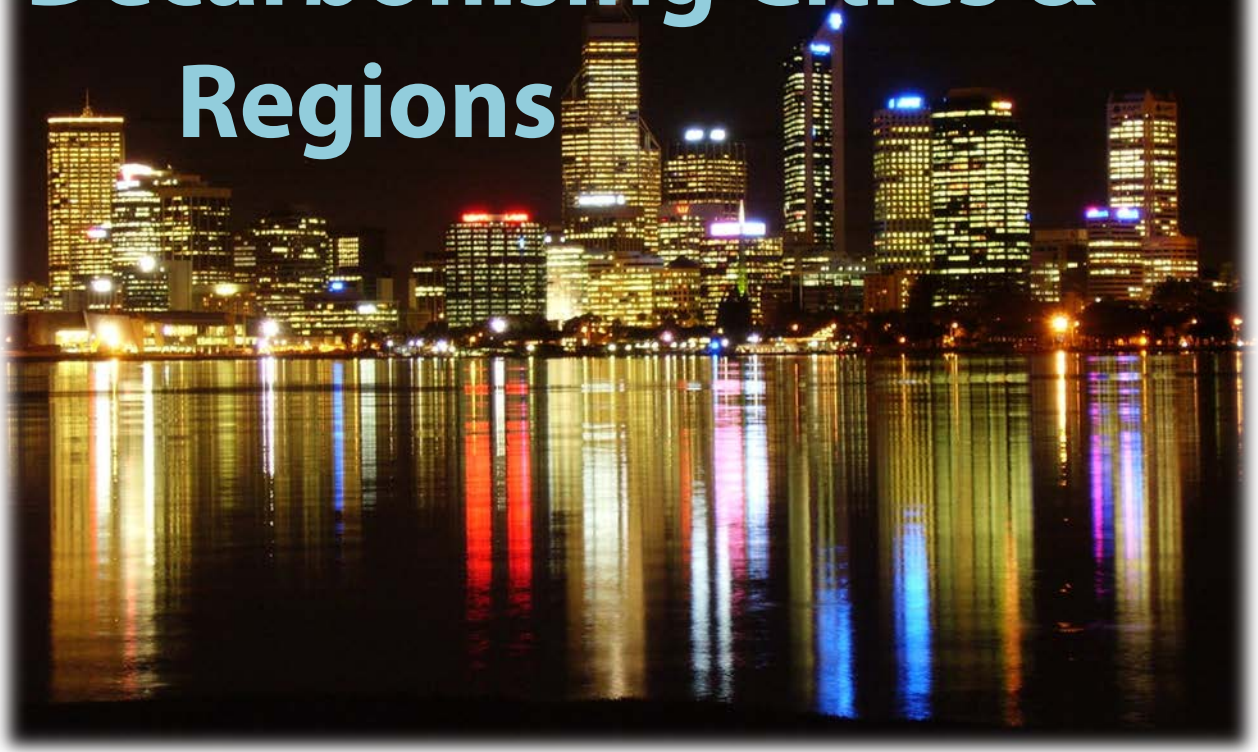


Decarbonising Cities & Regions



SHORT COURSE

12th – 16th September 2011

CURTIN UNIVERSITY SUSTAINABILITY POLICY INSTITUTE

3 Pakenham Street, Fremantle

Australia, in line with key international countries has committed to reducing carbon emissions in the economy by 80% by 2050. How do businesses, households, schools, government departments and universities develop the necessary carbon accounting and analysis skills to participate in this process? What are the emerging legal requirements to do this? How are the UNFCCC negotiations attempting to create a global treaty? What are the technological, town planning, building and lifestyle options to decarbonise our settlements and regions?

These questions will be addressed by some of the States leading experts, including a range of industry professionals, academics and respected leaders from various fields. They will share their wealth of experience through presentations, reflective discussions and workshops during the five day "Decarbonising Cities and Regions" course run by Curtin University Sustainability Policy Institute. It is aimed at both professionals and students from a variety of backgrounds and has been designed to enable professionals to attend particular days.

