

SMALL SCALE RENEWABLE ENERGY SYSTEMS

STATUS: *City Policy - A policy that is developed for administrative and operational imperatives and has an internal focus.*

Developed by the Policy Committee and/or the administration and adopted by Council.

RESPONSIBLE: Director Planning and Development

OBJECTIVE: To establish criteria for the development of small scale renewable energy systems on land or buildings within the City.

To protect the quality of the streetscape and amenity (particularly visual and acoustic amenity) of adjoining properties from the impact of renewable energy technologies.

POLICY AREA

This policy shall apply to the installation of all small scale renewable energy systems within the City of Joondalup.

DEFINITIONS

Solar energy system: A system which converts energy from the sun into useable electrical energy, heats water or produces hot air or a similar function through the use of solar panels.

Small scale renewable energy system: A solar energy system of up to 100kW capacity, or a small wind energy system of up to 10kW capacity.

Total height: The vertical distance from natural ground level to the tip of a wind generator blade when the tip is at its highest point.

Wind energy system: Equipment that converts and then stores or transfers energy from the wind into usable forms of energy. This equipment includes any base, blade, foundation, generator, nacelle, rotor, tower, transformer, vane, wire, inverter, batteries or other component used in the system.

APPROVALS REQUIRED

Solar energy system:

An application for planning approval is **required** for a solar energy system installation, except where it is installed on a dwelling in a residential zone.

A *Building Licence* is **not required** for the installation of a solar energy system. However, it remains the property owner's duty of care to ensure that any installation does not impact on the structural integrity of the building on which it is installed or any other structure.

Wind energy system:

An application for planning approval is **required** for all wind energy system installations.

A *Building Licence* is **required** for the installation of any wind energy system.

STATEMENT

Solar energy system:

Development provisions:

Solar energy systems should be designed and positioned on rooftops so as not to detract from the building itself or impose on the existing streetscape.

Wind energy system:

Development provisions:

All wind energy systems are to comply with the general provisions listed below and the development standards provided in Table 1:

- The system must be well setback from any overhead power lines.
- The turbine system must be fitted with an automatic and manual braking system or an over-speed protection device.
- Unless colour-matched to the supporting roof, the wind energy system and any tower structure must remain painted or finished in the colour or finish applied by the manufacturer.
- No signage, other than the manufacturer's or installer's identification, shall be attached to the system.
- Any electrical components and wires associated with a small wind energy system must not be visible from the street.
- The system must not be located on a property/building on the City's Heritage List.

Table 1: Development standards

	Residential and Special Residential zones and Single and grouped dwellings in City North and Lakeside District of the Joondalup City Centre	All other zones:
Number of turbines	<ul style="list-style-type: none"> Maximum of one per lot 	<ul style="list-style-type: none"> Maximum of one per 1,000m² of lot area
Minimum lot size	<ul style="list-style-type: none"> 350m² 	<ul style="list-style-type: none"> 1,000m²
Nameplate capacity	<ul style="list-style-type: none"> Maximum 2 kW 	<ul style="list-style-type: none"> Unlimited
Height	<p>Pole Mounted:</p> <ul style="list-style-type: none"> Maximum 5.0 metres total height above natural ground level <p>Roof Mounted:</p> <ul style="list-style-type: none"> Maximum total height 3.0 metres above roofline if mounted on a single-storey dwelling Minimum 1.0 metres clearance above roofline Not permitted on dwellings two storeys or more 	<p>Pole Mounted:</p> <ul style="list-style-type: none"> Maximum 10.0 metres total height above natural ground level <p>Roof Mounted:</p> <ul style="list-style-type: none"> Maximum total height 7.5 metres above roofline
Diameter	<ul style="list-style-type: none"> Maximum blade diameter 2.0 metres 	<ul style="list-style-type: none"> Maximum blade diameter 5.5 metres
Boundary setbacks (street)	<ul style="list-style-type: none"> Not permitted between the building and the street alignment 	<ul style="list-style-type: none"> Not permitted between the building and the street alignment
Boundary setbacks (side and rear)	<p>Pole Mounted:</p> <ul style="list-style-type: none"> Setback from boundaries is not less than the total height of the wind energy system <p>Roof Mounted:</p> <ul style="list-style-type: none"> No minimum setback from boundary, however, wind energy system to be located a minimum of 7.5 metres from major opening of adjoining dwelling 	<p>Pole Mounted:</p> <ul style="list-style-type: none"> Setback from boundaries is not less than half of the total height of the wind energy system <p>Roof Mounted:</p> <ul style="list-style-type: none"> No minimum setback from boundary, however, wind energy system to be located a minimum of 7.5 metres from major opening of adjoining building

ADVERTISING

Applications for planning approval that do not comply with this policy will require consultation with adjoining property owners likely to be affected by the proposal for a minimum period of 21 days prior to the determination of the application. Consultation will include neighbours on the opposite side of the street where the structure may be visible from the street and will be undertaken by the City.

Where planning approval is granted for development that complies with this policy, the owners of adjoining properties will be notified of the approved development in writing.

OTHER

Compliance with other legislation:

All wind energy systems are required to comply with the *Environmental Protection (Noise) Regulations 1997*. In addition, wind energy systems that connect to the electric utility supply must comply with the requirements of the relevant public authorities.

Manufacturer's specifications and a statement demonstrating compliance with the *Environmental Protection (Noise) Regulations 1997* must be submitted with the planning application.

VARIATIONS

Where a proposal does not meet the specific requirements of this policy, the applicant is to provide appropriate justification, and the proposal will be considered in accordance with the objectives of this policy.

Amendments:	CJ041-03/11
Related documentation:	<i>Environmental Protection (Noise) Regulations 1997</i> Office of the Renewable Energy Regulator
Issued:	15 March 2011