



## **A Proposal for a Sustainable Cities CRC**

### **1. Background:**

The ATN symposium held in Adelaide on 8 and 9 September, 2005 provided an opportunity for a number of key researchers and research leaders in all 5 ATN Universities (University of South Australia, University of Technology Sydney, RMIT University, Queensland University of Technology, Curtin University) to develop an initial proposal for a bid to establish a new CRC in the area of Sustainable Cities.

The 5 ATN Universities are located in the 5 largest cities of Australia which are experiencing similar challenges in the path towards sustainability. They also have substantial research credibility in various aspects of sustainable cities.

Setting up such a CRC is particularly timely as it coincides and would interact positively with the Solar Cities Program being implemented by the Australian Greenhouse Office. ATN Universities are key players in a number of Solar Cities bids. However, the proposed CRC will be more comprehensive and will cover the whole spectrum of dimensions associated with the concept of sustainability. The bid is in tune with the national priority area “Environmentally sustainable Australia” and coincides with the recent Sustainable Cities report released by the House of Representatives Environment Committee. The report has a number of recommendations in the policy, planning, transport, water, energy, buildings and research areas.

### **2. Themes and participants:**

#### **Theme 1: The Path Towards a Sustainable Future**

**Leader:** Ralph Horne (RMIT)

**Researchers:** John Jackson (RMIT), Chris Lund (Curtin), Steve Hamnett (UniSA), Jon Kelett (UniSA), Simon Robb (UniSA), John Bell (QUT),

The theme examines the necessary societal changes necessary to transform our current urban environment to sustainable settlements. The proposed projects include:

- How do we get from here to there?
- How future cities will perform?
- Implications to businesses and necessary adjustments to business operations
- Resource provision and implications ( this links with integrated assessment project)
- Adjusting to the impacts of climate change, population growth / resource availability.
- Community engagement

## **Theme 2 – Sustainable Infrastructure and planning**

**Leader:** Steve Hamnett (UniSA)

**Researchers:** Bill Richards (UniSA), John Bell (QUT), Jon Kelett (UniSA), Rocco Zito (UniSA), John Boland (UniSA), Ascelin Gordon (RMIT)

This theme focuses on macro planning and infrastructure issues for the whole city. It includes:

- Urban planning and regulation
- Management of services networks – Water, Electricity, communications, waste
- Transport networks
- Natural environment – Flora and Fauna
- Planning policy, regulations, codes and standards
- Synergies and interaction between different sectors

## **Theme 3 - Sustainable Buildings**

**Leaders:** Geoff Smith (UTS), Wasim Saman (UniSA)

**Researchers:** John Bell (QUT), Bill Richards (UniSA), Margaret Lee (RMIT), Chris Lund (Curtin), Wiji Senadeera (UniSA), Frank Bruno (UniSA), Carolyn Hayles (RMIT), Ralph Horne (RMIT), John Boland (UniSA),

This theme focuses on individual buildings of different sizes and functions including houses, flats, commercial and industrial buildings, schools. The theme focus is:

- Land, water, materials, energy flows and waste, emissions for individual buildings
- Life cycle analysis of existing and new buildings
- Zero energy sustainable housing
- Sustainable appliances and equipment in homes, commercial buildings, businesses, schools and other buildings
- Local natural environment
- Services, how can they provide / meet our social and environmental needs

## **Issues for Immediate action:**

I believe that the next steps to help us decide to go ahead in developing the bid are:

1. Finding a number of large potential Industry partners. The ones we listed include insurance companies, transport and logistics organisations, State Government planning, energy, environment and housing agencies as well as local government, Federal agencies in the transport and environment areas, The Australian Greenhouse Office, Building developers, building material producers, appliance manufacturers and suppliers; food producers, waste management companies, utilities, public transport companies
2. Finding potential champions
3. Organising a workshop for organisations who express interest early in December.

Wasim Saman

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Director, Institute for Sustainable Systems and Technologies

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