SHIRE OF DENMARK

DRAFT TOWN PLANNING SCHEME POLICY

RAINWATER TANKS, RENEWABLE ENERGY & GREYWATER RE-USE SYSTEMS

1. INTRODUCTION

The Shire of Denmark has prepared this policy to encourage landowners, developers and builders to incorporate rainwater tanks, renewable energy and greywater re-use systems within residential areas. This will to achieve a number of environmental benefits including:

- Reduced risk of water restrictions in the future,
- Increased local awareness of water scarcity and usage,
- Promotes responsible use of water supplies and can reduce the demand on the Water Corporation supply network,
- Promote reduced energy consumption and usage to reduce reliance on the present Western Power supply network which is at capacity,
- Encourage waterwise developments through recycling of greywater and other initiatives,
- Promote an overall increased level of sustainability within residential areas.

Whilst the introduction of this policy may result in additional costs for housing developments in the short-term, the economic benefits over the long-term are considerable. The desire to encourage residents to become more sustainable will also deliver benefits to the community as a whole over time.

The policy delivers on the Shire's commitment to the community to promote environmentally conscious development and create a sustainable community.

Whilst it is expected that some of the systems may create some local disharmony or disquiet, these are only expected in the short-term as the residents become used to these systems being implemented. The main visual impacts from wind turbines relate to flicker from the blades, glint or reflection from the blades and overshadowing. The main visual impacts from solar energy systems relate to reflection from the panels surface into adjoining properties. There is also potential noise impacts from the operation of wind energy systems, particularly the movement of the rotors and this will increase over time as the generator becomes aged and mechanical parts wear.

2. OBJECTIVES OF THE POLICY

The objectives of the Policy are as follows:

- Improve the environmentally sustainability of housing within the Shire.
- Encourage the installation of rainwater tanks, renewable energy and greywater re-use systems within residential developments.
- Ensure that the streetscape and amenity of the local area is not adversely affected through unacceptable visual or acoustic impacts from the operation of any renewable energy systems.
- Introduce standards for the siting and development of rainwater tanks, renewable energy and greywater re-use systems.

Attachment 9.1.6

3. DEFINITIONS AND APPLICATION OF THE POLICY

3.1 Policy Definitions

For the purpose of this Policy, the following main terms are defined:

'wind energy system'	*shall mean any equipment that is used to convert and then store and/or transfer energy from the wind into usable electrical energy. The term shall include any equipment used in the activity such as base, blades, generator, tower, transformer, vane, wire, inverter, batteries etc.*
'domestic wind energy system'	*shall mean any wind energy system that is used for generating electricity for domestic energy consumption and has a rated capacity of 2kW or less.*
'solar energy system'	*shall mean any equipment that is used to convert and then store and/or transfer energy from the sun into usable energy including electricity, steam or air through the use of solar or photovoltaic panels. The term shall include any equipment used in the activity such as frame, panels, generator, transformer, inverter, batteries etc.*
'greywater re-use system'	*shall mean any equipment designed and used to treat and re-use domestic greywater from a dwelling.*
'total height'	*shall mean the vertical height from natural ground level to the highest point of the system such as tip of generator blade or photovoltaic frame/cell.*

3.2 Policy Application

This policy applies to all land within the residential, special residential, special rural, rural multiple occupancy, landscape protection and rural zones in the scheme area. In addition, certain areas of the Shire including heritage places and some residential areas are covered by other planning scheme provisions or policies. In these cases, proposals will need to comply with those requirements also.

Those proposals that achieve compliance with all of the acceptable development provisions below do not require planning consent approval to be issued by the Shire of Denmark as they are deemed acceptable and satisfy the established criteria set down.

Those proposals that do not achieve all of the acceptable development provisions require planning consent approval to be issued by the Shire of Denmark before the system can be installed.

Whilst not all rainwater tanks and renewable energy systems require formal approval, the Shire expects that the proponents will still achieve the objectives of the policy.

4. POLICY

4.1 Acceptable Development Criteria

All rainwater tanks, renewable energy and greywater re-use systems which achieve all of the acceptable development criteria table do not require planning consent to be issued.

