

# ClimEco4

4 - 9 August 2014 in Shanghai, China

**Delineating the Issues of Climate Change and Impacts to Marine Ecosystems: Bridging the Gap Between Research, Assessment, Policy and Management**

The linkages and interactions in the marine environment are very complex, particularly in the context of global change. Indicators provide a practical and economical way to track the state and trends of social, economic, and ecological systems.

The IMBER ClimEco4 summer school will provide training to enable participants to source, analyse and transform data into indicators to assess the ecological state of a marine ecosystem, environmental states and trends, implications for society, and long-term ecosystem sustainability.

The summer school will bring together those involved with management, analysis and reuse of ecological, climate and socio-economic data, thereby facilitating transdisciplinary training and research.

## Participants

ClimEco4 is an interdisciplinary summer school for students and early-career researchers (less than 10 years since PhD) working on topics related to the oceans and climate change. We welcome applicants from the natural and social sciences who are interested in addressing the complex issues facing marine ecosystems and the human societies that depend on them.

## Conveners

Alida Bundy (DFO, Canada)  
 Laura David (University of the Philippines, The Philippines)  
 Beth Fulton (CSIRO, Australia)  
 Eric Galbraith (McGill University, Canada)  
 Xianshi Jin (Yellow Seas Fisheries Research Institute, China)  
 Scott Large (NOAA, USA)  
 Stéphane Pesant (University of Bremen, Germany)  
 Keith Sainsbury (CSIRO & University of Tasmania, Australia)  
 Rashid Sumaila (UBC, Canada)  
 Ingrid van Putten (CSIRO, Australia)

## Programme

The ClimEco4 programme will focus on linking indices of climate change, climate impact, and ecosystem services, to socio-economic indices and policy information. Information will include how indices are constructed, used, and combined to inform policy and decision-making in the context of climate-ecosystem interactions.

There will be 'hands-on' practical sessions to apply the concepts covered in lectures, using databases, indices and models. During group work, participants will select and develop indicators, evaluate trade-offs and analyse their application and use for the ecosystem.

## Lecture topics

- Indices of climate change and climate impacts
- State and pressure indicators and modelling basics
- Data and databases
- Analyses refresher and statistics primer
- Past climate change and global context
- Using indicators in models to inform climate decisions
- Using indicators for policy

## Registration fees

Students: € 250  
 Early-career researchers: € 350  
 Limited travel support is available

**Application deadline: 15 April 2014**  
[www.imber.info](http://www.imber.info)