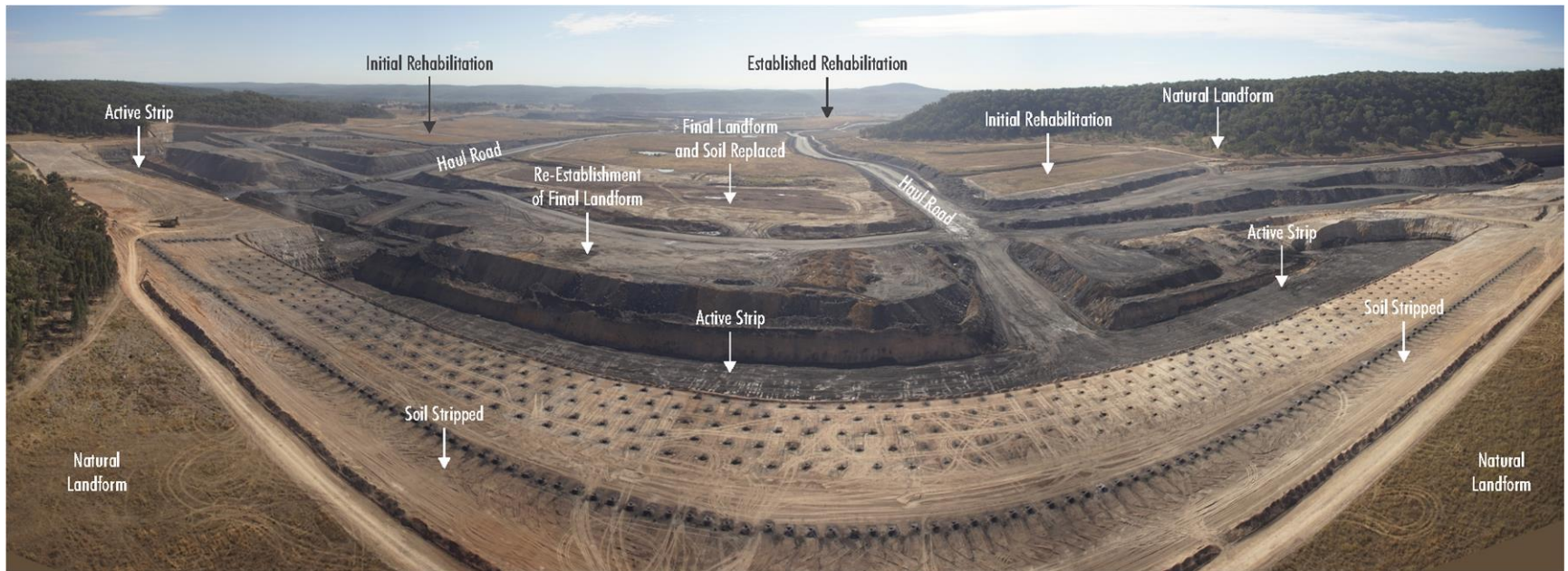
- Noise, dust, air quality and weather data
- Pit cameras
- Document and convey data and observations to Open Cut Examiners to inform decisions regarding operational performance





