

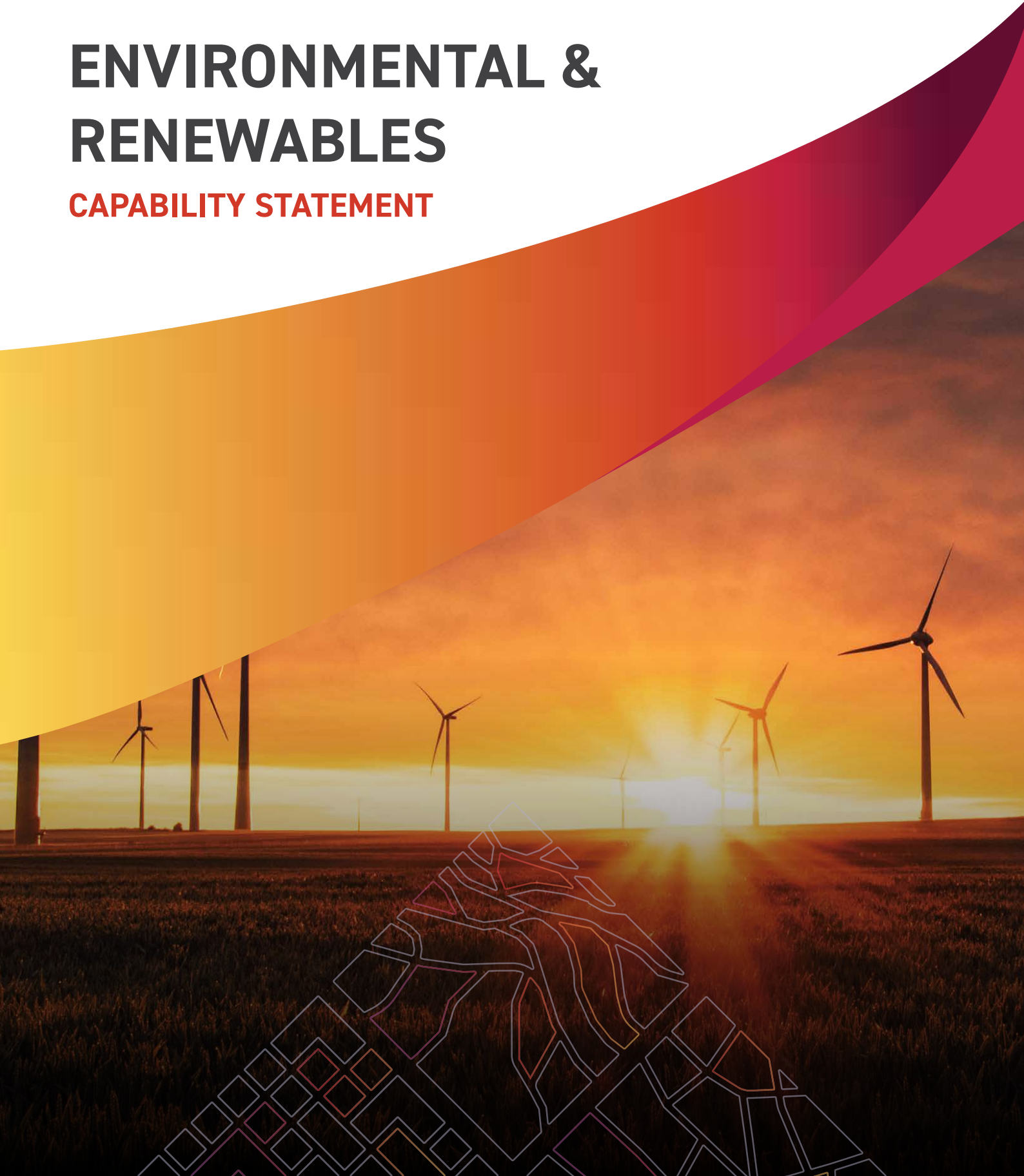


PLAN / DESIGN / DELIVER

Premise

ENVIRONMENTAL & RENEWABLES

CAPABILITY STATEMENT





INTRODUCTION

Premise is a full-service multidisciplinary consultancy that provides tailored solutions across various sectors including Built Environment, Water, Environmental & Renewables, and Transport.

