

Muswellbrook Solar Farm

Independent Planning Commission Briefing

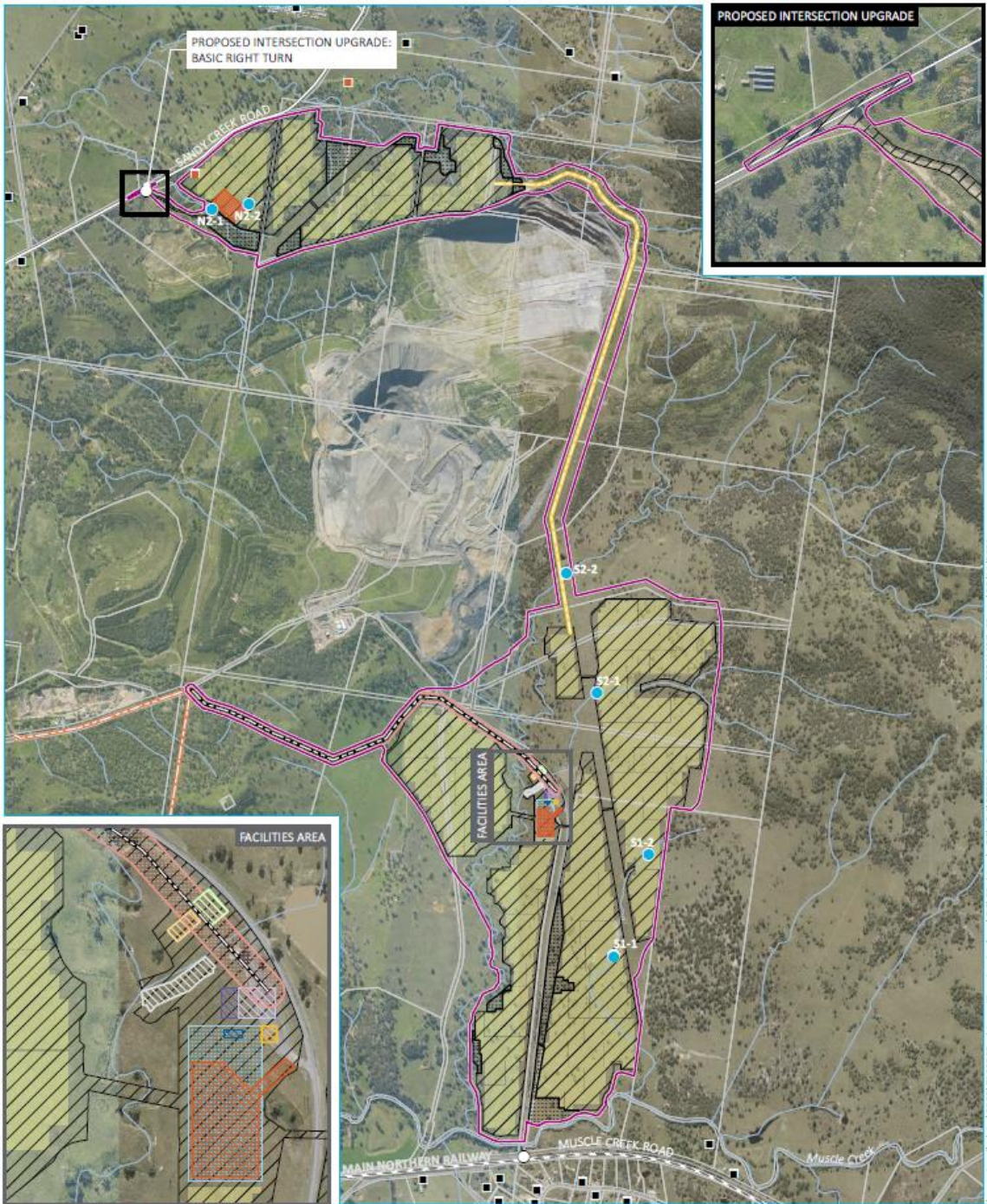
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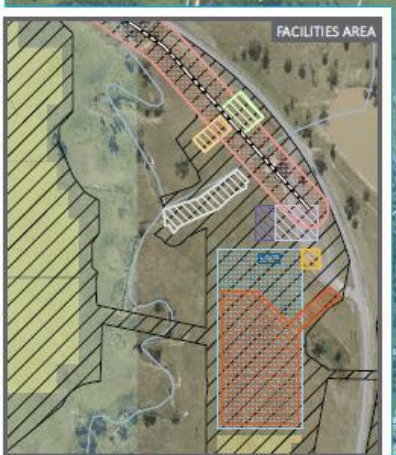
- Context
- Engagement
- Key issues
- Other issues
- Evaluation