# Wilpinjong Overview

*Low strip ratio allows rehabilitation to closely follow mining*



Wilpinjong Pit 5 looking North



# Wilpinjong Overview

## *Mined areas returned to open woodland / grazing*



Wilpinjong – Tailings Dam 2  
active 2007



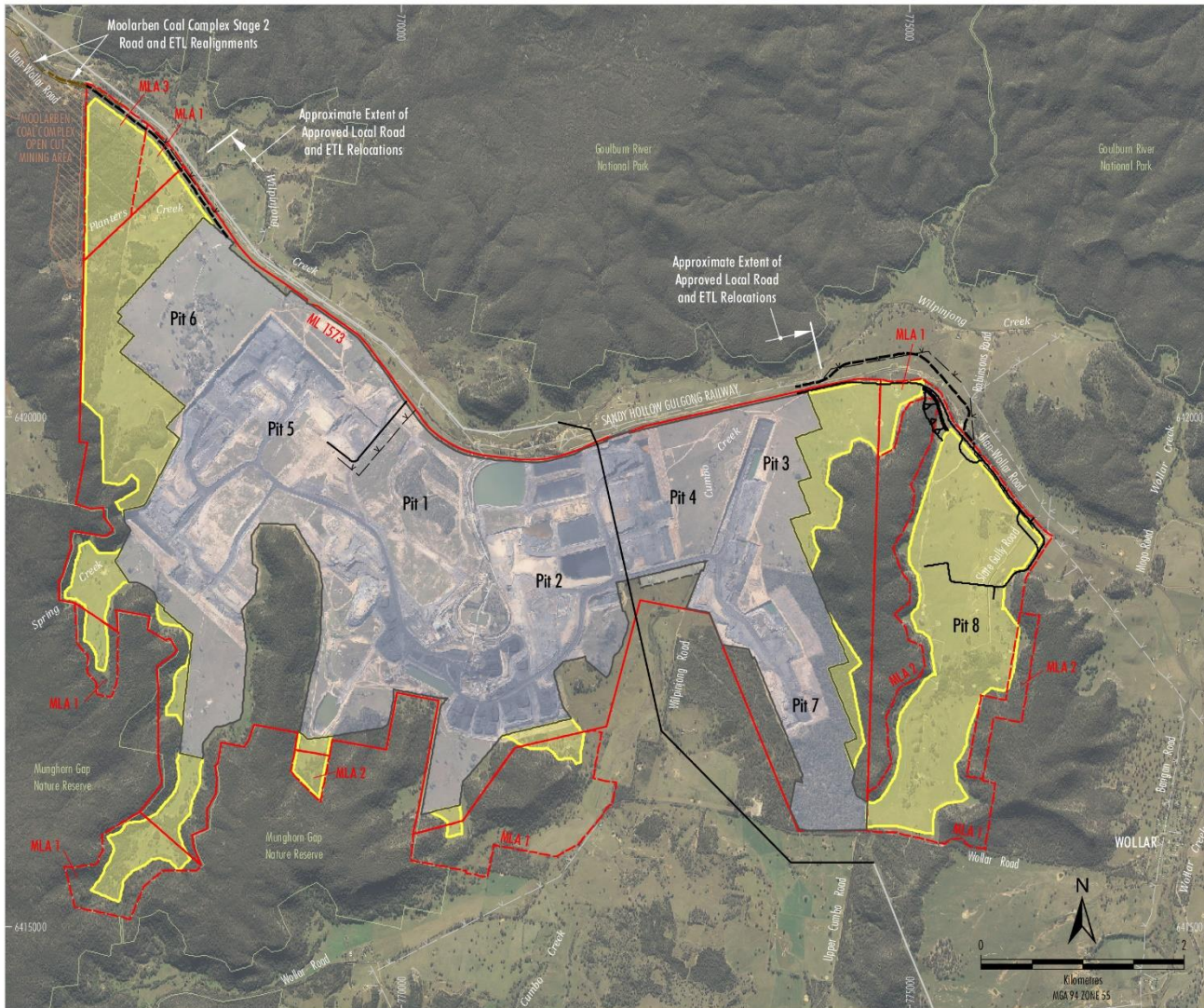
Wilpinjong – Tailings Dam 2  
rehabilitated 2015

## Video Flyover



# Wilpinjong Extension Project

## Overview



- LEGEND**
- Mining Lease Boundary
  - Mining Lease Application Boundary
  - Approved/Existing Open Cut and Contained Infrastructure Area
  - Relocated Block Bank and Cumbo Creek Disturbance Area
  - Proposed Open Cut Extension Area
  - Proposed Public Road Realignment
  - Proposed Pit 3/8 Haul Road
  - Proposed Service Road
  - Proposed Local ETL Realignment/Relocation
  - Proposed Relocated TransGrid 330 kV ETL
  - Existing Local ETL
  - Existing TransGrid 330 kV ETL

Source: WCPL (2015); NSW Dept of Industry (2015)  
 Orthophoto: WCPL (Jun 2015; Jun 2014)

