

# Turning up the heat on housing

‘... a big step in the evolution of housing design.’

**E**NERGY conscious home buyers may soon ascertain the efficiency for their home with a new Australian rating system.

Work on the nationwide Home Energy Rating Scheme (HERS) started in 1993 and a computer simulation tool has been released in WA, for designers and architects, among others.

Until now, there has not been a coordinated approach to the problem of comparing the energy efficiency of houses across the widely different climates and conditions in Australia.

Because of climatic variations, the same house will receive different ratings in different places.

In most locations, there will be one rating based on the combined winter and summer results but more detailed information on seasonal variations in house performance will be available.

HERS is a cooperative venture by the Commonwealth and all State and Territory Governments.

In 1992, the National Greenhouse Response Strategy recognised the need to develop a rating scheme which would be applied nationwide.

Dr Mary Dale, director of energy innovation at the WA Office of Energy, who is overseeing the WA scheme, said it would be tailored to local conditions.

"The HERS is planned to become an Australian standard available through Standards Australia," she said.

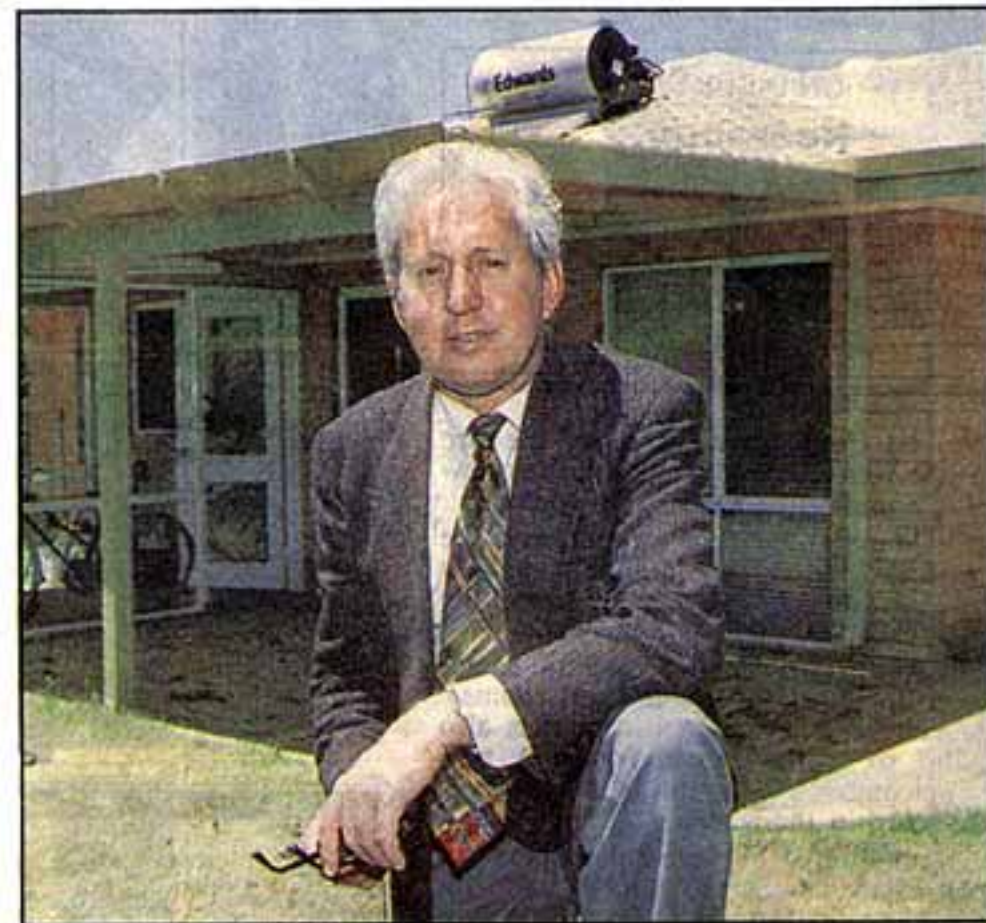
"At present, one of the reasons people don't look at comfort in their homes is they feel it is not a marketing advantage.

"Very few builders or real estate agents sell a home as being comfortable but instead point out its aesthetic features.

"For most people, comfort is a top priority but because of this market attitude, people don't see the dollar value in comfort.

"We hope this promotion will give thermal comfort a higher standing in Australia."

The program, which only looked at houses and house designs, and not at appliances or fittings, will be upgraded



■ Perth architect Garry Baverstock outside an energy efficient house at Bayswater.

early next year to provide a star rating for each house.

The main aspect of the scheme was to orientate the home correctly to enable windows to take advantage of winter sun.

It also evaluated the thermal property of windows, walls, the roof and the floor so that heat loss in winter and heat load in summer were assessed by the computer.

Perth solar energy architect Garry Baverstock believes the energy rating scheme would be a big step in the evolution of housing design.

Mr Baverstock worked with Dr Neville d'Cruz, head of Curtin University's school of architecture, on preparing some of the climatic data for the computer program. He was also a member of the advisory committee for the housing energy rating scheme in its early stages.

"Rating refrigerators and appliances has been a big success," he said. "There is no reason why a national rating program for houses should not be the same."

The public would not need to know the technical aspects of the rating scheme but would receive a simple answer and a star rating.

Building companies, architects and designers could update their software and rate their designs as they were produced, Mr Baverstock said.

"It will give an automatic rating level which they can equate scientifically. If the program becomes popular with the public, it should soon receive similar standing with the housing industry."

The work was based on scientific projects developed by the CSIRO over the past 30 years.

Josephine Allison