Renewable Energy and Environmentally Sustainable Design

Case Studies

DSE Office - Heidelberg

Site: Heidelberg, Melbourne, Victoria

Dates:
- Design Phase Commencement: February 2005
- System Commissioning: June 2005

Client:
Department of Sustainability and Environment

Project Goals:
- Harvest rainwater for use on site.
- Demonstrate a commitment to sustainability.

Project Features:
Collection of rainwater, for use at an on-site car wash and for watering garden beds. The sizable roof area created an excellent opportunity to demonstrate a commitment to sustainability that was cost-effective.

Two 2100L rotationally moulded UV stabilised polyurethane tanks were installed on the northwest corner of the building, beside the car wash area (without obstruction of car-park space or access). Rainwater is plumbed into the existing carwash system via a pump and Davey Rainbank controller.

The Rainbank controller automatically switches the pump on when required and detects when rainwater storage is depleted, automatically switching to mains back-up supply. In the event of a power outage, mains water supply is used. Additionally, an in-line tap is supplied so that excess rainwater can be used on the surrounding garden beds. Water meters were recommended on the rainwater and main lines so that usage can be monitored.

Project Team:
- Lachlan Bateman, Project Engineer, Going Solar
- Stephen Ingrouille, General Manager, Going Solar
- Brent Papadopoulos, Installer

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(Photo credits: Brent Papadopoulos)

Rainwater Harvesting

Rainbank Controller

Rainbank & Pump Housing

Carwash