Barriers to Effective Climate Change Adaptation Productivity Commission Inquiry climate-adaptation@pc.gov.au



NORTHERN ALLIANCE FOR GREENHOUSE ACTION

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## **Barriers to Effective Climate Change Adaptation**

Thank you for the opportunity to comment on the *Barriers to Effective Climate Change Adaptation*Productivity Commission Issues Paper. Northern Alliance for Greenhouse Action (NAGA) welcomes the Productivity Commission's consideration of these issues, the release of the Issues Paper, and the opportunity to provide comment and input to the Inquiry.

The **Northern Alliance for Greenhouse Action** (NAGA), which began operating in 2002, is an alliance of Moreland Energy Foundation and the nine councils spanning the northern metropolitan region of Melbourne from the CBD to the rural/urban fringe (see footer). The Alliance covers a quarter of Melbourne's population; the region spans major industrial, commercial, and residential areas, activities and types, as well as forests, agriculture, and water catchments on the urban fringe.

NAGA shares information, coordinates emission reduction and adaptation activities, and cooperates on the research and development of innovative projects. NAGA's goal is to substantially contribute to the transition to a low-carbon future by delivering effective programs and leveraging local government, community and business action. NAGA and its members have demonstrated significant climate change action innovation at the local government and regional level. NAGA also establishes partnerships and linkages with state and federal government agencies and departments, local government and industry associations, research institutions, community groups and consultants, to facilitate climate change action in the northern metropolitan region.

### NAGA is working to ensure urgent, regional action in our transition to a climate-changed, low-carbon future.

Climate change presents huge and complex social, economic and environmental challenges to our established ways of life. Adaptation likewise requires complex and multi-layered responses; there are indeed a number of barriers that impede adaptation to climate change; this submission focuses particularly on issues for local government (rather than responding in detail to the specific questions posed in the Issues Paper); these issues and priorities for action are outlined on the following page.

Local government plays a key role in implementation of sustainability and liveability programs, policies and objectives; with provision of adequate resources and in partnership with other levels of government, local government, and regional groupings such as NAGA are well-placed to effectively and efficiently implement climate change programs that are locally relevant and respond to local needs as well as state and federal priorities.

Please contact me if you	u would like to discuss any	of these issues in more deta
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Yours sincerely

Judy Bush Executive Officer

The views represented in this submission do not necessarily represent the views of all NAGA members individually.

# Barriers to Effective Climate Change Adaptation: Productivity Commission Issues Paper NAGA submission December 2011

#### Defining 'effective' adaptation

It is important that any definition of 'effective adaptation' also encompasses climate change mitigation principles and requirements (or in other words, adaptation that is effective should NOT produce adverse or unintended consequences that increase greenhouse gas emissions).

#### Local government exposure to climate change impacts and adaptation

The local government sector as a whole has significant exposure to climate change impacts and the resulting requirements for adaptation, for its own operations and planning decisions, and more broadly for its community's well-being. As the level of government with closest and most immediate links to communities, local government's actions and responses are necessarily broad, and wide-ranging. This can place significant pressure on local government staff and resources.

Adaptation requires a localised, bottom-up approach that responds to the particular characteristics of the local area and community, and that utilises local government's detailed knowledge, and day-to-day contact with its municipality's residents and businesses. There are also opportunities for implementing local government adaptation responses (such as infrastructure upgrades) on a regional scale to achieve economies of scale and streamlined project management.

Local governments must incorporate climate change impacts and adaptation into their planning and operations at a time when scientists are highlighting a range of other significant global sustainability challenges and limits, including peak oil, resource depletion, pollution and biodiversity loss.<sup>1</sup>

#### **Barriers**

There are a number of barriers that local government have encountered in planning for and implementing climate change actions. The Municipal Association of Victoria has undertaken research into the status of Victorian local governments' adaptation planning and implementation, identifying barriers and proposing recommended responses<sup>2</sup>. Many of the issues for local government relate to confusion and uncertainty about appropriate planning processes and methodologies; lack of high level priority or support for adaptation planning and implementation and lack of staff time, skills and resources.

