

## CHAPTER 22

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### Abbreviations and Glossary

## 22. ABBREVIATIONS AND GLOSSARY

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### Abbreviations

<b>AA</b>	Airservices Australia
<b>AAAA</b>	Aerial Agricultural Association of Australia
<b>ABS</b>	Australian Bureau of Statistics
<b>ACMA</b>	Australian Communications and Media Authority
<b>AEMO</b>	Australian Electricity Market Operator
<b>AGL</b>	Above ground level
<b>AGO</b>	Australian Greenhouse Office
<b>AIS</b>	Aeronautical Information Service
<b>ALC</b>	Aboriginal Land Claim
<b>AM</b>	Amplitude Modulated
<b>APZ</b>	Asset Protection Zone
<b>ARG</b>	Australian Research Group Pty Ltd
<b>ARPANSA</b>	Australian Radiation Protection and Nuclear Safety Agency
<b>A-SMGCS</b>	Advanced Surface Movement Guidance and Control Systems
<b>AusWEA</b>	Australian Wind Energy Association
<b>Auswind</b>	Australia Wind Energy Association
<b>BB</b>	Brown Barrel – Narrow Leaved Peppermint Moist Tall Open Forest
<b>BioBanking</b>	Biodiversity Banking
<b>BoM</b>	Bureau of Meteorology
<b>BWEA</b>	British Wind Energy Association
<b>CAAP</b>	Civil Aviation Advisory Publication
<b>CAP</b>	Catchment Action Plan
<b>CASA</b>	Civil Aviation Safety Authority
<b>CASR</b>	Civil Aviation Safety Regulations
<b>CEMP</b>	Construction Environmental Management Plan
<b>CIA</b>	Connection Investigation Agreement
<b>CMA</b>	Catchment Management Authority
<b>CMA Act</b>	Catchment Management Authority Act 2003
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>CO<sub>2</sub> -e</b>	Carbon dioxide equivalent
<b>COAG</b>	Council of Australian Governments
<b>COP2</b>	Conference of the Parties
<b>CPRS</b>	Carbon Pollution Reduction Scheme
<b>CRZ</b>	Core riparian zone
<b>CSIRO</b>	Commonwealth Scientific and Industrial Research Organisation
<b>DA</b>	Development Application
<b>DACR</b>	Defence (Area Control) Regulations
<b>DCC</b>	Department of Climate Change
<b>DEC</b>	Department of Environment and Conservation
<b>DECC</b>	Department of Environment and Climate Change
<b>DEH</b>	Department of the Environment and Heritage
<b>DEWHA</b>	Department of the Environment, Water, Heritage and the Arts
<b>DGR's</b>	Director General's Requirements
<b>DLWC</b>	Department of Land and Water Conservation
<b>DoD</b>	Department of Defence
<b>DoL</b>	Department of Lands
<b>DoP</b>	Department of Planning

<b>DPI</b>	Department of Primary Industries
<b>DWE</b>	Department of Water and Energy
<b>EA</b>	Environmental Assessment
<b>ECRTN</b>	Environmental Criteria for Road Traffic Noise
<b>EEC</b>	Endangered Ecological Community
<b>EIA</b>	Environmental Impact Assessment
<b>ELALC</b>	Eden Local Aboriginal Land Council
<b>ELF</b>	Extremely Low Frequency
<b>EMF's</b>	Electric and magnetic fields
<b>EMP</b>	Environmental Management Plan
<b>EP&amp;A Act</b>	Environmental Planning and Assessment Act, 1979
<b>EPA</b>	Environment Protection Authority
<b>EPBC</b>	Environment Protection and Biodiversity Conservation Act, 1999
<b>ESD</b>	Ecologically Sustainable Development
<b>EU</b>	European Union
<b>FM</b>	Frequency Modulated
<b>GWEC</b>	Global Wind Energy Council
<b>IEC</b>	International Electrotechnical Commission
<b>IGACC</b>	Interim Guidelines for Aboriginal Community Consultation
<b>INP</b>	Industrial Noise Policy
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>LCA</b>	Life Cycle Assessment/Landscape Character Areas
<b>LEP</b>	Local Environmental Plan
<b>LGA</b>	Local Government Area
<b>LOS</b>	Line of Sight
<b>LSALT</b>	Lowest Safe Altitude
<b>LVIA</b>	Landscape and Visual Impact Assessment
<b>MIC</b>	Maximum instantaneous charge
<b>MRET</b>	Mandatory Renewable Energy Target
<b>MWHB</b>	Montane Wet Heath and Bog
<b>NEM</b>	National Electricity Market
<b>NEMMCO</b>	National Electricity Market Management Company
<b>NER</b>	National Electricity Rules
<b>NGA</b>	National Greenhouse Accounts
<b>NHMRC</b>	National Health and Medical Research Council
<b>NOW</b>	NSW Office of Water
<b>NPS</b>	NSW Police Service
<b>NPW Act</b>	National Parks and Wildlife Act 1974
<b>NPWS</b>	National Parks and Wildlife Service
<b>NSW</b>	New South Wales
<b>NTG</b>	Natural Temperate Grassland
<b>NW</b>	Noxious Weeds Act 1993
<b>OEMP</b>	Operational Environmental Management Plan
<b>OLS</b>	Obstacle Limitation Surface
<b>PANS OPS</b>	Procedures for Air Navigation Services
<b>PEA</b>	Preliminary Environmental Assessment
<b>PFM</b>	Planning Focus Meeting
<b>PM10</b>	Particles effectively less than 10µm diameter
<b>POEO Act</b>	Protection of the Environment Operations Act 1997
<b>PSPD</b>	Power System Planning and Development
<b>RAAF</b>	Royal Australian Air Force

