



APPENDIX 21

Cumulative Impact Scoping Summary

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The following provides an analysis of the potential for the Project to result in cumulative impacts, considering all relevant existing and future projects, in the surrounding region. Where the summary has identified specific projects resulting in potential cumulative impacts, these have been addressed in the EIS (refer to **Section 6.0**).

For some technical matters, where Gundry Solar Farm may only result in minor impacts that can be effectively managed using standard management techniques and design features (e.g. risk and water/soils) and the risk associated with Gundry Solar Farm is low and impact envelopes (where relevant) are contained within the Project Area, Gundry Solar Farm has not been considered to materially contribute to potential cumulative impacts and therefore these issues have not been highlighted as requiring further assessment in the table provided in this appendix. This is not to infer that other projects with a higher risk of impact may not contribute to cumulative impact, including some of those listed below, simply that Gundry Solar Farm will not materially contribute to any such cumulative impact and therefore does not require further assessment.

Likelihood	LOW – minimal to no overlap, no further consideration of cumulative impacts undertaken.
	MODERATE - potential for overlap, unlikely to result in substantial cumulative impacts – qualitative assessment of cumulative impacts undertaken.
	HIGH – potential for substantial cumulative impacts – quantitative assessment of cumulative impacts undertaken.

Project	Approximate Proximity/ Location	Details/Timing/Overlap	Potential Impact of Other Projects on the Same Assessment Matter						
			Biodiversity	Agriculture	Noise and Vibration	Transport	Waste Management	Visual	Social & Economic
Renewables Projects – Construction Underway or Operational									
Collector Wind Farm	33 km west Upper Lachlan Shire LGA	54 turbine wind farm which has been operational since 2022.							
Crookwell 2 Wind Farm	36 km northwest Upper Lachlan Shire LGA	110 MW wind farm which has been operational since 2018.							
Cullerin Range Wind Farm	36 km west Upper Lachlan Shire LGA	15 turbine wind farm generating 30 MW of electricity which has been operational since 2009.							
Gullen Range Wind Farm	36 km northwest Upper Lachlan Shire LGA	Operational wind farm with 73 turbines producing 166 MW of electricity.							
Capital Wind Farm	39 km southwest Goulburn Mulwaree LGA	140 MW wind farm which has been operational since 2010.							
Biala Wind Farm	46 km northwest Upper Lachlan Shire LGA	110 MW wind farm with 110 MW capacity which has been operational since 2020.							
Capital Solar Farm	55 km southwest Goulburn Mulwaree LGA	50 MW solar farm which has been operational since 2018. Linked to Capital Wind Farm substation.							
Taralga Wind Farm	46 km north Upper Lachlan Shire LGA	Operational 51 turbine wind farm with a total capacity of 107 MW.							
Woodlawn Wind Farm	30 km southwest Goulburn Mulwaree LGA	48 MW wind farm which has been operational since 2011.							

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			Biodiversity	Agriculture	Noise and Vibration	Transport	Waste Management	Visual	Social & Economic
Renewables Projects – Approved/Construction Not Commenced									
Marulan Solar Farm	23 km northeast Marulan, Goulburn Mulwaree LGA	100 MW proposed solar farm with energy storage and associated infrastructure. Approved August 2023. Construction is expected to commence in 2024 and last for approximately 18 months. Project will employ approximately 300 people during the peak construction period, with around five FTE operational workers and the potential to employ up to 50 casual workers during maintenance periods. Approximately 13 heavy vehicle trips per day (maximum 28 trips per day) are expected, along with 100 light vehicle trips per day (maximum 160 trips per day). The Hume Highway and Munro Road will be the primary access roads to the site.							
Crookwell 3 Wind Farm	33 km north Roslyn, Upper Lachlan Shire LGA	58 MW proposed wind farm. Approved October 2020. Construction has not commenced and completion date is unknown. As a conservative scenario, assumption has been made that construction period overlaps with Gundary Solar Farm. Approximately 40 FTE workers during construction and six permanent jobs during the operational phase. Expected typical daily traffic volume of 238 vehicle movements (return trips), with a peak construction vehicle activity resulting in up to 342 vehicle movements (return trips) per day on the surrounding road network. Access to Crookwell 3 South is proposed to be via Crookwell Road, and access to Crookwell 3 East is proposed via Woodhouselee Road, and through an ungazetted Greywood Siding Road as one of the access options. Picton Road and the Hume Highway will be the primary road used to access the site.							
Blind Creek Solar Farm	43 km southwest Bungendore, Palerang LEP	Proposed 350 MW solar farm with battery storage and associated infrastructure. Approved July 2023.							

