Identify policy makers, resource managers and researchers working in regional hotspots for membership in a global hotspot network (see contacts below).

1. Host an initial workshop to draft a strategic and operational plan identifying communication options, resource implications (threats and opportunities), and potential funding opportunities for case studies, interdisciplinary workshops, and development of consistent monitoring methodologies.

Why focus on hotspots?
1. Impacts associated with global warming will likely be observed earlier;
2. Models developed for prediction can be validated earlier than in other slower changing regions; and
3. Adaptation options can be developed, implemented and tested first.

Evidence of impacts:
- Biological changes in the south-east Australia hotspot
  - 1430 intertidal species moved further south in Tasmania over 50 year period (Fie et al. 2010 MPR).
  - Range expansion of sea urchins native to NSW causing loss of kelp forest off eastern Tasmania (Ling et al. 2009 GCB).
  - Changing composition of phytoplankton boom off Tasmania: increased tropical species and red tides (Thompson et al. 2003 MPR).
  - Rock lobster catch, growth and recruitment correlated with SST changes around Tasmania (Peel et al. 2000 DCC).
  - Many coastal fish species have exhibited range expansion consistent with climate change (Last et al. 2010 GCB).

Network vision
- A global network of scientists, managers and policy makers where shared information is synthesised, contrasted and compared across locations, providing the best possible learning opportunity to address climate challenges.
- A mechanism for capitalising, as efficiently and effectively as possible, on emerging information in a rapidly changing world to facilitate accelerated learning and indication of sensible adaptation pathways for other global regions.
- Implementation of local/regional adaptation options through a global partnership of shared expertise and capacity building.

Network benefits
- Research, development, management and communication can all be delivered faster and with greater certainty through a coordinated network across global hotspots.
- Scientists, managers and policy makers can communicate on how science is being translated into policy and practical adaptive management measures.
- Networking across these regions can facilitate comparative studies through:
  > promotion of consistency in data collection, analysis and reporting;
  > the potential for greater certainty in projection models through first opportunities for validation.
- Comparisons between regions can provide greater certainty for stakeholders in understanding impacts.
- Shared learning and capacity building about adaptation science (successes and failures) can generate insights into the impacts, model validation and the success or failures of adaptation planning for the broader global community.

Network – planning for involvement now
1. Identify policy makers, resource managers and researchers working in regional hotspots for membership in a global hotspot network (see contacts below).
2. Host an initial workshop to draft a strategic and operational plan identifying communication options, resource implications (threats and opportunities), and potential funding opportunities for case studies, interdisciplinary workshops, and development of consistent monitoring methodologies.

Contact:
Gretta Peel <gpeel@utas.edu.au>
Alistair Hobday <ahobday@utas.edu.au>
Stewart Frusher <sfrusher@utas.edu.au>
Warwick Sauer 

1. CSIRO Marine and Atmospheric Research, GPO Box 1538 Hobart 7001
2. Climate Change Research, Tasmanian Institute of Automation and Robotics, University of Tasmania, Private Bag 49, Hobart, Tasmania, Australia, 7001
3. Climate Change Research, Tasmanian Institute of Automation and Robotics, University of Tasmania, Private Bag 49, Hobart, Tasmania, Australia, 7001
4. Flinders University, South Australia.