

Responses to Environmental and Societal Challenges for our Unstable Earth (RESCUE) foresight initiative

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The "Responses to Environmental and Societal Challenges for our Unstable Earth" (RESCUE, www.esf.org/rescue) foresight initiative aims to help Europe address the societal and scientific challenges related to global environmental change, placing humans as the focus of attention.

Humankind is currently facing unprecedented changes in the Earth system, that have arisen at a rapidly growing rate because of human activities: among others, unsustainable exploitation and consumption of natural resources and accelerating perturbations of the environment. The systemic understanding of global environmental change has expanded markedly, but societal and policy-relevant drivers and consequences are still to be fully explored. In particular, the complex Earth system requires interdisciplinary studies at scales compatible to political and societal agendas, and some stronger common, integrated foundations between natural, social and human sciences to be established.

In this context, the "Responses to Environmental and Societal Challenges for our Unstable Earth" (RESCUE, www.esf.org) foresight initiative will help the European science community and the related science policy actors address the societal and scientific challenges related to global environmental change, including its human dimensions, and help stimulate an integrated response from natural, social and human sciences. This will be achieved by addressing the following key objectives:

- To propose a strategic process for natural, social and human sciences to improve their interdisciplinary synergy, to respond efficiently to societal and policy-relevant needs;
- To articulate new scientific issues related to global change, especially those of transdisciplinary nature or of major society-driven relevance;

 To explore new approaches towards interdisciplinary science, and to facilitate the 'revolution' in education and capacity building it requires.

Through its analyses and recommendations, RESCUE will help enable the scientific community, together with other actors and key stakeholders, to develop medium to long-term strategies and recommendations for future research activities and applications. It is anticipated that RESCUE will impact society by favouring joint science strategy and coordination, and by stimulating education-based changes in behaviour and performance, to help ensure global sustainable governance.

Launched in September 2009, RESCUE is organised around a series of topical activities, involving the science community and its stakeholders and aims at identifying existing and emerging good practices and key success stories in global change research, education and science policy issues.

In early spring 2011, the **RESCUE Stakeholders Conference** will bring together about 100 key scientists, science policy makers, and representatives of national research councils and several relevant international organisations or initiatives. They will examine the results of the RESCUE foresight initiative and, through a common understanding about the relevant societal needs, will work together towards the elaboration of a common roadmap and its follow-up activities for the implementation of the RESCUE recommendations. This event will make it possible for RESCUE to deliver its final report and a Science Policy Briefing during spring 2011.

The presentation will give insights about the latest progress of the RESCUE foresight initiative run under the auspices of the **European Science Foundation** (ESF, www.esf.org) and the intergovernmental initiative for **European Cooperation in Science and Technology** (COST, www.cost.eu), as a joint COST-ESF "Frontiers of Science" initiative.

Topics: Governance, institution and policy Integration

Keywords: Environmental and Societal Challenges; Unstable Earth; sustainability governance