

## "Responses to Environmental & Societal Challenges for our Unstable Earth" (RESCUE)

## A joint COST-ESF "Frontiers of Science" initiative

The "Responses to Environmental and Societal Challenges for our Unstable Earth" (RESCUE) foresight initiative aims to help Europe address the societal and scientific challenges related to global environmental change. In RESCUE, the focus of attention is on people and the goal is to stimulate an integrated, innovative response from natural, social and human sciences.

RESCUE has the following key objectives:

- To propose a strategic process for natural, social and human sciences to improve their ability and capacity to work together through interdisciplinary synergy and to respond effectively to societal and policy-relevant needs to address global environmental change;
- **2.** To articulate new scientific issues related to global environmental change, especially those of transdisciplinary nature and of major relevance to society;
- **3.** To explore new approaches towards truly integrated, interdisciplinary science, and to facilitate the 'revolution' in education and capacity building it requires.

The RESCUE foresight initiative began in September 2009 and will be completed in fall 2011. Four Working Groups and one Task Force have been active during the course of the initiative. A set of recommendations based on these findings were discussed at a Stakeholders Conference in May 2011 and will feed into a concrete RESCUE roadmap implementation. Our findings will be synthesized in the **RESCUE Report** and the **RESCUE Science Policy Briefing** to be released during a Press Event scheduled on 13<sup>th</sup> October 2011.

In order to move substantively and rapidly toward sustainability governance, the RESCUE initiative proposes major changes in the current research paradigm through developing and implementing a broad framework of research and an open knowledge and learning system drawn from the diversity of actors, institutions, and intellectual (re)sources in the global human society.

The RESCUE recommendations include the following issues to be addressed by science-funders, science policy-makers, researchers, practitioners, educators and a range of other societal actors:

- An interdisciplinary and transdisciplinary research agenda that is implementation-oriented and responds to societal demands has to be matched by an **appropriate institutional framework**.
- Long-term support mechanisms are needed for integrative global change research; facilitating the development and testing of concepts, methods and for a deep understanding of the roles of human behaviour, social arrangements, and human-environmental interactions.
- A network of long-term integrated studies that are monitored and compared is required in order to encourage experimentation with different approaches to address the human drivers and implications of environmental change in broad empirical contexts.
- Processes are required that engage educators from pre-school through Universities and far beyond, including a wide range of other professional areas, in a dialogue about the education and capacity building frameworks and institutions needed for an open knowledge and learning society.
- The challenges of a changing Earth and the development of an open knowledge society call for a **dynamic dashboard of information systems** to provide a forum for communication on the state of the social-environmental system, the likely short-to medium-term changes, the 'intervention' points and potential consequences of alternative choices.

For further information on RESCUE, visit <a href="www.esf.org/rescue">www.esf.org/rescue</a>, or contact us at <a href="mailto:fl-rescue@esf.org">fl-rescue@esf.org</a>.