Cost: Individual days and packages for professional development include:
1 day package- \$500 - 2 day package: \$900 - 5 day course: \$2,200

For registration and a detailed outline of the course visit:
http://sustainability.curtin.edu.au/study_opportunities/short_courses.cfm

For further information contact: Vanessa Rauland on +61 (8) 9266 9025 or v.rauland@curtin.edu.au

PROGRAM

Day 1: Climate Change Policy and Law: Local and Global Responses

TOPIC	CONTENT
Introduction to Climate Change, Policy and Decarbonising Cities	<ul style="list-style-type: none"> • <i>Introduction and overview of the course</i> • <i>Climate change 101: The science and the myths</i> • <i>Approaches to Decarbonising: Front End versus End Uses</i>
Overview of Front end Mechanisms	<ul style="list-style-type: none"> • <i>Definitions in Climate Change Policy</i> • <i>Comparing a carbon tax and trading scheme</i> • <i>Decarbonising research at CUSP</i>
Interactive discussion on carbon trading	<ul style="list-style-type: none"> • Discussion of regulatory and voluntary carbon trading systems including legislation around offsets (Carbon Farming Initiative)
Climate Change Law: A National Perspective	<i>Australia's Directions</i> <ul style="list-style-type: none"> • <i>NGERS (National Greenhouse and Energy Reporting Scheme)</i> • <i>Australia's new carbon pricing package</i>
Climate Change Law: An International Perspective	<i>International Directions</i> <ul style="list-style-type: none"> • <i>What is going on internationally?</i> • <i>How close are we to seeing a global price on carbon?</i> • <i>How are other countries decarbonising?</i>

Facilitators

- Professor Peter Newman – Director of Curtin University Sustainability Policy Institute (CUSP)
- Vanessa Rauland – PhD Candidate & Project Coordinator CUSP
- Adjunct Professor Simon Dawkins – Oil Mallee Association
- Legal Firm - Minter Ellison

Day 2: Planning & Measuring Decarbonisation – Greenhouse Gas Inventory & Carbon Neutrality

TOPIC	CONTENT
Introduction to Counting Carbon	<ul style="list-style-type: none"> • <i>Greenhouse gas inventory and carbon footprints</i> • <i>Understanding the national greenhouse gas inventory</i> • <i>The need to undertake carbon inventory and accounting: mandatory requirements and voluntary commitments</i> • <i>Inventory standards and methodologies</i>
Creating an inventory	<ul style="list-style-type: none"> • <i>Scopes and establishing organizational & operational boundaries</i> • <i>Calculations using NGA & NGERS factors</i> • <i>Assumptions and justifications</i> • <i>Lifecycle assessment & calculating carbon footprints</i>
Inventory Workshop	<ul style="list-style-type: none"> • <i>Group activity – determine the GHG inventory of an organization</i>
Reducing the Carbon Footprint	<ul style="list-style-type: none"> • <i>Opportunities for reducing carbon emissions</i> • <i>Marginal abatement cost curves</i> • <i>Developing a credible carbon reduction strategy</i> • <i>Carbon Neutrality and Zero Net Emissions</i>
Carbon Neutral Workshop	<ul style="list-style-type: none"> • <i>Group Activity: Carbon Neutral Strategy for an Organisation</i> • <i>Discussion of City of Fremantle's Carbon Neutrality Plan</i>

Facilitators

- Associate Professor Chris Lund – Climate Change Response Institute
- Alex Hyndman – Sustainability Officer City of Fremantle

Day 3: Decarbonising through Planning & Transport

(Half Day)

TOPIC	SCOPE
Designing Low Carbon Cities	<ul style="list-style-type: none"> • <i>Designing Cities around Transit Oriented Developments (TOD's)</i>
New Fuels and Technologies for Transport	<ul style="list-style-type: none"> • <i>Decarbonising through a range of new fuels and technologies</i> • <i>Renewable natural gas for vehicles</i>
Renewable Transport	<ul style="list-style-type: none"> • Electric Vehicles • Smart Grid Integration • Enabling Renewable Energy

Facilitators:

- Professor Peter Newman – Director of Curtin University Sustainability Policy Institute (CUSP)
- Boyd Milligan – Energy X Roads
- Dr Andrew Simpson – Research Fellow CUSP