Our diverse skills and experience, coupled with our collective drive and determination, has created an energetic culture of thought leaders focused on providing greater outcomes within both public and private arenas. We are committed to providing unparalleled leading-edge capability and solutions to our clients, delivered with a local, regional and personalised touch.

Above all we strive to exceed our clients' expectations each and every day.

LOCATIONS

We have over 200 people in the following locations:

NEW SOUTH WALES

- > Albury
- > Dubbo
- > Goulburn
- > Orange
- > Oran Park
- > Wagga Wagga

QUEENSLAND

- > Brisbane
- > Mackay
- > Rockhampton
- > Sunshine Coast
- > Townsville

WESTERN AUSTRALIA

- > Perth

PAPUA NEW GUINEA

- > Port Moresby



PHILOSOPHY

Premise is committed to going above and beyond to plan, build and deliver innovative projects informed by expertise, an ethical framework, strong relationships, and a commitment to creating valued places and vibrant communities.

Premise strives to exceed expectations in every area. For our clients and communities.

Every aspect of our work is informed by an ethical framework. We want to enrich the communities where we work and leave the world a better place. A greater place.

Together, we are more than the sum of our parts. Our collective expertise and shared drive allow us to deliver greater outcomes.

We are Premise.

Our vision is to lead the creation of valued places, communities and environments.

OUR CAPABILITIES

With a team of over 200 staff, Premise has been continually involved with the Australian resources, energy and environmental sectors throughout our lifespan. Boasting a proven track record in providing leading services alongside international insights through our strategically placed offices.

With projects aiming to preserve, enhance and create environments that enable mutual prosperity and longevity, Premise are reliable in crafting full spectrum approaches geared for success. Considering all stages and solutions, we operate within regulatory frameworks and strive for complete project success.

Premise operates in the regions and we draw on our wide range of experience in the delivery of environmental and engineering services, as well as our experience in other disciplines environments, to ensure projects are delivered successfully.

OUR SERVICES

- > Environmental impact assessments
- > Constraints and opportunities analysis
- > Biodiversity assessments
Terrestrial and aquatic
- > Heritage assessments
Aboriginal and European
- > Groundwater and surface water impact assessments
- > Engineering
Civil, traffic, structural, environmental and water
- > Transport planning and traffic engineering
- > Heavy vehicle access route options analysis
- > Engineering assessment
Waterway crossings, culverts and bridges
- > Road design
Site accesses and intersection upgrades
- > Surveying
Ground survey and drone survey
- > Environmental monitoring, including soil sampling for geochemical analysis
- > Contaminated land assessments
- > Environmental management plans and support
- > Compliance management
- > Community and stakeholder engagement
- > Land capability assessments
- > Rehabilitation planning
- > Soil and land capability analysis
- > GIS and spatial

OUR EXPERIENCE

Solar Energy

Premise has been involved in a variety of solar farm projects, from scoping, impact assessment and management plans. An overview of some of our solar energy projects is provided below.

Scoping and EIS

- > Quorn Park Solar Farm for Renewable Energy Developments
- > Goonumbla Solar Farm for Smardi Enterprises
- > Marulan Solar Farm for Terrain Solar
- > Walgett Solar Farm for Epuron Projects

Spatial constraints analysis

- > Wellington North Solar Farm for AGL Energy
- > Maison Dieu Solar Farm for Terrain Solar
- > Tenterfield Solar Farm for Enerparc Australia
- > Murrumburrah Solar Farm for Enerparc Australia

Other Projects

- > CEMP for Wagga Wagga Solar Farm South for Mytilineos
- > Hydrologic and hydraulic data review for Suntop Solar Farm for Canadian Solar
- > Burren Junction Solar Farm for Enerparc Australia
- > Moree Solar Farm for Elecnor
- > OEMP for Moree Solar Farm for FRV Services Australia
- > Traffic impact assessment for Glenella Solar Farm
- > Warwick Solar Farm heavy vehicle access route options analysis
- > Wagga Wagga Solar Farm North for Terrain Solar
- > Wagga Wagga Solar Farm South for Terrain Solar

