# Multi-level Climate Change Adaptation Governance and Local Government Planning Processes in Australia

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### Climate change adaptation - an imperative for land use planning

- In future, climate change adaptation will become critical for minimising harm to people, assets and infrastructure
- Urban and regional land use planning can play a central role in determining the exposure of communities, assets, and infrastructure to the effects of climate change (Hurlimann & March, 2012; IPCC, 2014a), e.g. with regarding to risks related to sea-level rise

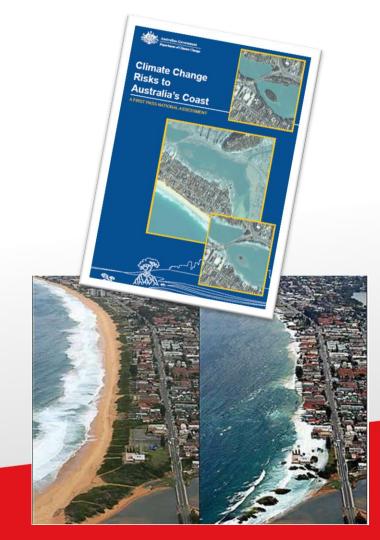
#### Land use planning

- Provides institutional controls to incorporate climate change projections into decision-making about future land use
- Determines where new settlements/houses are built and thus has the potential to protect people and assets from harmful climate change impacts.
- E.g. in coastal areas subject to inundation and erosion LUP can facilitate gradual, early retreat from areas subject to inundation, allow for expansion of coastal conservation zones to protect coastal habitat, etc.



## **Coastal risks of climate change in Australia**

- The coast, and coastal lifestyles, feature prominently in Australian identity and are a source of national pride and identity.
- Yet much of that coastline is under threat from sea level rise and its localised impacts.
- In Australia, approximately 85 per cent of the population live within 50 kilometres from the coast (Australian Government 2009: 14).
- National assessment of coastal risk: AU\$41-63 billion worth of residential buildings at risk from sea level rise,
- Up to 247,000 buildings potentially exposed to inundation using a sea-level rise scenario of 1.1 metres (Australian Government 2009: 71)





Southeastern Australia: climate change hotspot



high adaptive capacity



Adaptation action?

Local government has been leading adaptation in Australia, but:

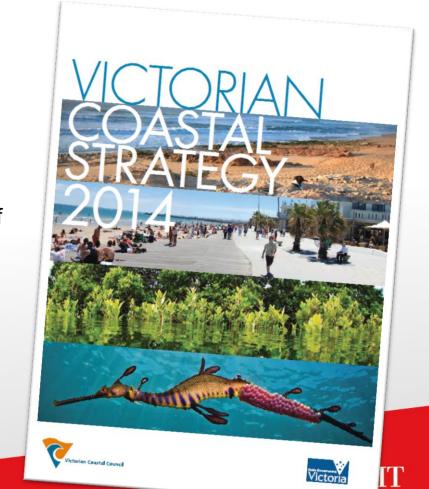
- Focus on understanding impacts through climate risk assessment
- Driven by corporate risk management, esp. financial risk and legal liability
- Mostly at strategic planning level
- → Increasingly sophisticated processes but limited implementation / adaptation action (Measham et al. 2012; Gurran

et al. 2010)



#### **Victorian Coastal Hazards Guidelines**

- 2008 Victorian Coastal Strategy: plan for sea level rise of not less than 0.8 metres by 2100
- New development should be "located and designed so that it can be appropriately protected from climate change's risks" (State of Victoria, 2008)
- State government inserted this into all local planning schemes in July 2012:
  - 0.2m by 2040 benchmark for urban infill developments
  - 0.8m by 2100 benchmark for new greenfield developments
- This doesn't tell local planners how these benchmarks are to be applied



## **Changes to Planning Schemes: only one to date**

- South Gippsland alteration of planning in flood prone areas
- A permit is now required to unless a building is 3.4 metres above sea level.
- So If the land is 2 metres above sea level the building must be 1.4 metres above ground
- There is no ban on building in the flood prone area, or even a ban on buildings too close to the ground
- Requiring a permit only means planners get to consider - not what they will determine
- So a proponent could still make a case for their lower development.







## Weak consideration of climate change

#### Three evident reasons:

- Firstly, the political acceptance of climate change has been late and begrudging in Australia,
- Secondly, the land use planning system itself is not particularly strong or robust.
  - Neoliberal reforms have led to discretionary language flexibility is valued over regulation.
- Climate change adaptation mostly viewed as a risk management issue – competes with other, more tangible risks