<b>RBL</b>	Rating background level
<b>REC</b>	Renewable Energy Certificates
<b>REF</b>	Review of Environmental Factors
<b>RET</b>	Renewable Energy Target
<b>RFS</b>	Rural Fire Service
<b>RGOF</b>	Ribbon Gum Open Forest
<b>RTA</b>	Roads and Traffic Authority (NSW)
<b>SA EPA</b>	South Australian Environmental Protection Authority
<b>SEPP</b>	State Environmental Planning Policy
<b>SES</b>	State Emergency Service
<b>SGW</b>	Snow Gum Woodland
<b>SoC</b>	Statement of Commitments
<b>SoE</b>	State of the Environment Report
<b>SRCMA</b>	Southern Rivers Catchment Management Authority
<b>SWMP</b>	Soil and Water Management Plan
<b>TS</b>	Trigonometrical Stations
<b>TSC Act</b>	Threatened Species Conservation Act
<b>TV</b>	Television
<b>UHF</b>	Ultra high frequency
<b>UNEP</b>	United Nations Environment Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>WBZ</b>	Water Bearing Zones
<b>WHO</b>	World Health Organisation
<b>WM Act</b>	Water Management Act 2000
<b>WMO</b>	World Meteorological Organisation
<b>WoNS</b>	Weed of National Significance
<b>WSP</b>	Water Sharing Plan
<b>WTG</b>	Wind Turbine Generator
<b>YCOM</b>	Cooma Aerodrome
<b>YMNC</b>	Yukembruk Merung Ngarigo Consultancy Pty Ltd
<b>ZVI</b>	Zone of Visual Influence

**Units**

°	degree
°C	degree Celsius
<b>dB</b> A	decibels (A range)
<b>GWh</b>	gigawatt hour
<b>H</b>	hour
<b>Ha</b>	hectare
<b>Hz</b>	hertz
<b>Kg</b>	kilogram
<b>Km</b>	kilometre
<b>kph</b>	kilometres per hour
<b>kV</b>	kilovolt
<b>kV/m</b>	kilovolts per metre
<b>kW</b>	kilowatt
<b>L</b>	litre
<b>M</b>	metre
<b>m<sup>2</sup></b>	square metres
<b>m<sup>3</sup></b>	cubic metres
<b>mG</b>	milligauss
<b>m<sup>3</sup>/h</b>	cubic metres per hour
<b>mHz</b>	mega hertz
<b>ML</b>	mega litre
<b>m/s</b>	metre per second
<b>MVA</b>	megavolt Ampere
<b>MW</b>	megawatt
<b>MWh</b>	megawatt hours
<b>MWh/y</b>	megawatt hours per year
<b>rpm</b>	revolutions per minute
<b>y</b>	year
<b>μT</b>	microTesla

