Geophysical Research Abstracts
Vol. 15, EGU2013-10165, 2013
EGU General Assembly 2013

Climate Ireland - Tailoring Climatic Information for Adaptation

Barry O'Dwyer, Anthony Patterson, Stefan Gray, and Jeremy Gault

Coastal and Marine Research Centre, Environmental Research Institute, University College Cork, Cork, Ireland (b.odwyer@ucc.ie)

Climate change poses a wide variety of impacts, both direct and indirect, for Ireland, presenting different challenges for individual sectors, areas, ecosystems and populations. Moreover, climate change impacts will be most apparent at the local level and will require locally tailored responses. As a result, a clear understanding of sectoral and local-specific vulnerability (current and future) to climate change is a fundamental starting point in developing adaptation responses.

Currently for Ireland there exists a significant amount of information and data on a wide range of climatic variables and predictions and a growing understanding of the expected impacts of climate change. However, much climate relevant data and information is held by a wide range of organisations, in a variety of formats and of different quality. The EPA-funded project 'Climate Information Platform for Ireland' (ICIP) is developing a one-stop web-based resource of climatic information and data for Ireland, 'Climate Ireland', for adaptation planning. The Climate Ireland resource will provide decision makers (sectoral, local, regional and national planners) with access to complete, harmonised and easy to use climatic information and data that has been specifically tailored for adaptation planning on a sectoral and local basis. Moreover, ICIP aims to overcome the challenge of employing inherently uncertain climatic information and data in planning through the development of web-based tools and frameworks.

Scientific uncertainty regarding, amongst other, the timing and magnitude of future climate change impacts and future GHG emissions trajectories represents a key barrier to climate change adaptation. Moreover, the ability to provide downscaled climatic information to finer temporal and spatial scales does not imply that our confidence in these projections is greater. In contrast to the predict and provide top-down approach to adaptation planning, ICIP is developing web-based tools and frameworks which will allow sectoral and local decision-maker to employ inherently uncertain existing climatic information and data (made available through the Climate Ireland resource) to identify their specific vulnerabilities to climate change, both in the short and long term. Moreover, these tools will allow sectoral and local decision-makers to develop and assess a wide range of measures to decrease their specific vulnerabilities to climate change. This is achieved through the employment of bottom-up approaches to climate change adaptation whereby sectoral, local and regional planners employ current and future climatic information and data to develop scenario neutral, robust and flexible adaptation plans.