## *Project highlights*

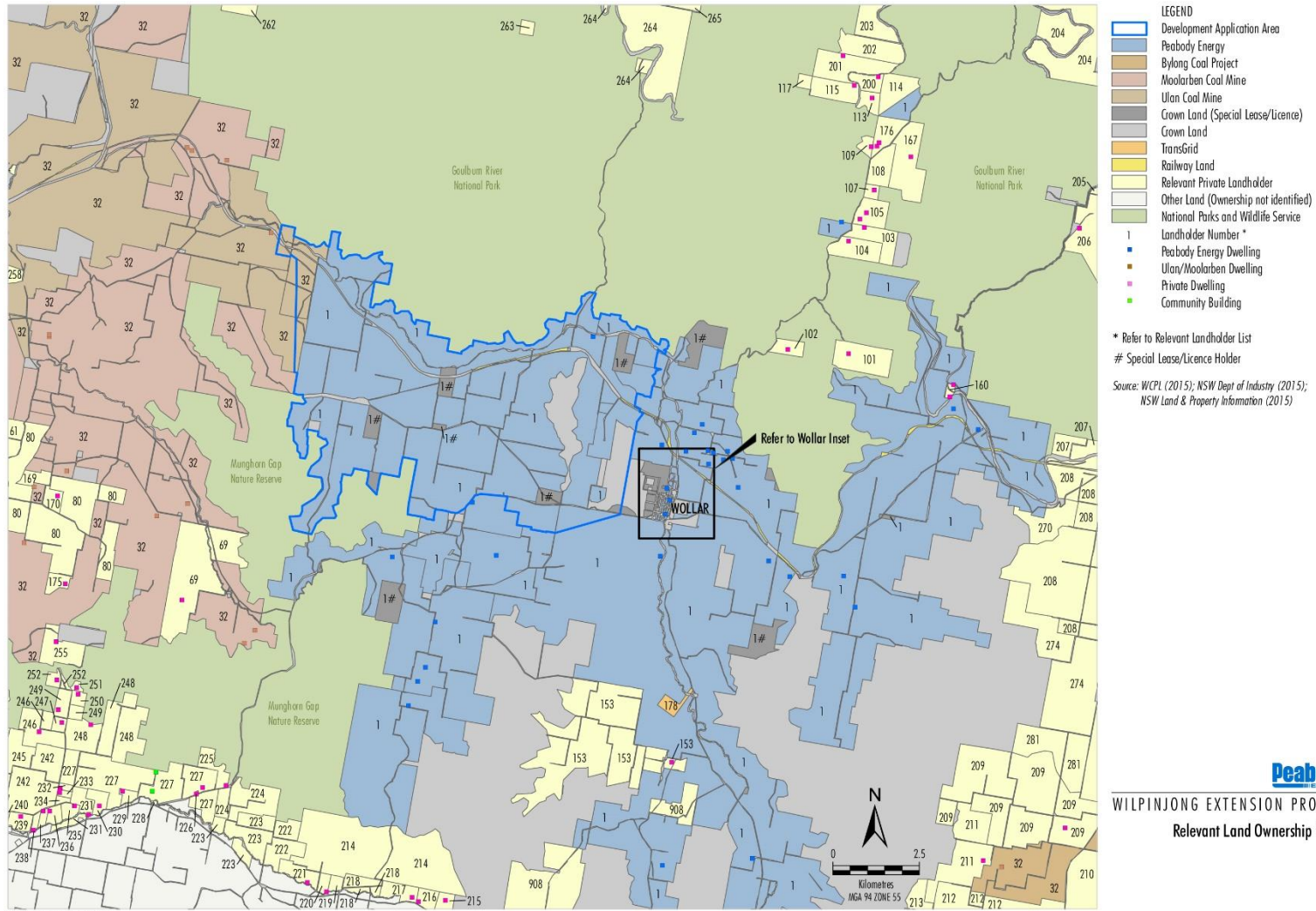
The Project would include:

- Approximately 800 ha of open cut extensions
- Mine life extension by 7 years (from 2026 to 2033)
- Continued employment of 550 people - peak of 625 (operations)
- Continued production of approximately 16 Mtpa of ROM coal
- Continued raiing of product (average of 6 and a maximum of 10 train departures/day)
- Continued use of the CHPP and general mine infrastructure
- Relocation of a section of the TransGrid Wollar to Wellington 330 kV ETL
- Local infrastructure relocations  
(e.g. realignment of Ulan-Wollar Road and associated rail level crossings, relocation of local ETLs and services)