Councils have highlighted the profusion of adaptation planning tools, approaches, and methodologies, leading to confusion and uncertainty about how to approach planning and implementation tasks. Adaptation planning, actions and responses are frequently complex tasks that require additional resource allocations, both staff time and funding. There is continuing uncertainty about the scope of roles and responsibilities of different levels of government, and the need for coordination between local governments, particularly at a regional scale (to ensure consistency of actions and approaches between neighbouring councils to impacts such as flooding and heatwaves, that will span the municipal boundaries). This would also enable the removal of duplication across local government authorities, especially with regard to infrastructure development and emergency responses.

Priorities for adaptation planning, actions and responses include:

#### Communities

• Supporting the development of sustainable and resilient communities.

 Public engagement programs that take into account behavioural and cultural barriers to understanding, and processing information on climate change impacts; moving beyond simple information provision to more sophisticated community engagement that encourages empowered communities to effectively take action.

Integrated decision-making processes

- Whole of government approach and integrated decision-making; integrating climate change assessment into development of all legislation, policies and programs
- Urban planning and design that integrates sustainable building and precinct design, enhances sustainability and addresses climate change impacts (including extreme weather events such as heat

http://www.sustainability.mav.asn.au/content/upload/files/publications/Supporting Victorian Local Gov3088.pdf

<sup>&</sup>lt;sup>1</sup> Rockstrom, J. *et al*, (2009), **A safe operating space for humanity**, *Nature*, **461**, 472-475 (24 September 2009) Published online 23 September 2009, <a href="http://www.nature.com/nature/journal/v461/n7263/full/461472a.html">http://www.nature.com/nature/journal/v461/n7263/full/461472a.html</a>

waves, exacerbated by heat island effects), whilst protecting green wedges and food-producing areas close to urban areas.

Minimum performance standards

Minimum performance standards for appliances, buildings and infrastructure: energy efficiency, passive
thermal performance. In addition, the process behind the development of such performance standards,
needs to be flexible and dynamic enough to continually incorporate new science and technologies into
the setting of these standards.

Funding and support, research and data

- Clearly defined roles of, and interactions between, different levels of government, including
  identification of the most appropriate scales and levels of government for adaptation planning and
  implementation (national, state, metropolitan, metro-regional and local scales). Identification and
  implementation of collaborative approaches between federal, state and local governments.
- Provision of climate change impacts data at regional and local scales; ongoing support for integrated, multi-disciplinary research (including through the National Climate Change Adaptation Research Facility).

Local government adaptation planning and implementation

- Funding and technical support for local government to prepare local adaptation plans and implement actions to climate-proof their own operations, as well as supporting their development of resilient local communities.
- Infrastructure planning, installation and maintenance incorporating modelled climate change impacts, including extreme weather events (such as storms and heatwaves); guidance on utilising and interpreting climate change impacts data and modelled trends. (Delaying action, particularly for large infrastructure projects, due to uncertainty about the magnitude of climate change impacts is frequently an inappropriate option, particularly when the trends of future impacts are clear, even if the exact magnitude or other details are not.)
- Local government plays a key, long-term role in disaster preparation and recovery, spanning
  responsibilities across community health and welfare, infrastructure, environment and natural resource
  management. The recovery processes following disasters (such as the Black Saturday bushfires that
  directly affected several NAGA member councils), can continue for significant periods, span physical,
  mental and emotional, social and community aspects, and place substantial pressures on local
  government staff and resources. Councils need appropriate systems and resources in order to provide
  such services.

Local government plays a key role in implementation of sustainability and liveability programs, policies and objectives; with provision of adequate resources and in partnership with other levels of government, local government, and regional groupings such as NAGA are well-placed to effectively and efficiently implement climate change programs that are locally relevant and respond to local needs as well as state and federal priorities.