

Transforming Auckland: **Institutional, technological and cultural** **innovations for sustainable cities**

A Thematic Research Initiative of The University of Auckland

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NZ Society for Sustainability Engineering and Science
The University of Auckland
2 December 2010

Overview

1. Context:

- The global urban challenge: sustainable cities
- Auckland at a turning point?

2. Thematic Research Initiative:

- Transforming Auckland: Institutional, technological and cultural innovations for sustainable cities

3. Transitions to Sustainability:

- The university as a key anchor organization transitioning cities to sustainable urban futures

The global urban challenge

- 50% of the world's population is urbanised
- Unprecedented global challenges – 'wicked problems', complexity, uncertainty
- Climate change & global warming – inevitable & dramatic change
- Resource scarcity, population growth, poverty, food shortage, biodiversity loss, pollution, environmental health, political & economic instability, conflicts

THE AMERICAN DREAM



URBAN SPRAWL



The global urban challenge

- Failure of Heads of States to take decisive leadership & action (e.g., Copenhagen CC Summit)
- Worldwide network of sustainable cities: initiated at municipal level with civil society engagement
- Universities have a key role to play in transforming cities for sustainable futures:
 - Changing practices through research-led innovation



Auckland city, New Zealand

- 87% of New Zealand's population urbanised
- But, no nationally-recognised centre for urban research in New Zealand
- Governance – one Auckland Council (1 Nov)
- Demographics:
 - 1.3 million, 32% NZ popn, 37% born overseas
 - Ethnically diverse: 11% Māori, 14% Pasifika, 19% Asian, 56% European (2006 Census)

Auckland's sustainability challenge

- Infrastructure – e.g., public transport
- Urban sprawl vs. intensification
- Affordable & healthy housing
- Safe city for children, cyclists, etc.
- Inequalities in health, wealth & opportunities
- Environmental assets vs. balancing future resource needs (water, energy, food security)
- Small country, export-driven economy
- Auckland diverse, but needs competitive distinctiveness & identity

Some issues relevant to urban infrastructure

- Infrastructure development (economic & policy goals vs. urban planning)
- Splintered infrastructure development process (multiple entities, PPPs, etc.)
- Planning for industry and freight in a post-industrial city
- Transport, mobility and disadvantage

Academy–Policy Space

- To transform cities to meet the critical challenges of the 21st century, universities have to engage widely – with our colleagues and our communities, city leaders & decision-makers.
- Transdisciplinarity: emergence of new knowledge; an enriched process through going beyond disciplinary boundaries.

Transforming Auckland: Innovations for Sustainable Cities

- A strategic research initiative of the UoA
- Cross-faculty, interdisciplinary research
- Business Plan and Investment Case (2010)
- UoA internal investment & V-C endorsement
- Hosted by National Institute of Creative Arts and Industries – championed by Dean
- Steering Group with 5 faculties represented
- Wide collegial network of 100+ researchers
- Annual funding rounds

Transforming Auckland: Innovations for Sustainable Cities

Peoples, Places and Processes

Three themes:

1. Understanding and managing change in urban environments
2. Transformations in space and place for sustainable futures
3. Imagining and developing mechanisms/interventions for sustainability

Research projects 2010

Four initial projects with six faculties involved:

- Active transport to reduce carbon emissions in Auckland
- Anchor organizations, sustainability and new forms of leadership in transforming Auckland
- The place of diverse ethnic communities and business innovation in transforming Auckland
- Transforming Auckland into a bicycle-friendly city

Transforming Auckland



Transitions to Sustainability

- The university as a key anchor organization transitioning cities to sustainable urban futures
- Collaboration of expertise and co-funding major research at local and international levels
- Knowledge transfer and co-learning
- Links with Australian urban sustainability research centres & UN Global Compact Cities
- Drawing on international best practice to effect proactive change to the urban sustainability challenges ahead – being courageous

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Thank you – we invite questions and discussion