

DETAILED CASE STUDY

PROJECT NAME :	54-64 Macarthur Street Affordable Housing Units	
DEVELOPER / CLIENT :	CityWest Development Corporation	
CONTACTS :	NSW Department of Public Works and Services	
DATE COMPLETED:	1994	
PROJECT SIZE:	Site (gross land area):	No known
	Building (gross building area):	2732 m ²
	Other	

a. Environmental considerations

Units were designed for low running costs, incorporating grey water recycling, solar heating hot water with booster, water efficient appliances and avoiding the use of PVC where possible. This project set the pattern and policy norms for a program of similar new units and the refurbishment of some older properties.

The targeted occupants were public housing tenants of a diverse social mix (families, married couples, singles and aged) rather than one predominant type.

b. Environmental awareness/commitment of the client

The Affordable Housing Program had environmental considerations and economic operation/maintenance as a policy statement in order that the tenants could afford to live in the units and the Trust could maintain them without recourse to bailing-out by Federal Government.

c. Arguments/facts/issues to convince client

The subjective judgment of environment considerations and material specification (quality of project) were balanced by the outcomes of life cycle costing exercises. In most cases the environmental issues were determined by policy rather than finance, although the reduced running costs were an added attraction, bearing in mind that there was no requirement for a return on investment from the housing projects.

d. Integration of environmental and cost savings into the design

Many items are prescriptive (no pvc, water efficient appliances). Some items required additional service runs, tanks, pumps and extra equipment (solar heating, grey water recycling). These items required advice and inputs from experts to ensure the satisfactory operation and maintenance of the items.

Cost savings/extras were incorporated into the Capital costings (cost plan).

Life cycle costings were evaluated on options, using discounted cash flow analysis to determine the alternative costs. The analysis was tested for differing discount rates.

e. Key management steps for integrating environmental initiatives into the project

The main step was the commitment to environmental issues and the ability to have sufficient control of capital funding to permit the inclusion of the initiative without jeopardising the project. Where capital funding was more tightly set there would be increased pressure to adopt a cheaper solution at the expense of the environmentally preferred option. This is the same constraint which often results in a project's landscaping scheme being sacrificed to pay for the building.