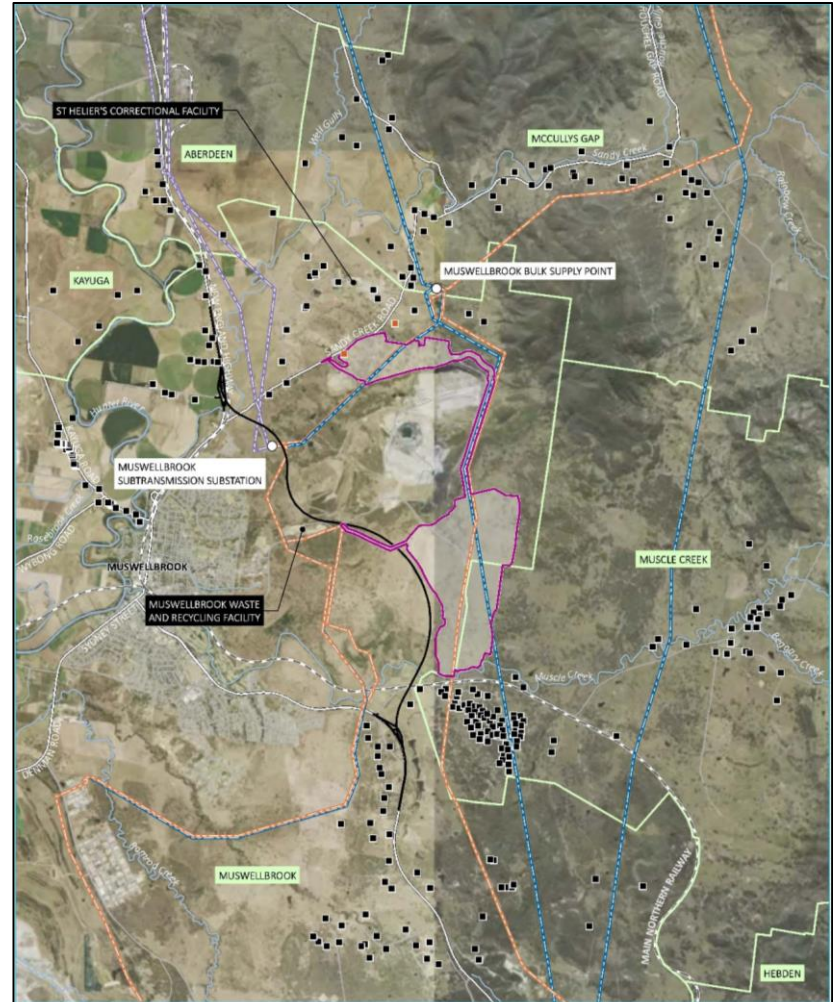
KEY

- Project area
- Site access
- Potential watercourse crossing
- Associated dwellings
- Dwellings not associated with the project within 5 km
- Development footprint
- Indicative panel layout
- Biodiversity exclusion area
- Connection route**
- 132 kV connection to 95M
- Internal connection route (33 kV)

- Existing transmission line (132 kV)
- Site element**
- BESS (Battery Energy Storage System)
- BESS Collection Station
- Car Park
- Connection internal north to south buffer
- 132 kV connection to 95M buffer
- Laydown
- O&M
- SF Collection Station
- Switchyard
- Transformer Substation
- Diversion channel
- Existing environment
- Rail line
- Major road
- Minor road
- Watercourse/drainage line
- Cadastral boundary



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Source: EMM (2024); ESCO Pacific (2024); TPNISW (2022); DFSI (2017, 2021); GA (2011); Metromap (2022)

Source: EMM (2023); ESCO Pacific (2023); DCSS (2023); DFSI (2017, 2021); GA (2011); Metromap (2023); ABS (2016)

EIS Public Exhibition:

- 22nd August – 18th September 2023
- 54 Objections
- 5 in Support

Other Engagement:

- The Department engaged with 14 Government Agencies throughout the assessment process
- The Department engaged with Muswellbrook Shire Council throughout the assessment process
- The Department inspected the site in May 2024 and met with nearby landowners

Key Issues

- Energy transition
- Land use compatibility
- Traffic and Transport
- Biodiversity
- Visual impacts

Energy Transition

- 135 MW generating capacity that would power about 52,310 homes.
- Consistent with the NSW Climate Change Policy Framework of net zero emissions by 2050.
- Project would play an important role in:
 - Increasing renewable energy generation and capacity;
 - firming the grid by including 135 MW / 270 MWh of energy storage; and
 - Contributing to the transition to a cleaner energy system as coal fired generators retire.