Wind Energy

Premise has been involved in the following wind energy projects:

- > **Upper Burdekin Wind Farm**
Traffic impact assessment and recommendation of route options to accommodate construction and operational traffic. Included engineering assessment of roads and bridges.
- > **Fiery Creek Wind Farm**
Route assessment, traffic impact assessment, concept layouts for site accesses and intersection upgrades.
- > **Taralga Wind Farm**
EIS and consent modification.
- > **Lotus Creek Wind Farm**
Concept design of access tracks and crane pad.
- > **Uungula Wind Farm**
Provision of traffic advice for construction.

Battery Energy Storage Systems

Premise has prepared deliverables for State Significant Battery Energy Storage System (BESS) developments:

Firm Power

- > Awaba BESS
- > Beresfield BESS
- > Murrumburrah BESS (SEARs)
- > Muswellbrook BESS

ACEnergy

- > Apsley BESS
- > Yanco BESS (SEARs)



SOLAR ENERGY

Case Studies

WALGETT SOLAR PTY LTD

WALGETT SOLAR FARM

Walgett, NSW

Approved 30 MW solar farm located at Walgett. Key challenges with the plan included managing potential flood impacts and community expectations.

RENEWABLE ENERGY DEVELOPMENTS P/L

GOONUMBLA SOLAR FARM

Parkes, NSW

Approved 70 MW solar farm located adjacent to approved 120 MW solar farm. Key constraint was the potential for cumulative noise impacts associated with the operation of the two facilities.

QUORN PARK SOLAR FARM

Parkes, NSW

Preparation of an EIS including subconsultant management, to support a state significant development application for a proposed 80 MW solar farm, including battery storage. Quorn Park was approved in July 2020.

TERRAIN SOLAR

MARULAN SOLAR FARM

Marulan, NSW

Premise prepared a scoping report and EIS for the proposed 150 MW solar farm, including 150 MW battery energy storage system, located to the west of Marulan in southern NSW. Premise also prepared the land use conflict risk assessment, biodiversity development assessment report, Aboriginal Cultural Heritage Assessment, land and soil capability assessment, traffic impact statement and water cycle management report study. The project was granted approval in August 2023.

WAGGA WAGGA SOLAR FARM

Wagga Wagga, NSW

North

Approved 30 MW solar farm at Bomen, north Wagga Wagga. Key constraints included community opposition and the careful management of visual screening.

South

Approved 18 MW solar farm at Bomen, South Wagga Wagga. Key constraints included community opposition.

WIND ENERGY

Case Studies

WIND FARMS

Various in QLD

Premise services supplied for Wind Farms have included roads design, traffic engineering, hydraulic studies and construction management plan preparation.

Traffic engineering services have been applied to identify over-size-over-mass (OSOM) route options through review of the Queensland Excess Mass and Dimension Conditions database and swept path analysis using aerial imagery. Field work included identification of suitable site access locations, condition assessment of structures on OSOM routes, and verification of geometric constraints. Potential OSOM routes between the local port and the project site passed through different local government areas and state-controlled roads.

Hydraulic studies undertaken by Premise produced stormwater management and erosion & sediment control plans. Premise has identified construction requirements and prepared standard drawings for erosion and sediment control treatments. Premise also prepared the Construction Management Plans.

The preliminary and detailed design of upgrades to the routes has presented particular challenges including upgrading and replacement of structures at creek crossings. In some cases the rolling terrain with some turbines proposed to be located on sites requiring access involving steep gradients for windfarms. Similarly batter slopes for access roads or levelling of construction sites often resulted in increasing the footprint of road and/or construction site. Minimising environmental impacts and avoiding encroachment into waterway buffers had been a key consideration.

KENNEDY ENERGY PARK

QUANTA POWER

Prairie, QLD

Following preparation of Traffic and Stormwater Impact Assessment reports to secure development approval, Premise was engaged to provide civil engineering services during construction. These services included hydrologic assessments, access design and construction certification.