# Wilpinjong Extension Project

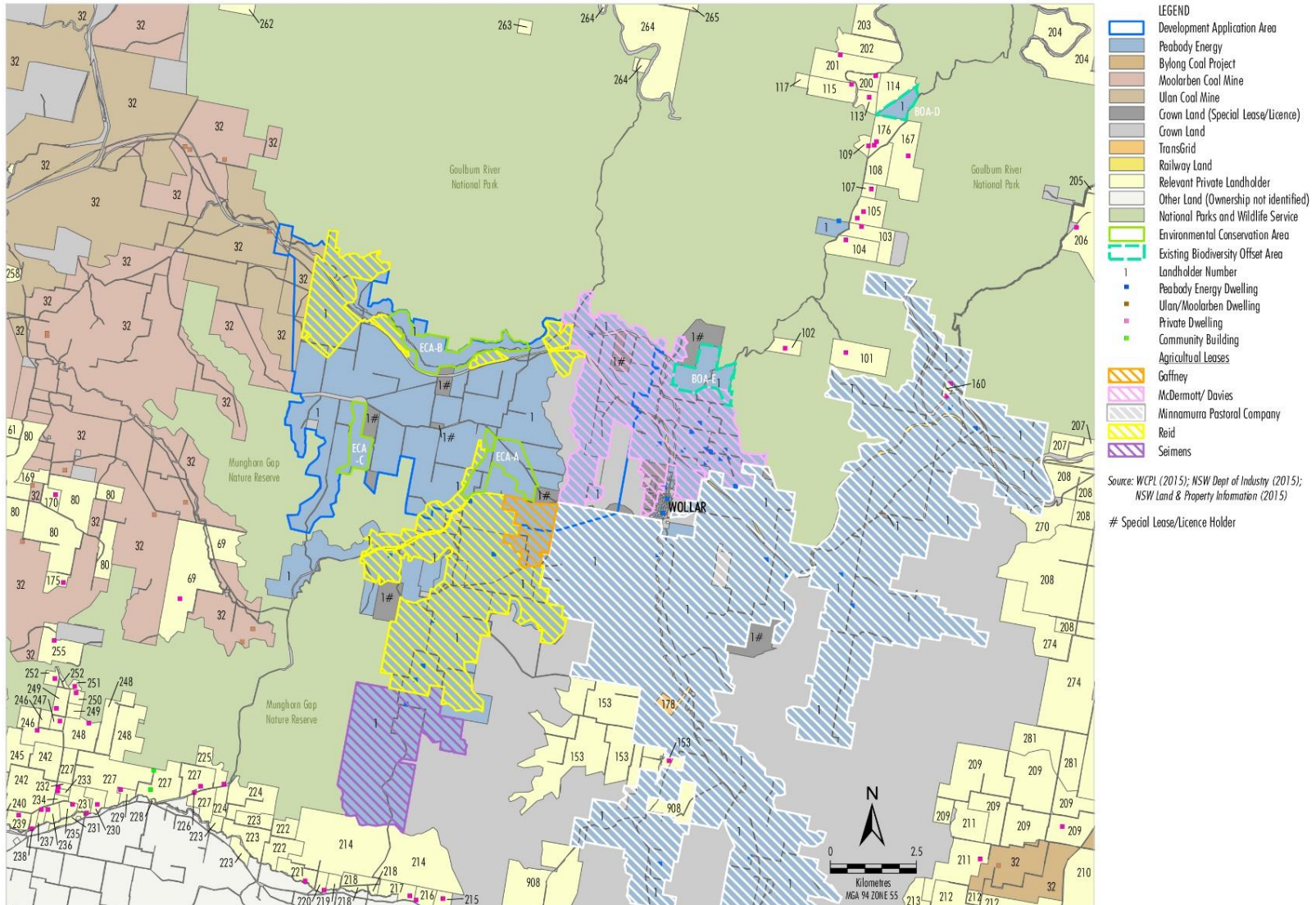
## Peabody has substantial land holdings



WIL-12-12\_WEP\_RtOS\_DC\_201A

# Wilpinjong Extension Project

## Continued agricultural enterprises





# Wilpinjong Extension Project

## Residual landowners offered acquisition rights

- ID 933
- ID 908
- ID 959 (vacant lot)
- ID 903



## *Substantial EIS studies with multiple expert reviews*

WEP EIS included 17 technical assessments to support the application:

- Noise and Blasting
- Air Quality and GHG
- Groundwater
- Surface Water
- Biodiversity (inclusive of Offset Strategy)
- Aquatic Ecology
- Aboriginal Cultural Heritage
- Historical Heritage
- Land and Soil Assessment
- Road Transport Assessment
- Geochemistry Assessment
- Land Contamination Assessment
- **Economic Assessment**
- **Social Impact assessment**
- Visual Assessment
- Environmental Risk Assessment
- Preliminary Hazard Analysis