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			Biodiversity	Agriculture	Noise and Vibration	Transport	Waste Management	Visual	Social & Economic
		Construction expected to take 12-18 months, construction to commence early 2024 and operational by 2026. Project is expected to employ approximately 300 people during peak of construction period and five FTE operational workers. Project is anticipated to generate an average of 62 vehicle trips (48 of which are light vehicles), and a maximum of 170 vehicle trips will be undertaken during construction (100 of which are light vehicles). The project proposes to use Braidwood Road as part of the transport route to site.							
Springdale Solar Farm	58 km southwest Sutton, Yass Valley LGA	100 MW proposed solar farm and associated infrastructure. Construction period to last for approximately 10 months, with unknown start and finish dates. Project will employ approximately 200 people during the peak construction and five FTE operational workers. Up to approximately 400 light vehicle movements are expected per day during peak construction, with up to approximately 75 heavy vehicle movements per day during the peak delivery period, and up to approximately 16 oversized vehicle movements in total throughout construction. The Federal Highway will be the primary road used to access the site.							
Coppabella Wind Farm (previously Yass Valley Wind Farm)	100 km west Yass, Yass Valley LGA	Proposed wind farm incorporating 75 WTGs. Construction expected to last for approximately two years, and expected to commence in 2024. Project will employ approximately 200 people during the peak construction period, and approximately 15 FTE employees during the operational phase. Expected traffic movements are unknown, however the Hume Highway will be the primary road used to access the site.							
Renewables Projects – Proposed/In Planning									
Merino Solar Farm	1 km west Tirrannville Goulburn Mulwaree LGA	In Planning - Prepare EIS 450 MW proposed solar farm with energy storage and associated infrastructure. Construction expected to commence (but not approved) in early-mid 2025 to mid-late 2026, with a duration of 12 to 18 months. Project is expected to generate up to 200 to 300 FTE jobs during							

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			Biodiversity	Agriculture	Noise and Vibration	Transport	Waste Management	Visual	Social & Economic
		construction, with four FTE jobs during operation, as well as 50 casual staff. Access to the northern site is expected to be provided via a new access driveway linking to Braidwood Road, but could potentially utilise existing arrangements from Windellama Road or Gundry Lane. The southern site is expected to be accessed either directly from Braidwood Road or from Painters Lane.							
HumeLink	26 km north Located across 5 LGAs: Wagga Wagga City, Snowy Valleys, Cootamun-dra-Gundagai Regional, Yass Valley, Upper Lachlan Shire	In planning – Under assessment. Proposed 500 kV transmission line which will connect Wagga Wagga, Bannaby and Maragle. Transmission line proposed to be approximately 360 km long with a 60 m to 70 m wide easement. Construction is expected to last approximately two years and is expected to commence in 2025. The project will employ approximately 400 to 1,000 people during the peak of construction. Expected traffic movements are unknown, however the Hume Highway will be one of the primary road used to access the site.							
Wattle Creek BESS	50 km northeast Marulan, Upper Lachlan Shire LGA	In Planning – Prepare EIS. A 800MW/1600MWh battery energy storage facility with associated infrastructure. Construction expected to be undertaken during 2025 and 2026. The project will employ approximately 150 people during the peak of construction and 7 FTE operational workers. It is unknown what the expected traffic movements will be, however Hume Highway will likely be the primary road used to access the site.							
Wattle Creek Solar Farm	50 km northeast Marulan, Upper Lachlan Shire LGA	In Planning – Prepare EIS. A 265 MW solar farm with energy storage and associated infrastructure. Construction expected to be undertaken during 2025 and 2026. The project will employ approximately 200 people during the peak of construction and 7 FTE operational workers. It is unknown what the expected traffic movements will be, however Hume Highway will likely be the primary road used to access the site.							

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Gunning Solar Farm	56 km west Lade Vale, Upper Lachlan Shire LGA	In planning – Response to Submissions. Proposed 250 MW solar farm and associated infrastructure, including battery storage and grid connection. Construction anticipated to commence in 2024 and expected to be undertaken for 18 months. Local employment opportunities of approximately 200+ jobs during 18-month construction period and approximately 5 to 6 FTE jobs during the 35-year operational life. Temporary construction access to the site would be from the Hume Highway via Lade Vale Road or Hillgrove Road.							
Western Range Solar Farm	60 km west Gunning, Upper Lachlan Shire LGA	In Planning – Prepare EIS. 175 MW proposed solar farm and ancillary BESS. Construction is expected to take 18 months, however it is unknown when construction will commence. As a conservative scenario, assumption has been made that construction period overlaps with Gundry Solar Farm. Project is expected to employ approximately 100 people during peak construction and eight FTE operational workers. Expected traffic movements are unknown, however the Hume Highway will be the primary road used to access the site.							
Paling Yards Wind Farm	76 km north Oberon LGA	In Planning – Response to Submissions. Proposed wind farm with up to 47 wind turbines and associated infrastructure. Construction estimated to commence in 2024. The project will employ over 152 people during construction.							
Yass Solar Farm	77 km west Yass Valley LGA	In planning – Prepare EIS. 100 MW proposed solar photovoltaic energy generating facility with an associated battery energy storage system. Construction is expected to commence in 2025 for a period of approximately 24 months and will require up to 150 people during the peak period. The Hume Highway will be used to transport construction materials to the site.							