## Glossary

<b>Ambient noise</b>	The all-encompassing noise associated within a given environment. It is the composite of sounds from many sources, both near and far.
<b>Artefact locale</b>	The exact location of where the artefact was found within the Project site.
<b>Asset Protection Zone</b>	Is cleared of vegetation, which is designed to protect assets (houses, buildings, etc.) from potential bushfire damage.
<b>Biodiversity</b>	First coined in 1998 as a contraction of biological diversity; diversity traditionally referring to species richness and species abundance. Biodiversity has been defined subsequently as encompassing biological variety at a genetic, species and ecosystem scales (DASETT 1992). The maintenance of biodiversity, at all levels, is acknowledged internationally as a high conservation priority, and is protected by the International Convention of Biological Diversity 1992.
<b>Biodiversity Banking</b>	The Biodiversity Banking and Offset Scheme (Biobanking) has been established by the NSW DECC to help address loss of biodiversity and threatened species.
<b>Bund</b>	An earthwork or wall to contain and control spillages, normally associated with fuelling and chemical storage facilities.
<b>Buried earth grid</b>	Refers to physically connecting a part of an electrical system to the ground, carried out as a safety measure, by means of a conductor embedded in the earth.
<b>Capacity factor</b>	Factor used to account for variation in wind speeds at the site and minor electrical losses when determining the electricity output of a wind farm compared to its installed capacity.
<b>Clusters</b>	Is a group of wind turbines which are likely to be constructed and commissioned in one stage.
<b>Construction Environmental Management Plan</b>	An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the construction phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.
<b>Crown Land</b>	Land that is owned and managed by State Government. Crown land accounts for over half of all land in NSW and includes Crown lands held under lease, licence or permit, community managed reserves, lands retained in public ownership for environmental or travelling stock route purposes, land within the Crown public roads network, and other unallocated lands.
<b>Cumulative Impact</b>	Refers to the accumulation of impacts at a locality from a range of developments of similar or different type over time.

<b>dBA</b>	The noise level in decibels, obtained using the 'A' weighted network of a noise level meter as specified in Australian Standards AS 1259-1990 Noise Level Meters. The 'A' weighting is designed to adjust the noise level (very approximately) in line with human hearing.
<b>Dermosol</b>	Generally a clay soil with good structure in the lower part of the soil profile.
<b>Study Area</b>	200 m wide corridor in which the turbine footprint, roads and reticulation will be contained.
<b>Development Footprint</b>	The impact area from all proposed infrastructure related to the Project.
<b>Ecologically Sustainable Development</b>	Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained and the total quality of life, now and in the future can be increased. Incorporates four key principles: the precautionary principle; inter-generational equity; conservation of biological diversity and ecological integrity; improved valuation and pricing of environmental resources.
<b>Effective Survey Coverage</b>	A percentage estimate of the proportion of the Survey Unit which provided the potential to view archaeological material.
<b>Endangered Ecological Community</b>	A community listed under Schedule 1, Part 3 of the NSW <i>Threatened Species Conservation Act 1995</i> .
<b>Environment</b>	The physical, biological, cultural, economic and social characteristics of an area, region or site.
<b>Environmental Assessment</b>	For a development that constitutes a Major Project under the State Environmental Planning Policy - Major Project, prepared pursuant to the <i>Environmental Planning and Assessment Act 1979</i> .
<b>Environmental Management Plan</b>	The control, training and monitoring measures to be implemented during the design, construction and operation phases of a project in order to avoid, minimise or ameliorate potentially adverse impacts, identified during environmental (being socio-economic, cultural, physical, biological) assessments.
<b>Fauna</b>	Animals
<b>Flora</b>	Plants
<b>Fresnel Zone</b>	In optics and radio communications the Fresnel zone is an elliptical region surrounding the line of sight path between transmitting and receiver antennas which must be obstruction free for a microwave radio link to work without interference.