**Bolded** = Peer review by DP&E engaged expert

Underlined = Peer review by WCPL engaged expert

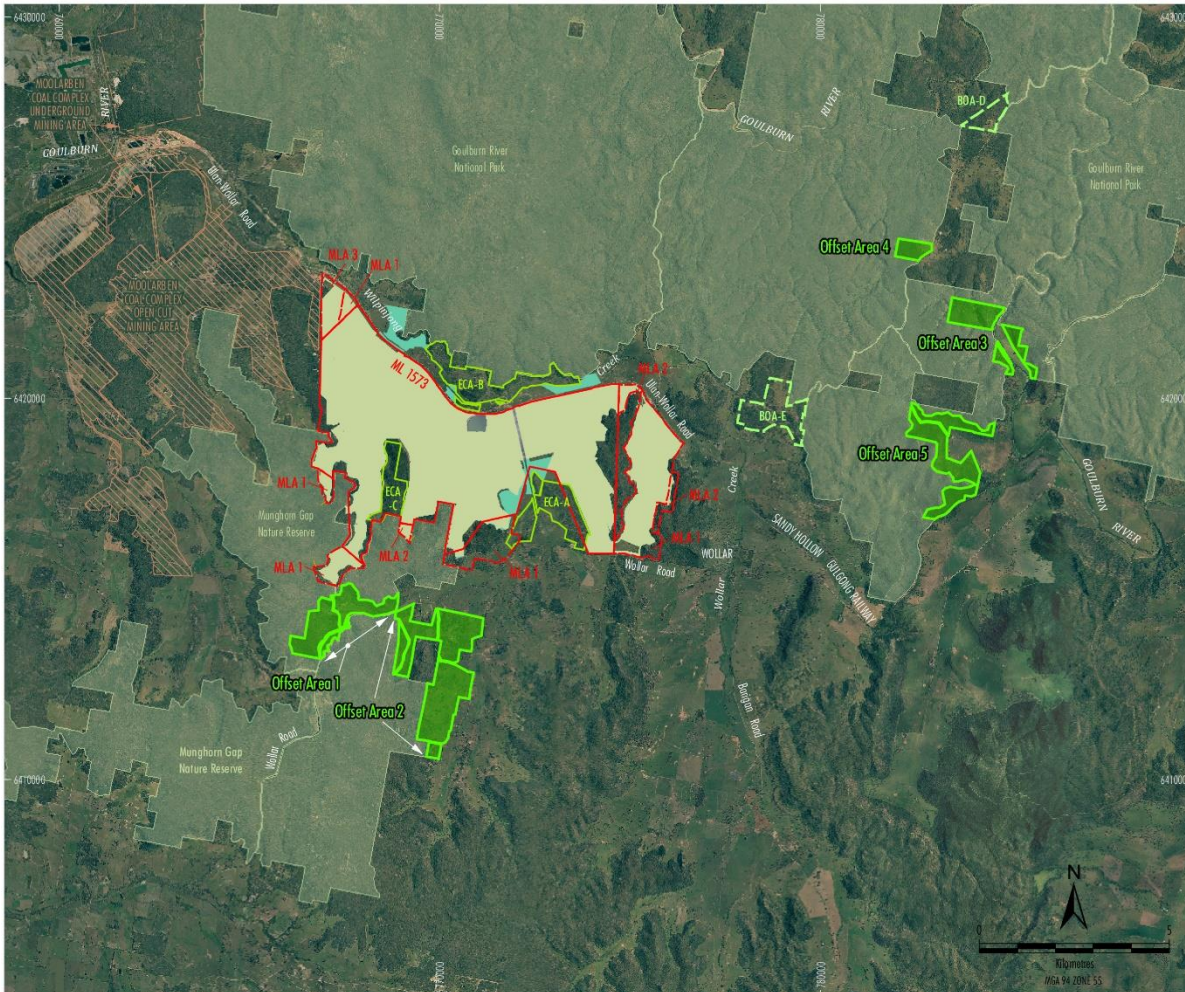


## *Comprehensive Aboriginal Heritage assessment with RAPs and highly experienced Archaeologist*

- Range of archaeological site types identified
- Cultural values identified by RAPs
- Rocky hill in Pit 8 – not unique in the region, mitigation measures:
  - Salvage excavation of deposits
  - Surface collection of identified artefacts
  - Detailed recording of ochre quarry and art
  - Further analysis of collected items
- OEH did not raise any material technical issues
- DP&E draft Consent Conditions require further targeted survey in WCPL land based offsets

