

Cheap solar's on way

MELBOURNE scientists have achieved a world-first breakthrough in solar power technology that promises to revolutionise renewable energy and put Melbourne at the heart of the \$30 billion global industry.

Former RMIT Professor Ian Bates and his team have developed solar panels four times more efficient and three times cheaper than available models.

The technology could also ease the rising electricity costs Victorians face. The roll-out plan involves having power companies install the panels on customers' roofs under deals which would lock in fixed power costs for 15 years.

Professor Bates and his team have created a Melbourne-based company called Technique Solar to commercially produce the technology, originally developed at RMIT.

The firm is fielding inquiries from the burgeoning solar markets of India and China and is negotiating a deal to manufacture prototypes in the US with car parts giant Magna Cosma International.

The new panels work by using special acrylic lenses to concentrate the sun's rays on photovoltaic cells while the panel moves to track the sun's movement across the sky.

"What we've got here is a device which provides both electricity and heat energy. We've been able to cut to cut

LAURIE NOWELL

back the number of photovoltaic cells (PVs) required by about 75 per cent," said Technique Solar director Dan Taylor.

Mr Taylor said the panels could produce 1000 watts of power at "a-third-to-a-quarter" the cost of current technology.

The company says the panels will deliver an energy output which has an average cost per kilowatt hour nominally competitive with 20 cents per kW-h for energy now delivered by the Australian electricity grid — and compares with the existing cost of energy from conventional panels, which is typically in the range of 70 to 100 cents per kW-h.

It enables solar energy to be provided to the consumer using modules supplying heat load (hot water) and electrical energy at one quarter of the energy costs of conventional solar energy systems.

The modules can be supplied and installed at a cost which does not require Government subsidies or rebates.

Technique Solar is an unlisted public company with 100 shareholders described as "mums and dads and small corporates". Mr Taylor said the company planned to make Magna Cosma, which has 250 factories in 50 countries, the global manufacturer of the panels, under licence.