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Wallaroo Solar Farm	78 km southwest Wallaroo, Yass Valley LGA	In Planning – Under Assessment. 100 MW proposed solar farm and associated infrastructure, including battery storage facility. Although the construction phase is expected to last approximately nine to 12 months, the construction start and finish dates are unknown. Access is proposed via Gooroomon Ponds Road via Wallaroo Road. The nearest major road is the Barton Highway.							
Other Projects – Proposed/Approved, Not Yet Constructed									
Marulan Quarry	15 km northeast Marulan, Goulburn Mulwaree LGA	In planning – Prepare EIS. Proposed quarry operation to be developed near Marulan. Construction timing is unknown. Construction timing unlikely to overlap. An average of 45 trucks per day are expected to transfer product from the site via the existing forestry haul road, Winfarthing Road and the Hume Highway to access the Sydney and the regional cement market.							
Woodlawn Advanced Energy Recovery Centre	29 km south Tarago, Goulburn Mulwaree LGA	In Planning – Response to Submissions. Proposed energy recovery facility for the thermal treatment of up to 380,000 tpa of residual waste feedstock, and a power plant with a nominal capacity of 30 MWh to generate up to 240,000 MW of electricity per annum. Construction is expected to take 36 months, commencing in 2024. The project will employ approximately 300 people during peak construction and 40 full FTE operational workers. It is expected that 25 light vehicle trips, 20 heavy vehicle trips and 25 bus trips will be required during peak construction. The Hume Highway, Braidwood Road, Goulburn Street, Bungendore Road and Collector Road will be primarily used for access to the site.							
Marulan Gas Fired Power Station	35 km northeast Marulan, Goulburn Mulwaree and Upper Lachlan LGAs	Approved – Construction to commence. Proposed 700 MW gas fired power project, to be developed in multiple phases. Although construction is expected to take 12 to 18 months for each facility. Construction overlap is unlikely. The project is expected to employ approximately 150 people during peak construction and six FTE							

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		operational workers. The Project is expected to generate an average of 24 heavy vehicles and 96 light vehicle movements per day. Brayton Road and the Hume Highway would be the primary access roads to the site.							
Other Projects – Approved/Under Construction or Operational									
Goulburn Base Hospital Redevelopment	10 km north Goulburn, Goulburn Mulwaree LGA	Project located within the township of Goulburn. Construction has commenced and is expected to last 24 months. Construction overlap is unlikely. The project will employ approximately 200 people during peak construction and an additional 45 FTE operational workers. The main access to the site will occur via Faithfull Street, Sydney Road and the Hume Highway.							
Ardmore Park Quarry	14 km southeast Bungonia, Goulburn Mulwaree LGA	Operational sand and hard rock quarry, located near Bungonia.							
Gunlake Quarry	26 km northeast Marulan, Goulburn Mulwaree LGA	Existing quarry, approved in 2017.							
Lynwood Quarry	27 km northeast Marulan, Goulburn Mulwaree LGA	Existing quarry, approved in 2005.							
Marulan South Limestone Mine	23 km northeast Marulan, Goulburn Mulwaree LGA	Mining commenced 1929.							
Peppertree Quarry	23 km northeast	Existing quarry, approved in 2007.							

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	Marulan, Goulburn Mulwaree LGA								
Wingecarribee-Goulburn Water Pipeline	10 km north Goulburn, Goulburn Mulwaree LGA	Operational 83 km water pipeline and associated infrastructure, between Wingecarribee to Goulburn. Operational traffic movements are unknown, but are expected to be minimal.							
Woodlawn Bioreactor	29 km southwest Tarago, Goulburn Mulwaree LGA	Eco-precinct approved in 2012.							
Woodlawn Mine	28 km southwest Tarago, Goulburn Mulwaree LGA	High-grade zinc, copper and lead volcanogenic massive-sulphide mine approved in 2013.							