# Wilpinjong Extension Project

## Biodiversity offset package leverages off existing National Parks and Conservation Areas



**LEGEND**

- Mining Lease Boundary
- Mining Lease Application Boundary
- Rehabilitation Areas potentially included in the Biodiversity Offset Strategy
- Residual Regeneration Area
- Enhancement and Conservation Area
- Existing Biodiversity Offset Area
- NSW Offset Area
- National Park/Nature Reserve

Source: WCPL (2016); Hunter Eco (2014); NSW Dept of Industry (2015)  
Orthophoto: WCPL (Jun 2015, 2011)

Biodiversity Offset Area	Area (ha)
1	201
2	417.5
3	128.5
4	39
5	221
<b>Total</b>	<b>1,007</b>
<b>Native Vegetation Disturbance</b>	<b>354</b>
<b>On-Site Rehabilitation</b>	<b>2,906</b>

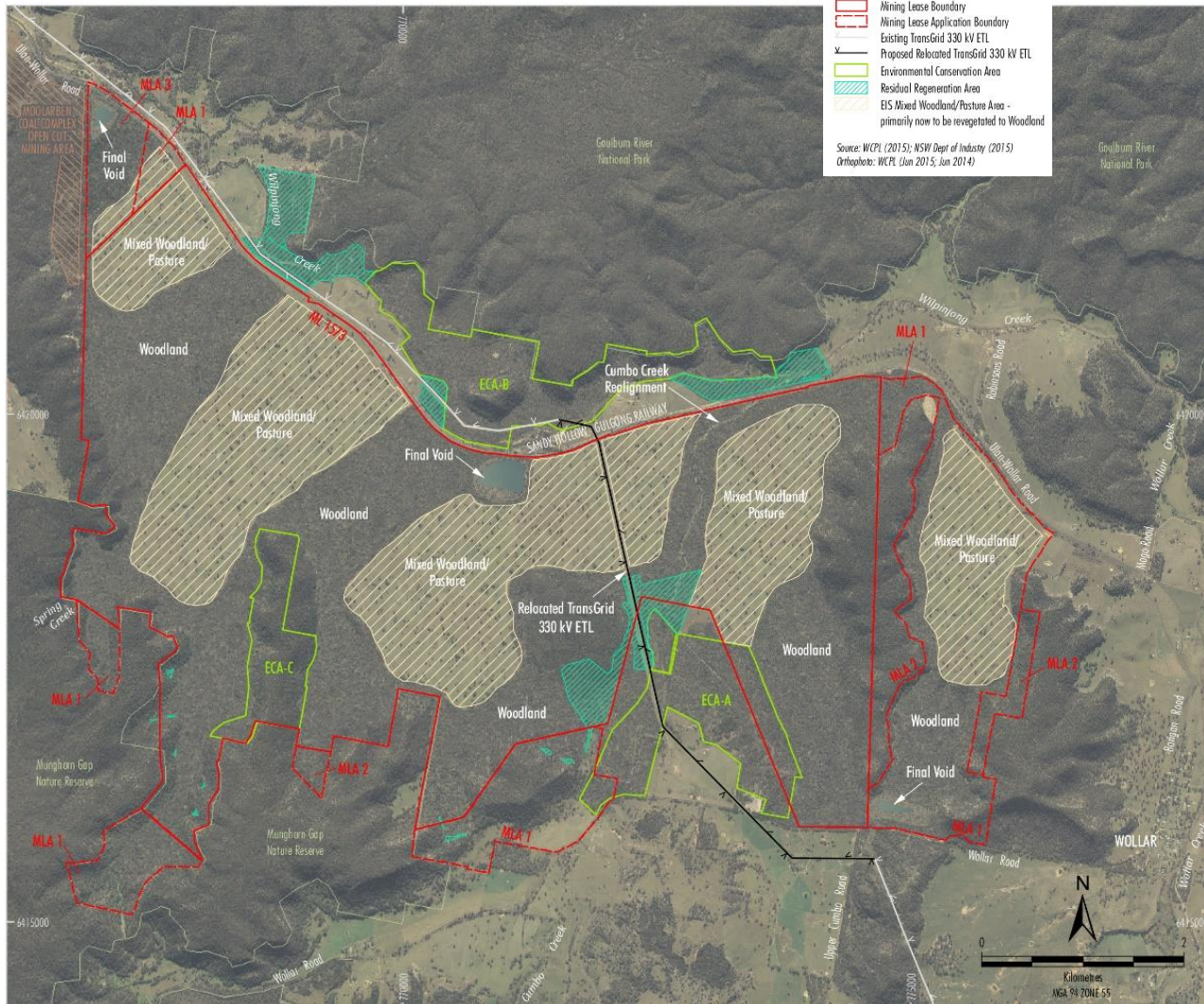
Regent Honeyeater breeding programme contributions (\$660K)

