

# Ecologically Sustainable Development (ESD) Fact Sheet



The Doncaster Hill Strategy sets a new benchmark in architectural and sustainable development, with ESD Guidelines that establish a process for the creation of sustainable, mixed-use buildings in the Activity Centre. These buildings will be the model for healthier, accessible and ecologically responsive environments, where occupants will collectively enjoy the benefits of living in a sustainable urban village. Key requirements that must be addressed by developers include provision for access and mobility, energy efficient design, water conservation and reuse, materials recycling and reuse, waste minimisation, best practice construction and demolition standards, integrated transport and car parking, building height controls, minimised overshadowing and overlooking, maintained view lines and vistas, useable open space, landscaping and high safety standards.

The aim of sustainable development is to create buildings that provide:

- lower operating costs for residents and businesses
- increased occupant comfort and accessibility
- higher perceived value due to the occupant and environmental benefits
- reduced urban sprawl
- protection and enhancement of the natural and built environment.

## Council's Doncaster Hill ESD Objectives

The eight key ESD performance areas and objectives are:



**Energy Management:** To achieve new benchmarks in energy conservation and increase use of renewable energy sources



**Water Conservation and Re-Use:** To achieve best practice water sensitive urban design that offers an alternative to the traditional approach to water management



**External Building Materials:** To minimise the environmental impacts of input and output materials as well as any material used in the external construction and development of buildings and works



**Interior Materials Analysis:** To achieve healthy internal building environments



**Waste Minimisation and Avoidance:** To achieve a reduction in waste generated by building occupants that is collected and disposed of in landfills



**Quality of Private and Public Realms:** To achieve design excellence in the built, natural and cultural environments



**Integrated Traffic and Transport Management:** To minimise overall environmental impacts due to movement and transportation of people, materials, equipment and systems



**Construction and Demolition Management:** To minimise environmental impacts associated with site construction practices.

## Doncaster Hill Smart Energy Zone (SEZ)

Council was approached by Sustainability Victoria in early 2007 about involving Doncaster Hill in its Smart Energy Zone project. Smart Energy Zones demonstrate the benefits of integrating multiple technologies in one location, for greater energy efficiency and security. Council has received a \$500,000 grant from Sustainability Victoria and a \$1.5 million grant under the Federal Government's Green Precincts initiative to assist with the implementation of an energy efficient tri-generation facility in the new Civic Precinct Community Centre, which will be connected by a micro-grid to the existing Council Offices and will supply heating, cooling and power generated locally.

## Doncaster Hill Water Plan

The Doncaster Hill Water Plan is a joint initiative between Manningham City, Yarra Valley Water and Melbourne Water, aiming to provide a benchmark for other councils in terms of identifying systems and actions that will:

- Reduce the demand for potable water through the use of water saving features and the reuse of wastewater and stormwater
- Reduce the volume of wastewater through conservation and re-use
- Improve stormwater quality run-off and a reduction in peak flows through appropriate treatment and reuse
- Showcase water sensitive design.

Under a Memorandum of Understanding signed in October 2008 all three organisations agreed to develop an *'integrated urban water management strategy for the Doncaster Hill area that is more environmentally sustainable than traditional planning methods, and accordingly produce a template for others to use in future planning.'* The Doncaster Hill Water Plan tender brief represents a cutting edge and internationally progressive approach to water planning which will be widely applicable to other activity centres across Melbourne.

## Green business incubator

Manningham Council partnered with Box Hill Institute in January 2008 to investigate the feasibility of sourcing Federal funding for the development of a green business incubator in Doncaster Hill. Given the global emergence and increasing emphasis on business sustainability, it is anticipated that an incubator in Doncaster Hill – purposefully designed to assist environmentally sustainable start-up businesses become established and profitable in their early stages – will further augment Council's resolve to create a 21<sup>st</sup> century urban village promoting positive economic, environmental and social performance.