Land Use Compatibility

- The proposed development is located on land within the RU1 Primary Production zone, SP2 Infrastructure zone and C3 Environmental Management zone under the Muswellbrook LEP. Under the Transport and Infrastructure SEPP, electricity generating works are permissible with consent on any land in a prescribed non-residential zone, including land zoned RU1 Primary Production and SP2 Infrastructure.
- Although the SEPP does not permit electricity generating works on land zoned C3 and the Muswellbrook LEP prohibits this use on land zoned C3, Section 4.38(3) of the EP&A Act enables development consent for State significant development to be granted despite the partial prohibition. The Department has considered the merits of the use of the C3 Environmental Management zoned land on the subject site and is satisfied that it is an appropriate use of the land. Consequently, the project is permissible with development consent.
- Consistent with the *Hunter Regional Plan 2036 and 2041*, as well as the Muswellbrook Local Strategic Planning Statement.
- Project site comprises of 482 ha of agricultural land (Class 4 – covering 396.1 ha, Class 6 – covering 60.6 ha, Class 5 – covering 25.2 ha), all of which has limited agricultural capabilities.
- Land subject to development would be capable of returning to usable agricultural land following decommissioning.
- The cumulative impacts which the development footprint would have on regional productivity would be negligible.

Traffic and Transport

- The haulage route for the project is via the New England Highway and Muscle Creek Road (southern site access) and Sandy Creek Road (northern site access)
- The proposed development generates the need to upgrade the northern site access to a Basic Right Turn (BAR) Treatment, which the applicant has committed to undertaking
- ESCO has also committed to implementing a suite of traffic management and mitigation measures to minimise potential for conflict at the New England Highway and Sandy Creek Road intersection.



Source: EMM (2023); ESCD Pacific (2022); ABS (2021); DFSI (2017, 2021); GA (2011); Metromap (2022); RMS (2017)

KEY		INSET KEY
Project area	Existing environment	Major road
Site access	Rail line	NPWS reserve
Classified state road	Major road	State forest
Approved heavy vehicle routes	Minor road	
Approved 26 m B-double route	Named watercourse	
Limited access 19 m B-double route	Named waterbody	

