



Department of Planning,  
Lands and Heritage



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# Position Statement:

## Renewable energy facilities

March 2020

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## 1. Policy intent

This document outlines the Western Australian Planning Commission (WAPC) requirements to support the consistent consideration and provision of renewable energy facilities within Western Australia. It supersedes *Planning Bulletin 67 Guidelines for Wind Farm Development (2004)*.

The policy identifies assessment measures to facilitate appropriate development of renewable energy facilities. It seeks to ensure these facilities are in areas that minimise potential impact upon the environment, natural landscape and urban areas while maximising energy production returns and operational efficiency.

When reviewed and where relevant, the WAPC will support amendments to incorporate the statutory content from this Position Statement into the *Planning and Development (Local Planning Schemes) Regulations 2015* as model or deemed provisions.

## 2. Renewable energy facilities in Western Australia

The *Western Australian Planning Commission's State Planning Strategy 2050* promotes renewable energy initiatives.

The local planning framework, principally administered by local government, can effectively manage the development assessment of renewable energy facilities.

Renewable energy facilities in Western Australia are principally wind turbine and solar array systems. Other systems include geothermal, biogas, ocean power and hydro-electric power for on-grid and off-grid locations.

Renewable energy can enhance local economies and easily connect into the network grid. The contribution that renewable energy facilities make to the reduction in carbon emissions is an important consideration for the growth of the industry, as well as the socio-economic benefits to the State.

## 3. Application of this policy

This position statement applies to the preparation and assessment of planning instruments including region and local planning schemes, planning strategies, and structure plans; as well as in the assessment of subdivision and development applications in Western Australia.

## 4. Policy objectives

The objectives of this position statement are to:

- guide the establishment of renewable energy facilities to support the *State Energy Transformation Strategy (March 2019)*
- outline key planning and environmental considerations for the location, siting and design of renewable energy facilities
- promote the consistent consideration and assessment of renewable energy facilities
- facilitate appropriate development of renewable energy facilities while minimising any potential impact upon the environment, natural landscape, and urban areas
- encourage informed public engagement early in the renewable energy facility planning process.

## 5. Policy measures

### 5.1 State Planning Framework

Regional and sub-regional strategies, as provided for by *State Planning Policy 1 State Planning Framework*, may provide objectives related to renewable energy, general principles for location in the regions and general guidance for renewable energy facilities in the local planning framework.

### 5.2 Local planning framework

Local governments should address renewable energy facilities in their local planning framework.

#### 5.2.1 Local planning strategy

The local planning strategy should indicate landscape protection areas that should exclude renewable energy facilities. Where a local government does not have an approved strategy, the subject site may require detailed evaluation as to the landscape qualities as part of the overall planning assessment. On and off the grid renewable energy facility considerations may be included in a local planning strategy. For example, areas of high environmental and landscape value may be unsuitable for large scale wind or solar farm development. Visual landscape

analysis, including view shed mapping, may be undertaken to enable important views and landscape character to be identified and protected.

Competing land uses on rural land should be taken into consideration when determining appropriate locations for renewable energy facilities. The provisions of *State Planning Policy 2.5 Rural Planning* need to be considered when assessing appropriate locations for these facilities. Large facilities should be located close to the network grid and preferably on cleared rural land with low agricultural value.

Where practicable, the agricultural use of land should continue after installation of a renewable energy facility. The future growth of regional towns and urban growth areas should not be compromised by renewable energy facilities impacting upon locations that will accommodate future sensitive land uses such as residential dwellings, particularly on the urban-rural fringe.

#### 5.2.2 Local planning scheme

Where applicable, local planning schemes should contain the land use definition of renewable energy facility as per section 6 below, in lieu of the existing definition for a wind farm.

It is recommended that a renewable energy facility be designated in the zoning table of a local planning scheme as an 'A' use (not permitted without discretion and giving notice) of land within the appropriate zones. 'A' land uses require public advertising before the proposal can be determined.

Special Control Areas may be applied within local planning schemes to create special provisions, for example to protect air flight paths, regionally or locally significant key views, or valued landscapes from incompatible land use or development. A renewable energy facility may be specified as an 'X' use (not permitted) in these areas.

Local planning schemes should include provisions to provide direction on matters such as the location, permissibility, terms of operation and development standards of a renewable energy facility. Measures may address potential impacts such as setbacks and vegetation screening from sensitive land uses.