Day 4: Decarbonising through Buildings and Infrastructure

TOPIC	SCOPE
Energy Efficient Building Design	<ul style="list-style-type: none"> • <i>Reducing consumption in buildings through sustainable architecture</i>
Green Buildings	<ul style="list-style-type: none"> • <i>Evolution of the green building movement & how successful it has been</i> • <i>Evaluating green buildings</i>
Green Infrastructure	<ul style="list-style-type: none"> • <i>Options for decentralized energy</i> • <i>Overview of the Allan Jones Model (co- and tri-generation)</i>
Low Carbon Developments Case Studies	<ul style="list-style-type: none"> • <i>Global examples of towns and developments that have decarbonised</i> • <i>Governance approaches</i>
Large-scale Renewable Energy	<ul style="list-style-type: none"> • <i>What is happening in Australia</i> • <i>Policies assisting large scale renewables</i>
Decarbonising Remote Indigenous Communities	<ul style="list-style-type: none"> • <i>Green Infrastructure for Remote Communities</i> • <i>Policy, Behaviour, Logistics and infrastructure</i> • <i>Challenges and opportunities in planning and implementing behaviour change</i>
Energy Efficiency & Renewable Energy in Indigenous Settlements	<ul style="list-style-type: none"> • <i>Decarbonising remote indigenous communities through energy efficiency and behaviour change</i>

Facilitators

- Gerard Siero – Ecological Architect
- Sam Hall – PhD Candidate CUSP
- Colin Beattie - PhD Candidate CUSP
- Rob Salter – Research Fellow - CUSP
- Steve Dear – Research Fellow - CUSP
- Dr. Dave Oldmeadow – Parsons Brinckerhoff
- Horizon Power

Day 5: Decarbonising through Behaviour Change and Smart Technologies

TOPIC	SCOPE
Behaviour Change Programs and Initiatives	<ul style="list-style-type: none"> Behaviour change in the community - the environmental psychology and behaviour economics that enable change.
End User Government Initiatives	<ul style="list-style-type: none"> Government programs and initiatives including subsidies and rebates Home sustainability assessments – household auditing Mandatory energy disclosure and greening real estate
Smart Technologies & Behaviour Change	<ul style="list-style-type: none"> Old habits die hard – the challenges of behaviour change Turning buildings into teaching tools: Providing fun, relevant and timely data
Personal Carbon Footprint – Understanding the Full Lifecycle Analysis	<ul style="list-style-type: none"> How much carbon am I really responsible for? Understanding embodied energy/CO₂ How to make the biggest impact and the best decisions Quality of Life and it's relationship to CO₂: Intelligent living and the importance of good community design

Facilitators

- Colin Ashton-Graham - Behavioural Economist
- Shani Graham – Ecoburbia
- Chiara Pacifici – Research Associate CUSP
- Pete Tickler – Greensense
- Alex Bruce – BLC Energy Solutions
- Professor Peter Newman – Director of Curtin University Sustainability Policy Institute

*The course runs from 9.00am to 5.00pm each day, with the following evening events available.
Timetable subject to change*

OTHER EVENTS DURING THE WEEK

Day 2: Tuesday 13th Sept 2011.

Informal Q&A Session	
The Federal Government's new "Securing a Clean Energy Future" Package	
5.00 – 6.30pm Refreshments provided	Associate Professor Chris Lund will provide a brief overview of the package and then a panel will be available to answer questions and facilitate a discussion.

Panel:

- Associate Prof Chris Lund – Climate Change Response Institute and Murdoch University
- Prof Peter Newman – CUSP
- Josh Wilson – Councillor & Chief of Staff for Melissa Park, Labour Party

Day 5: Friday 16th Sept

CUSP Film Night	
5.00 – 8.00pm Drinks and Organic Pizza and Movies	Short film launch by CUSP PhD Student Linda Blagg. <ul style="list-style-type: none"> • "Sustainability Street" - South Fremantle – A right brain neighbourhood • "Tim Beatley on Biophilia" • "The future of Fremantle"

Both these events are free
Please RSVP to v.rauland@curtin.edu.au