Regional setting

Muswellbrook Solar Farm
Traffic Impact Assessment
Figure 1.1

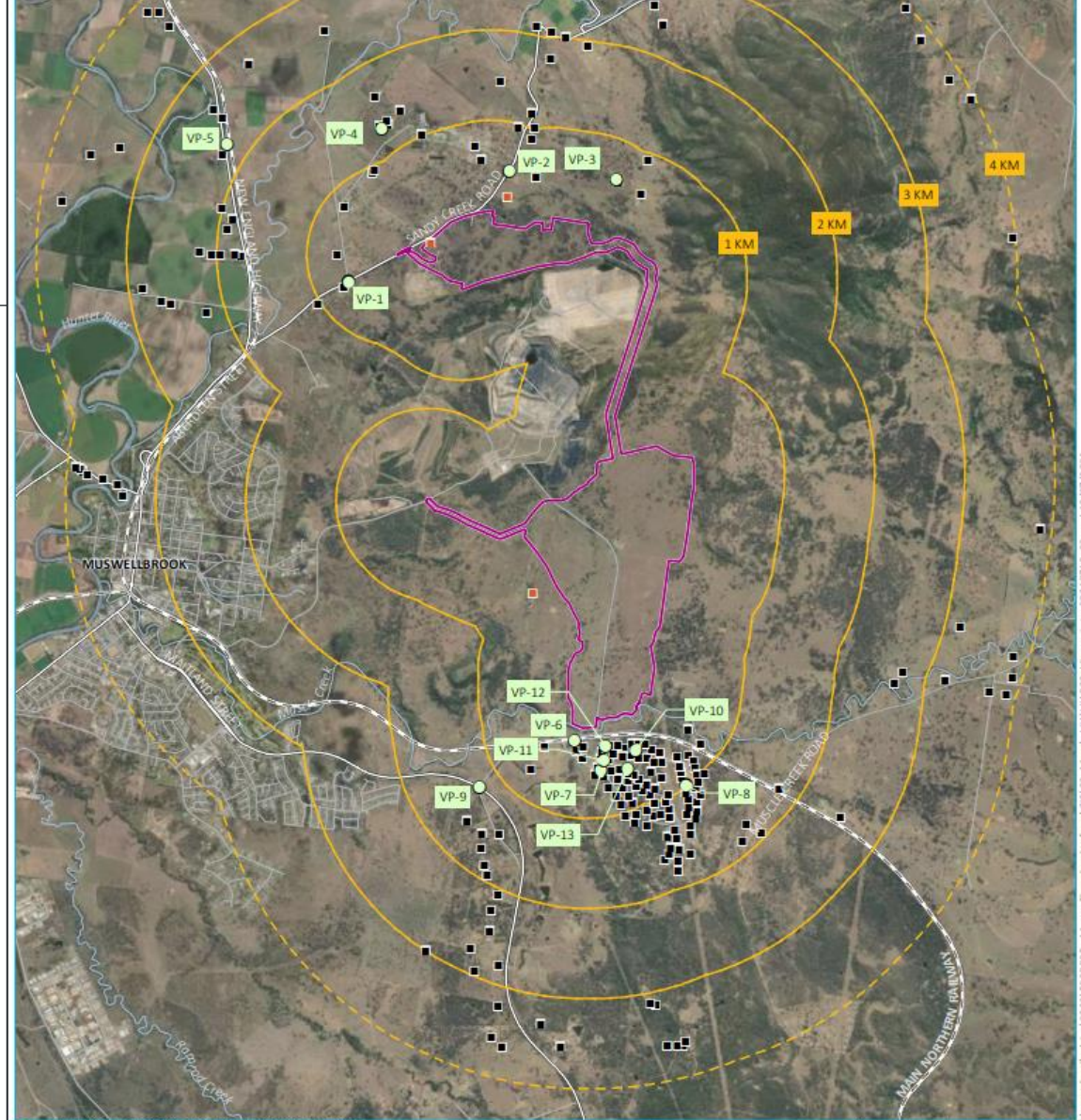
General

- A revised BDAR was prepared in response to matters raised by BCS, including on potential Significant and Irreversible Impacts (SAIL). The revised BDAR was reviewed and accepted by BCS, who advised that all their residual concerns on the project had been resolved
- The project would affect approximately 310 ha of native vegetation, of which 92.2ha is of a condition which generates the need for ecosystem credits to offset impacts

SAIL's

- The project would impact up to 113 ha of Box Gum woodland CEEC, and 3.2 ha of Large-eared Pied Bat habitat (foraging habitat) which are SAIL candidate entities
- The development footprint was refined to avoid a further 5.5 ha of the extent of the Box Gum Woodland CEEC (118 ha down to 113 ha). Of the 113 ha, only 7.5ha of low condition woodland would be removed, with the rest DNG or too low quality to generate offset.
- BCS recommended additional and appropriate measures given the SAIL on the Box Gum Woodland species. ESCO has committed to AAMs, which have been endorsed by BCS.
- The Large-eared Pied Bat species was listed as being at risk of SAIL due to it's breeding habitat being irreplaceable - surveys identified no breeding habitat across the site, and the removal of a small area of foraging habitat is unlikely to have significant impact on the species.

Visual Impacts



Source: EMM (2024); ESCO Pacific (2024); DFSI (2017, 2021); GA (2011)

KEY	
Project area	Existing environment
Project buffer	Rail line
Viewpoint location	Major road
Associated dwellings	Minor road
Dwellings not associated with the project within 5km	Named watercourse
	Named waterbody

Viewpoint locations

Muswellbrook Solar Farm
Landscape and Visual Impact Assessment
Figure 1.1



Other Issues

- Noise
- Flooding and Erosion
- Bushfire
- Accommodation
- Glint and Glare

- The Department has assessed the application, documents, submissions and advice, as per the requirements of the EP&A Act.
- The Department acknowledges that some members of the community remain strongly opposed to the project, and that the project would result in residual environmental and amenity impacts.
- Changes made to the project through the assessment process have significantly reduced the residual impacts of the project.
- With the implementation of the recommended conditions, the Department considers that the environmental and amenity impacts of the project can be managed to achieve acceptable outcomes.
- The project would:
 - provide significant economic and social benefits to the region
 - contribute to the transition of the NSW economy away from a reliance on fossil fuels
 - maximise the efficiency of the solar resource while minimising the potential impacts on surrounding land uses, local residents, and the environment.