Where the local government has not adopted a local planning strategy, or the local planning scheme does not include provisions to guide decision making on renewable energy facilities, consideration of the above issues may be incorporated into a local planning policy.

### 5.2.3 Local planning policy

A local planning policy can be used to provide specific development standards applicable to renewable energy facilities, and any other matters required to guide the local government in its decision making on a renewable energy facility.

## 5.3 Renewable energy facility proposals

### 5.3.1 Community consultation

Early consultation with the community and stakeholders by the proponents is encouraged to ensure that the proposal is compatible with existing land uses on and near the site.

The local government should be consulted with respect to the community consultation program.

Relevant stakeholders may include:

- Air Services Australia
- Australian Wind Alliance
- Civil Aviation Safety Authority
- Clean Energy Council
- Department of Biodiversity, Conservation and Attractions
- Department of Agriculture, Water and Environment (Australian Government)
- Department of Industry, Science, Energy and Resources (Australian Government)

- Department of Defence (Australian Government)
- Department of Fire and Emergency Services
- Department of Jobs, Tourism, Science and Innovation
- Department of Mines, Industry Regulation and Safety
- Department of Planning, Lands and Heritage
- Department of Primary Industries and Regional Development
- Department of Water and Environmental Regulation
- Electricity network provider
- Energy Policy WA
- Environmental Protection Authority
- Local government
- Main Roads Western Australia
- National Farmers Federation
- Western Australian Planning Commission

### 5.3.2 Environmental impact

An environmental survey of the site should be conducted prior to the commencement of the renewable energy facility design. The type, location and significance of flora and fauna, particularly rare endangered or threatened communities that may be impacted, should be described and mapped so that remnant native vegetation and sensitive areas can be avoided.

Facilities should be located near the grid to minimise clearing of vegetation for grid connection power lines. Solar arrays over a large area may have a significant effect on the clearing of native vegetation. Already cleared farming land may offer a practical solution to minimise any environmental impact.

To understand the impact of wind turbines on birds and bats, the following matters should be considered:

- stopover sites, local bird species roosting and nesting sites
- location of bat colonies
- areas of high raptor activity
- the cumulative impact of wind turbines on migration routes.

The positioning of wind turbines outside of migratory routes may reduce the risk of avian strikes. An avian study should be undertaken when this risk is identified.

Proposals that may have a detrimental impact upon the environment should be referred to the Department of Water and Environmental Regulation (DWER) and the Environmental Protection Authority (EPA). The proposal could be referred by the decision-making authority, the proponent, or any individual.

The EPA *Environmental Factor Guideline - Flora and vegetation (December 2016)* and *EPA Environmental Factor Guideline - Social Surroundings (December 2016)* should be used to inform the environmental assessment.

The EPA will determine whether the proposal should be subject to an environmental impact assessment (see *EPA Guidance Statement No.33 Environmental Guidance for Planning and Development (May 2008)* for further information).

Referral to the Commonwealth Minister for the Environment through the Department of Agriculture, Water and Environment, under the *Environment Protection and Biodiversity Conservation Act 1999*, may also be required for matters of national environmental significance.

### 5.3.3 Visual and landscape impact

The location and siting of a renewable energy facility may require a visual and landscape impact assessment that addresses:

- landscape significance and sensitivity to change, site earthworks, topography, extent of cut and fill, the extent and type of vegetation, clearing and rehabilitation areas, land use patterns, built form character, public amenity and community values

- likely impact on views including the visibility of the facility using view shed analysis and simulations of views from significant viewing locations including residential areas, major scenic drives and lookouts
- layout of the facility including the number, height, scale, spacing, colour, surface reflectivity and design of components, including any ancillary buildings, signage, access roads, and incidental facilities
- measures proposed to minimise unwanted, unacceptable or adverse visual impacts.

*Visual Landscape Planning in WA: a manual for evaluation, assessment, siting and design, (November 2007)* and the Australian Wind Energy Association and the Australian Council of National Trusts Publication *Wind Farms and Landscape Values (2005)* provide detailed guidance on visual landscape impact assessments.

#### **5.3.4 Noise impact (wind turbine proposals)**

The minimum recommended distance between noise-sensitive land uses and a wind turbine is 1,500 metres\*.

