

## Renewable Energy Demonstration at RISC (Reading International Solidarity Centre)

<b>Existing or Proposed Project:</b>	Commenced 2002	
<b>Location:</b>		
<b>Project Leader:</b>	TV Energy, Reading University and RISC	
<b>Description:</b>	RISC was donated 12 solar panels and a wind charger from a environment centre in Reading that was closed down. They wanted to utilise the equipment for a demonstration project in conjunction with their roof garden.	

### Background

RISC is currently undertaking an initiative called 'Growing our Future'. This is a development education centre working with schools and community organisations to raise the profile of international issues and promote sustainable development, equality and social justice.

'Growing our Future' consists of an environmental and sustainable development education programme utilising a section of the RISC building roof. The roof in question needed to be replaced and it was decided to build a garden on it in order to develop the following programmes:

- *Education and awareness-raising relating to sustainable development*
- *Biodiversity*
- *Waste minimisation*
- *Local food initiative*
- *Energy efficiency*



*Roof Under Conversion to Roof Garden*

### Scope of Project

The scope of the project was to use the PV panels and the wind charger to provide a recycled rainwater irrigation system for the garden in the summer and grey water system to flush the toilets in the winter.

The equipment was made available from Caversham Court when it was closed down. It comprised twelve 36Wp Newtec PV modules and a 72Wp @ 9.8m/s Rutland wind generator. The aim of the project was to assess the feasibility of using the PV modules and generator to power a water

pumping system for irrigation of the roof garden and flushing the toilet. The main objectives were:

- To design the irrigation and flushing system using the available equipment
- To assess the feasibility of the proposed system.

## Reading University

TV Energy were approached by Reading Borough Council with regard to offering help and advice to the RISC project. It was decided that the project could make a good thesis for an MSc student at Reading University, and the Energy Group within the Engineering Department were approached.

As a result Giorgia Franco (pictured right) accepted the project and her final dissertation can be downloaded from the TV Energy website.



## Installation

With funding from TV Energy and Reading Borough Council, the equipment was installed at the roof garden by Ernest Warren of Sustainable Energy Alliance. The completed installation can be seen opposite.