NB: In addition to the Nullo Mountain offset



# Wilpinjong Extension Project

## WEP Final Landform Plan



# Wilpinjong Extension Project

## *Existing topography closely replicated in final landform*

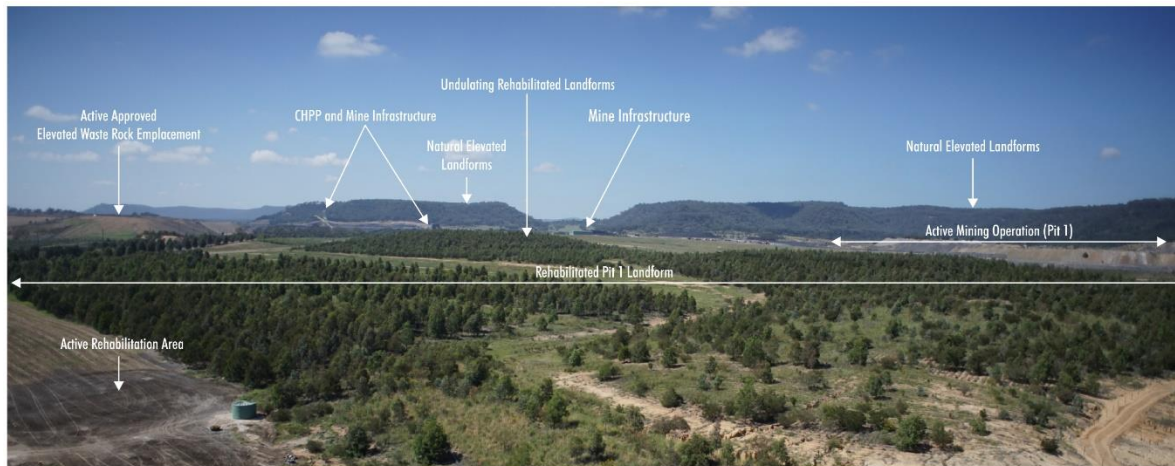
- No large out-of-pit waste rock emplacements
- Undulating final landform and gentle slopes
- Final landforms in same elevation range as pre-mining
- Micro-relief not considered necessary given landform design