\* Evidence suggests that there are unlikely to be any significant effects on physical or mental health for noise-sensitive land uses at distances greater than 1,500m from wind turbines Source: National Health and Medical Research Council (February 2015 ref # EH57)

The minimum distance may be reduced with the approval of the local government, based upon advice from DWER.

Proposals for new wind turbines within 1,500 metres of an existing or new noise-sensitive premises (excluding caretaker dwellings) will require an acoustic study to enable the local government to determine the acceptability of a lesser separation distance. The acoustic study should be completed by a qualified acoustic consultant and include the provision of suitable noise attenuation measures, where required. Noise emissions from renewable energy facilities, including wind turbines, are required to meet the standards prescribed under the *Environmental Protection (Noise) Regulations 1997*. The *South Australian Environmental Protection Authority – Wind Farms Environmental Noise Guidelines (2009)* should also be referenced for assessment purposes. These guidelines acknowledge the potential for operation in the presence of higher wind-induced background noise levels.

#### **5.3.5 Public and aviation safety**

Appropriate measures should be provided, in consultation with the local government, to manage public access near a renewable energy facility (particularly wind turbines)

and any public building, road or pathway including visitor facilities such as car parks, platforms, information facilities and toilets.

Wind turbines proposed in areas subject to cyclones need to be designed and constructed to enable safe stowage if high winds are forecast.

Proponents of wind turbine proposals should refer to the *National Airports Safeguarding Framework (NASF) Guideline D: Managing the Risk to Aviation Safety of Wind Turbine Installation (Wind Farms) / Wind Monitoring Towers* to determine any potential aviation safety risks and possible mitigation measures. Any potential aviation safety risks identified require consultation with Civil Aviation Safety Authority (CASA), Air Services Australia and/or the Commonwealth Department of Defence.

Wind turbines and solar arrays in bushfire prone areas should be designed and maintained so they are not a bushfire risk to surrounding bushland, and where possible should not be in bushfire prone areas with an 'extreme' bushfire hazard level or bushfire attack level (BAL) - 40 or BAL- Flame Zone. A minimum 10 metres clearance to combustible vegetation in the form of an Asset Protection Zone (APZ) is recommended. The APZ should be managed in a low threat state, in accordance with the *Guidelines for Planning in Bushfire Prone Areas (DPLH/DFES: 2017)*.

#### **5.3.6 Heritage**

Some locations may hold Aboriginal heritage, natural or historic heritage significance which may impact site suitability. An assessment should address:

- local archaeological and ethnographical records
- any impact upon the natural environment that have aesthetic, historical, scientific or social significance or other special value for the present and future community
- any impact upon the historic heritage characteristics of adjoining/nearby places with an impact assessment of the proposal undertaken where relevant.

Consultation with the Department of Planning, Lands and Heritage may be required if heritage issues are identified. Appropriate consultation should be undertaken with respect to Aboriginal heritage matters.

#### **5.3.7 Construction impact**

It is important to accommodate the full scope of works to occur on the site in the development of a renewable energy facility. Consideration needs to be given to potential staging that may occur including one type of renewable energy being

subsequently complemented by a second type of renewable energy to supplement continuity of feed into the grid, for example, wind turbines supplemented by solar arrays on the same site.

Key matters that should be addressed during the construction phase are:

- a site construction management plan that identifies standards and procedures for the construction of the development including the management of environmental emissions such as dust and noise
- site disturbance should be minimised during construction through careful siting and measures to address erosion, drainage run-off, flooding, water quality, retention of remnant vegetation, stabilisation of top soil, and weed and disease hygiene
- vehicle and machinery access and movement.

A decommissioning program should be separately developed in relation to removal of the facility and any rehabilitation requirements.

## 6. Definitions

**Caretaker dwelling** has the same meaning as under the *Planning and Development (Local Planning Schemes) Regulations 2015*.

**Renewable energy facility** means premises used to generate energy from a renewable energy source and includes any building or other structure used in, or relating to, the generation of energy by a renewable resource. It does not include renewable energy electricity generation where the energy produced principally supplies a domestic and/or business premises and any on selling to the grid is secondary.

**Sensitive land uses** comprise land uses that are residential or institutional in nature, where people live or regularly spend extended periods of time. These include dwellings, short-stay accommodation, schools, hospitals and child care centres and generally exclude commercial or industrial premises.