Impacts of Climate Change on Human Settlements in the Western Port Region

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Western Port Greenhouse Alliance

A regional partnership to reduce greenhouse gas emissions

Impacts of Climate Change on Human Settlements in the Western Port Region
WPGA Overview

- Established **June 2004**

- **Operational Funding:**
  - Department of Sustainability and Environment (Victorian Greenhouse Strategy (2002))

- **Who is the WPGA?**
  - Bass Coast Shire; Cardinia Shire; City of Casey; Frankston City Council; Mornington Peninsula Shire;
  - International Council for Local Environmental Initiatives;
  - Department of Sustainability and Environment

- **Hosted by the City of Casey**
WPGA purpose and projects

Provide a **regional framework** for local stakeholders to work together on **climate change** and **greenhouse gas abatement** projects

- **WPGA Projects**
  - Agriculture and Greenhouse
  - Carbon Sequestration
  - Public Street Lighting
  - Community Education
  - Climate Change and Adaptation
WPGA Benefits

- Regional focus
- Engaging stakeholders
- Partnerships with state and federal governments
- Providing stakeholders with solutions for a changing climate
Climate Change Impacts and Adaptation

Why adaptation?

“Adaptation is crucial to deal with the unavoidable impacts of climate change to which the world is already committed”.

(Stern Review: The Economics of Climate Change, p.404)

- Adaptation response is best initiated at the local and regional level
- Adaptation responses provide challenges and opportunities
Impacts of Climate Change on Human Settlements in the Western Port region

Two year project:
- impacts of climate change on *built environment*
- local adaptation responses to impacts

Integrated assessment:
- will combine biophysical, social and economic insights
Project Objectives

- Enhance the capacity and knowledge of local government, state government and other decision makers in the Western Port region to prepare for and adapt to climate change.

- Develop an approach to climate change assessment and adaptation that has transferability to other regions in Australia.
The project will comprise four major steps:

1. Project changes to climate drivers and associated biophysical impacts in Western Port region

2. Assess nature and extent of changes to region’s built environment

3. Identify and prioritise risks to local governments associated with impacts

4. Explore adaptation options and barriers to effective response to high priority risks and develop an adaptation response framework
Project Outputs

- Detailed biophysical assessment of climate change in the Western Port region to 2030 and 2070
  - resource for local councils and other decision makers
- Climate change infrastructure impacts report
  - also future reference source
- Adaptation framework
  - framework for response by local councils and other regional decision makers
- Lessons learnt
  - transferability of approach to other regions
Where to from here?

- **Next 8 months**
  - Integrated assessment of impacts on Western Port region

- **2007/2008**
  - Risk assessment
  - Barriers and opportunities
Role of local government - planning

• Assessment of impacts
  – Providing information
  – Guiding outputs

• Adaptation options
  – Appropriate land use
  – Location of major Infrastructure
  – Housing conditions ie/ type, floor levels
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