<b>Geotechnical</b>	Relating to the form, arrangement and structure of the geology.
<b>Grid</b>	With reference to electricity, the electrical transmission and distribution network.
<b>Groundwater</b>	All water which is below the surface of the ground in the saturation zone and in direct contact with the ground of the soil.
<b>Hydrology</b>	Surface water and groundwater and their interaction with earth materials.
<b>Indigenous objects and sites</b>	A place where physical remains or modification of the natural environment indicate the past and 'traditional' activities by Aboriginal people. Site types include artefact scatters, isolated artefacts, burials, shell middens, scarred trees, quarries and contact sites.
<b>Installed capacity</b>	The maximum electrical output of wind turbines installed in a wind farm.
<b>LA<sub>eq</sub></b>	The average noise level over the sample period.
<b>Locality</b>	Area encompassing all lands within a 10 km radius around the Project site.
<b>Monitoring</b>	The checking of impacts of a proposal or an existing activity in order to improve or evaluate environmental management practices; To check the efficiency and effectiveness of the environmental impact assessment process; To determine if the requirements of environmental legislation and associated regulations are being met.
<b>Operational Environmental Management Plan</b>	An element of an Environmental Management Plan that addresses the control, training and monitoring measures to be implemented during the operational phase of a project in order to avoid, minimise or ameliorate potentially adverse impacts identified during environmental assessments.
<b>Peak Demand</b>	The greatest demand for electricity in a stated period of time, such as the greatest demand during a week or a year.
<b>Photomontages</b>	A composite image combining two or more photographs.
<b>Precautionary Principle</b>	The precautionary principle states that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
<b>Procedures for Air Navigation Services</b>	Allows aircraft to conduct an instrument approach to airports in poor weather conditions, by using a published Instrument Approach and Departure Procedures which apply varying minimum altitude requirements above terrain.
<b>Project Site</b>	Land within the cadastre boundaries of all properties likely to be directly impacted by the proposal.



<b>Proponent</b>	In relation to an activity, means the person proposing to carry out the activity.
<b>Ramsar</b>	Australia is contracting party to the Ramsar Convention on wetlands. This obliges us to designate and protect wetlands of international significance.
<b>Riparian</b>	Relating to the banks of a natural course of water.
<b>Risk</b>	Likelihood of a specific undesirable event occurring within a specified period or in specified circumstances. Listed as a frequency or probability.
<b>Risk Assessment</b>	A process used to determine whether people and the environment are at risk (e.g. health and safety) from exposure to hazardous substances used or produced (mainly in an industrial or work place) so that appropriate control measures or management practices can be introduced to prevent or minimise the risk.
<b>Rotor</b>	The assembly of blades and hub that is used to intercept the wind, producing rotational energy.
<b>Rudusol</b>	Generally a shallow sandy soil profile.
<b>SCADA</b>	Supervisory Control and Data Acquisition system. The term implies that there are two activities that are necessary: The acquisition of data (from a wind farm) and subsequent transfer to some central location, and the control of some process or equipment from this central location.
<b>Statement of Commitments</b>	Is a document on how the proponent proposes to manage the Project to minimise and where possible, avoid impacts.
<b>Soil profile</b>	A vertical section of soil, which allows for the examination of soil structure.
<b>Survey Unit</b>	Area defined according to landform morphological type for cultural heritage field surveys.
<b>Tertiary basalt</b>	A rock type formed between 2 to 63 million years ago from volcanic activity when molten material from deep within the earth is ejected onto the surface of the earth.
<b>Topsoil</b>	The upper layer of soil, usually containing more organic material and nutrients than the subsoil beneath it.
<b>Transformer</b>	A device consisting of two or more insulated coils of wire wound around a magnetic material such as iron, used to convert one AC voltage to another or to electrically isolate the individual circuits. Usually used to increase generation voltage to transmission voltage.
<b>Vertosol</b>	A clay-rich soil with uniform texture throughout the soil profile.

<b>Visibility</b>	Measure of extent to which particular aspects of a development may be visible from surrounding areas.
<b>Visual Catchment</b>	The area from which the proposed wind farm would be potentially visible.
<b>Weed</b>	Naturalised, non-indigenous plant species which may be noxious weeds (or agriculture), environmental weeds or any other generally undesirable introduced species.
<b>Wetlands</b>	Areas largely inundated with water, yet offering elevated land as a habitat for wildlife, notably waterfowl. Can be landlocked.
<b>Wind</b>	The movement of air, caused by heating of the atmosphere, land and sea. Usually measured as metres per second, knots or kilometres per hour.
<b>Wind Monitoring Mast</b>	A guyed, narrow lattice or tubular steel design mast, in this case up to 100 m in height, with anemometers and wind vanes attached at different heights on the mast, to monitor and record the wind's characteristics.
<b>Wind Turbine Generator</b>	Electrical generators rotated by the movement of wind over blades that feed power into the mains electricity grid.