Arup's bridge will acknowledge immigrants' contributions and be a showcase for solar technology. Arup

Solar-roofed 'immigration bridge' floated for Canberra

A not-for-profit organisation, Immigration Bridge Australia, has announced plans for 'a magnificent covered pedestrian bridge soaring high across Lake Burley Griffin to commemorate the contributions of [Australia's] immigrants'.

Project Engineer Tristram Carfrae, of Arup Australia, says the bridge will feature an integrated solar roof that will be connected to the grid and provide enough energy to power the equivalent of 100 houses. Mr Carfrae says the solar roof will be responsible for almost 800 tonnes of CO_2 abatement each year.

The $30 million bridge will commemorate the contribution of the 10 million immigrants who have come to Australia since the First Fleet. The bridge will span 400 metres across Lake Burley Griffin between the National Museum and Lennox Gardens, and Arup Australia says that when complete, it will be presented as a 'gift to the nation'.

Andrew Baulch, the project's Campaign Director at Immigration Bridge Australia, says the company is exploring a unique way of attracting funding through a 'Solar Stock Exchange'.

'Australians will be able to purchase a share of the generating capacity of the roof, with their energy bill being credited. This would be their solar roof, no matter if they have an apartment or how many times they move.

'As with the History Handrail program, where Australians can pay to have the original migrants of their family listed among the 200 000 names to be engraved on the bridge's handrails, the Solar Stock Exchange will contribute greatly to the funds available for the bridge's construction.'

More information:
www.immigrationbridge.com.au

Fast-degrading nappies lighten the load on landfill

Perth inventor Charishma Seneviratne has developed the world's first fully biodegradable disposable nappy in association with CSIRO.

Every year about a billion disposable nappies are thrown away in Australia, representing the single biggest item in landfill.

While a normal disposable nappy can take up to 300 years to break down, the new nappy takes about six months (eight months in very dry conditions). Each Safeties Nature Nappy comes with a biodegradable refuse bag to assist in its decomposition.

Conventional brands consist of up to 60 per cent wood pulp, but the Safeties Nature Nappy contains only 10 per cent.

Developing the new nappy took Sri Lankan-born Seneviratne, a fashion and textile designer, six years and involved the creation of a new, custom-made fabric.

'I didn't only develop the fabric, I worked with CSIRO to develop the new technology to make the fabric,' she says. 'Conventional nappies are paper-based, but these [new nappies] are much softer because they are made from fabric.'

The nappy consists of eight layers and a protein gel, and uses a grafted polymer with natural starch technology to ensure liquid is drawn away from the skin. Both the design and new fabric have been patented and tested.

Charishma Seneviratne worked with CSIRO to develop the new material for the 'high-tech' biodegradable nappy. Safeties Nature Nappy Pty Ltd

Mrs Seneviratne developed the nappy after enrolling in a postgraduate diploma in design at Curtin University.

Her research won a Gold Star at the World Quality Commitment International Awards in Paris in 2002 and attracted offers of help from international companies.

Distribution deals for the nappies are due to be signed in Europe, the UK and the United States. The nappies have been on sale at IGA supermarkets in WA, and are due to go Australia- and New Zealand-wide by March 2007.