# Wilpinjong Extension Project

## *Gently sloping rehabilitated landforms*



Rehabilitated open cut



Rehabilitated tailings dam

# Wilpinjong Extension Project

## *Existing rehabilitation performing strongly*

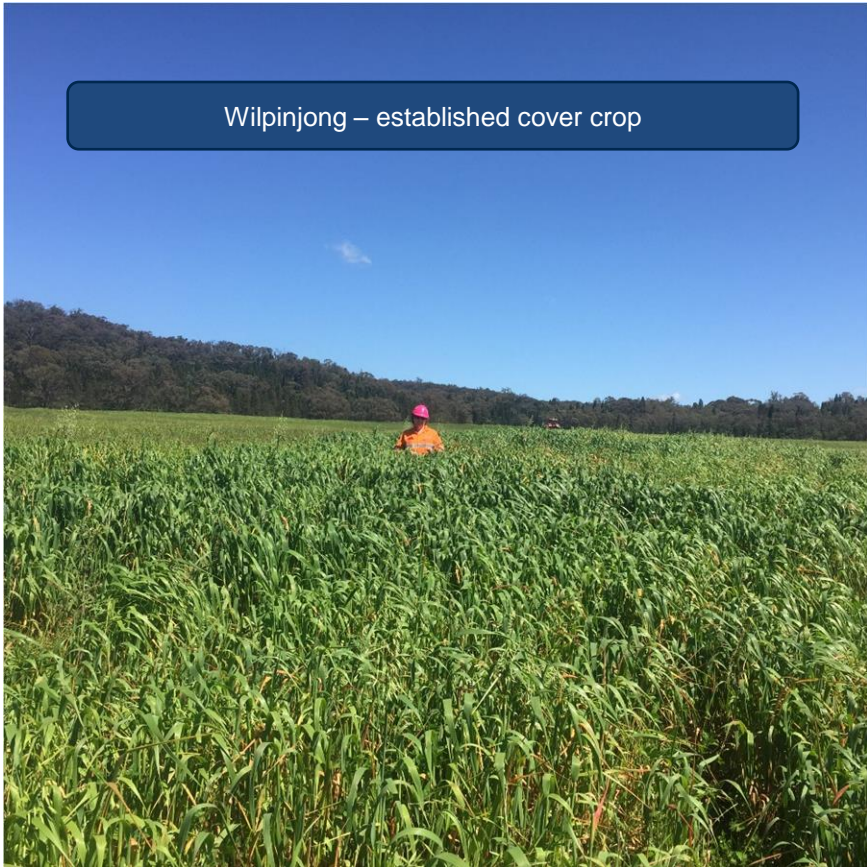




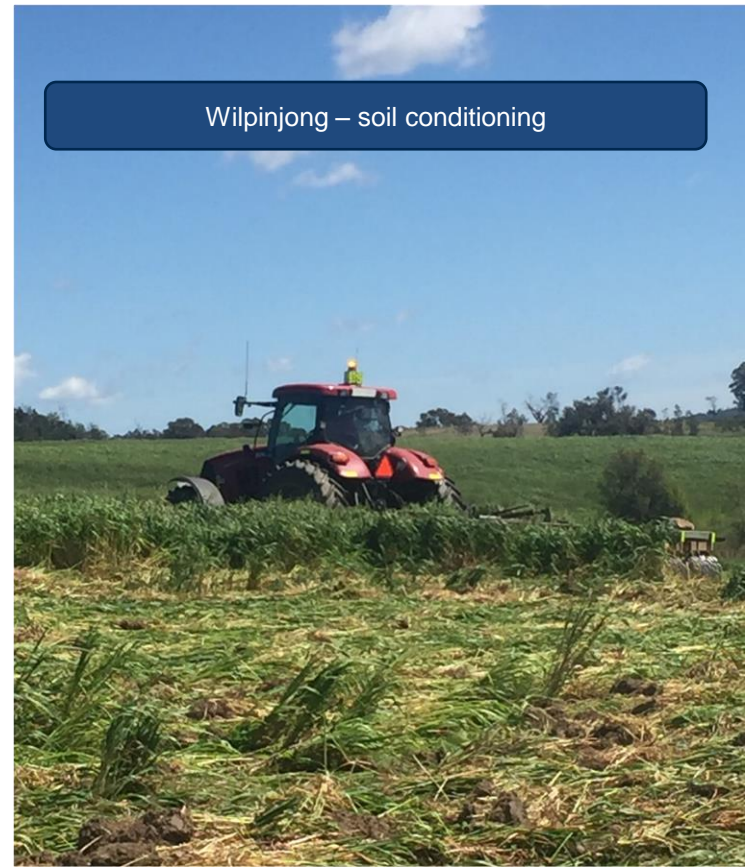
# Wilpinjong Extension Project

*Established pasture rehabilitation to be converted to woodland*

Wilpinjong – established cover crop



Wilpinjong – soil conditioning



## *Development of the Wollar Plan*

- Wollar Plan key elements:
  - Buildings and Structures – e.g. demolitions, maintenance
  - Community Services – e.g. postal, ablution, RFS
  - Transport and Infrastructure – e.g. Ulan Wollar Road
  - Amenity – e.g. signage, lighting, access to cemetery



Wollar Village – Looking East from Catholic Church



## *Extensions to existing operations will provide ongoing benefits*

- Ongoing employment of existing workforce, expanded to 625 at peak
- Extends the life of the operation and associated positive flow on effects to 2033
- Maximises continued use of existing infrastructure and facilities
- \$190 million royalties to the State of NSW
- Provides access to additional export coal
- Significant biodiversity conservation outcome
- Continuation of community investment and contributions



# Questions

# *Advanced Energy*



*PeabodyEnergy.com  
AdvancedEnergyForLife.com*