Site access on the Flinders Highway required crossing the Mount Isa Line. Premise:

- > Prepared for construction drawings of the access;
- > Liaised with the Department of Transport and Main Roads (TMR), Queensland Rail and Quanta Solar to obtain approval for the access design; and
- > Prepared as constructed drawings and RPEQ certification for handover of the access to TMR.

A challenge on the project was design of the access to accommodate over-size-over-mass (OSOM) vehicle. This proved more challenging vertically than horizontally in tying into the existing Flinders Highway carriageway, passing under powerlines and over the railway line. The low ground clearance and long rear overhang of blade transporters necessitated adoption of vertical curves which have a larger radii than are typical on a rural property access to maintain clearances to infrastructure and avoid damage to loads.





BATTERY ENERGY STORAGE SYSTEM

Case Studies

APSLEY BESS
ACENERGY
 Wellington, NSW

Premise prepared a scoping report and EIS for the proposed 120 MW battery energy storage system located to the south of Wellington, NSW. Premise also prepared the land use conflict risk assessment, biodiversity development assessment report and Aboriginal Cultural Heritage Assessment. This project was approved in June 2023.

MUSWELLBROOK BESS
FIRM POWER
 Muswellbrook, NSW

Premise prepared a scoping report and EIS for the proposed 150 MW battery energy storage system located to the north-east of Muswellbrook, NSW. Premise also prepared the land use conflict risk assessment. This project was approved in July 2023.

OTHER PROJECTS

Case Studies

**SCONI MINE HAUL ROADS,
 GREENVALE AND VALLEY OF LAGOONS**
 Charters Towers, QLD

The Sconi project comprises the Greenvale, Lucknow and Kokomo nickel-cobalt-scandium deposits near the town of Greenvale in the Charters Towers Region. Premise undertook the initial traffic assessments and preliminary design investigations for the primary access and haul roads for the Sconi project.

Lucknow Haul Road consists of a heavy vehicle haul road for road registered haulage vehicles. A significant section of the proposed Lucknow Haul Road is to utilise the existing TMR controlled Gregory Developmental Road (GDR) which is proposed to be widened to accommodate type 2 road trains.

Kokomo Haul Road consists of a heavy vehicle haul road for road registered haulage vehicles and is to connect Kokomo ore deposit to the Greenvale mining lease ROM pad. The route for this road comprises sections of the existing Old Gregory Developmental Road, and the Charters Towers Regional Council controlled Greenvale Valley Road and Poison Lake Road.

Premise undertook the concept / preliminary design investigations including assessing the traffic on the haul roads, confirming an appropriate type-section for the proposed haul roads and intersection configurations, preliminary hydrologic and hydraulic assessment of the significant waterway crossings, determining a preliminary horizontal and vertical alignment design for the haul roads and a preliminary design configuration for the proposed haul road and heavy vehicle intersections.

**GRANITE BELT WATER LIMITED,
 DAM AND IRRIGATION PROJECT**
 Stanthorpe, QLD

The Premise Traffic Engineering Team was engaged to assess the impact on state transport infrastructure generated by construction of the proposed 13ML dam and 126km pipeline network, extending generally along the New England Highway from Cottonvale to Ballandean.

Traffic Engineers commenced work on this project in July 2020 by assessing the traffic impact of the pipeline network and dam construction methodology. Premise responded to ongoing changes to the technical aspects and construction methodology, delivering the Traffic Impact Assessment for state transport infrastructure.

Innovation and Value Adding Data Collection

The scale of the study area required large volumes of data. The challenges of collecting the data were compounded by tight project timelines and the COVID-19 transport disruption. The data was combined with link and intersection counts provided by TMR to validate the survey data.

Crash Mitigation Strategy

Premise assessed traffic impacts based on the likelihood of interactions between traffic generated by different project components and peak traffic volumes. Following a review of road crash data, Premise recommended a stratified approach to performance standards. Consistent with the Department of Transport and Main Roads' "Guide to Traffic Impact Assessment", Premise identified a suite of strategies for avoiding and managing traffic impacts in preference to the construction of mitigation works.



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