## SMALL SCALE RENEWABLE ENERGY SYSTEMS POLICY

CATEGORY: City Policy - A policy that is developed for administrative and

operational imperatives and has an internal focus.

City policies are referred to Council for review and

endorsement.

RESPONSIBLE DIRECTORATE:

Planning and Community 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.

#### 1. AUTHORITY

This Policy has been prepared in accordance with Clause 8.11 of the City of Joondalup District Planning Scheme No.2, which allows Council to prepare local planning policies relating to planning or development within the Scheme area.

## 2. APPLICATION

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

#### 3. **DEFINITIONS**

"solar energy system" means 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" means a solar energy system of up to 100 kilowatts capacity or a small wind energy system of up to 10 kilowatts capacity.

"total height" means 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" means 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.

## 4. STATEMENT

The City supports and encourages the use of small scale renewable energy systems on land or buildings within its district in order to reduce the production of greenhouse gas emissions at a household level.

<u>In doing so, it also seeks to balance and</u> protect the quality of the streetscape and amenity (particularly visual and acoustic amenity) of adjoining properties from the impact of <u>these technologies</u>.

## 5. DETAILS

## 5.1 Solar Energy System

## **5.1.1** Approvals Required

- a. 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.
- b. A Building Permit 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.

## **5.1.2** Development Provisions

Where development is not subject to the provisions of the Residential Design Codes of Western Australia, 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.

#### 5.2 Wind Energy System

## 5.2.1 Approvals Required

- An Application for Planning Approval is required for all wind energy system installations.
- b. A Building Permit is required for the installation of any wind energy system.

#### **5.2.2** Development Provisions

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

- a. The system must be well setback from any overhead power lines.
- b. The turbine system must be fitted with an automatic and manual braking system or an over-speed protection device.
- c. 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.
- d. No signage, other than the manufacturer's or installer's identification, shall be attached to the system.
- e. Any electrical components and wires associated with a small wind energy system must not be visible from the street.
- f. The system must not be located on a property/building on the City's Heritage List.

#### **OTHER**

#### **5.2.3** Compliance with other Legislation

- a. 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.
- b. Manufacturer's specifications and a statement demonstrating compliance with the *Environmental Protection (Noise)*Regulations 1997 must be submitted with the planning Application for Planning Approval.

## 5.3 Advertising

- a. 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.

#### **5.4** 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.

**CREATION DATE:** March 2011

AMENDMENTS: CJXXX-XX/XX

RELATED DOCUMENTATION:

• City of Joondalup District Planning Scheme No. 2

• Environmental Protection (Noise) Regulations 1997

• Residential Design Codes of Western Australia



# Table 1 — Development Standards

	Applicable Zones			
	<ul> <li>Residential Zones</li> <li>Special Residential Zones</li> <li>Single and Grouped Dwellings in City North</li> <li>Lakeside District of the Joondalup City Centre</li> </ul>		All other Zones	
Number of turbines	max. of 1 per lot		max.of 1 per 1,000 m <sup>2</sup> of lot area	
Minimum lot size	350 m <sup>2</sup>		1,000 m <sup>2</sup>	
Nameplate capacity	max. 2 kW		unlimited	
Height	Pole Mounted:  Roof Mounted:	max. 5 m total height above natural ground level min 3 m blade clearance from natural ground level max. total height 3 m above roofline if mounted on a single- storey dwelling min. 1 m clearance above roofline not permitted on dwellings 2 storeys or more	Pole Mounted:  Roof Mounted:	max. 10 m total height above natural ground level max. total height 7.5 m above roofline
Diameter	max. blade diameter 2 m		max. blade diameter 5.5 m	
Boundary setbacks (street)	not permitted between the building and the street alignment		not permitted between the building and the street alignment	
Boundary setbacks (side and rear)	Pole Mounted:  Roof Mounted:	setback from boundaries is not less than the total height of the wind energy system  no min. setback from boundary, however, wind energy system to be located a minimum of 7.5 m from major opening of adjoining dwelling	Pole Mounted:  Roof Mounted:	Setback from boundaries is not less than half of the total height of the wind energy system  no minimum setback from boundary, however, wind energy system to be located a minimum of 7.5 m from major opening of adjoining building