All proponents must ensure that the installation, maintenance and operation of any renewable energy system is undertaken to ensure that any impacts particularly through visual and/or noise generation are managed effectively and do not exceed the prescribed limits in the *Environmental Protection (Noise) Regulations* or other relevant legislation. In accordance with the planning scheme controls, if in the opinion of Council, the approved use is causing nuisance or annoyance to neighbours or owner/occupiers of the land in the vicinity of the approved use, Council may require the system be modified to remove the nuisance or annoyance and address these concerns.

4.2 Conditional Development

Any proposal that does not meet all of the acceptable development criteria is required to obtain planning consent approval before the system can be installed and shall be subject to planning consent approval conditions as determined by the Shire upon application:

	ACCEPTABLE DEVELOPMENT CRITERIA			
TYPE	**SIZE, SITING & AMENITY**	**TOTAL HEIGHT**	**NOISE**	**SETBACKS**
RAINWATER TANK	• Is used in accordance with the Department of Health's standard on water tanks. This includes but is not limited to a 'First Flush Water Diverter' (for detailed information refer: http://www.health.wa.gov.au/home/). • For Residential, Special Residential, Rural Multiple Occupancy, Landscape Protection and Special Rural Zones has a capacity less than 45,001l and for Rural has a capacity of less than 200,000l. • Is not located between front of building and street. • The tank (and any pumping equipment or structure) shall be coloured, toned or painted to complement the colours of the existing dwelling and/or outbuilding. • Any runoff from the tank must not overflow onto adjoining properties.	n/a	n/a	Residential Zone: In accordance with R-Codes. Special Residential, Special Rural, Landscape Protection and Rural Multiple Occupancy Zones: Is within approved building envelope or setbacks. Rural zones: Is in accordance with setbacks prescribed by Town Planning Scheme No.3
WIND ENERGY SYSTEMS	• Is a domestic wind energy system. • Has a maximum blade diameter of 2m or less. • Is not located between front of building and street and/or is within the approved building envelope. • The turbine is fitted with an automatic and/or manual braking system or over speed protection device. • The generator, blades and tower structure shall be coloured, toned or painted to reduce reflection into adjoining properties. • Electrical components and wiring shall not be visible from adjoining properties or public road etc. • Any system that connects to the electricity or water supply shall comply with the requirements of the relevant government agency.	Pole or Tower Mounted: 6m Roof Mounted: 3m above roof (maximum)	Comply with *Environmental Protection (Noise) Regulations 1997*. (Note: In the event of Council receiving neighbourhood noise complaints, the applicant will be responsible to provide evidence from a suitable qualified acoustic consultant to prove systems compliance with the noise regulations)	Pole or Tower Mounted: To be setback from side and boundary setbacks equal to the total height of the system. Roof Mounted: To be setback a minimum of 7.5m from any major opening of any building on adjoining properties.
SOLAR ENERGY SYTEMS	• Be affixed to the roof. • Be positioned to not detract from the building aesthetics or streetscape. • The frame and structure shall be coloured, toned or painted to complement the roof colours of the existing dwelling and/or outbuilding. • Any system that connects to the electricity supply shall comply with the requirements of the relevant government agency.	n/a	n/a	n/a
GREYWATER RE-USE SYSTEM	• Is an approved system that is endorsed by the Department of Health for domestic greywater re-use purposes. • Is used for non-potable (not drinking) purposes.	n/a	n/a	n/a

Note: Rainwater tanks in Tourist, Commercial, Industrial and Professional Office are to comply with Town Planning Scheme No.3 development standards in accordance with Clause 5 of this Policy.

5. APPLICATION REQUIREMENTS

Where a proposal does not meet all of the acceptable development criteria, applicants shall provide the following information for assessment:

- Completed Planning Consent Application Form and Payment of Application Fee.
- Four (4) plans to scale and written information providing the following details:

Site Details

- Site plan showing all boundaries, proposed position and setbacks of rainwater tank or renewable energy system, lot number, dimensions, contours, north point and street names.
- Details of all buildings on any adjoining properties.

Proposal Details

- Details on rainwater tank or renewable energy system design including proposed purpose for the rainwater tank or renewable energy system, capacities/volumes, estimates of water use/savings and information on noise and visual impacts on adjoin properties and public roads, streetscape etc.

All applications that do not comply with the acceptable development criteria will be referred (for a period of 21-days) to adjoining landowners to enable comment to be received prior to the application being considered by the Shire.