

# **MOVING TOWARDS A NEW GLOBAL CHANGE SCIENCE: FROM DISCOURSE TO ACTION**

## **SUMMARY OF THE TIAS-RESCUE WEBINAR**

**JULY 9<sup>TH</sup> 2012**

**Organized and hosted by:**

The Integrated Assessment Society (TIAS, [www.tias-web.info](http://www.tias-web.info))  
and

the RESCUE initiative (Responses to Environmental and Societal Challenges for our Unstable Earth -  
ESF Forward Look ([www.esf.org/rescue](http://www.esf.org/rescue)))

**Recorded webinar:** <http://breeze.serv.uni-osnabrueck.de/p14707093/> (Audio-visual link to the session).

The **RESCUE report** is available from: <http://www.esf.org/rescue>

### **Participants**

- Bernard Avril Executive Officer, Integrated Marine Biogeochemistry and Ecosystem Research & formerly Science Officer, RESCUE, European Science Foundation (**Presenter**)
- Jenny Baeseman Director - Climate and Cryosphere Project, Norwegian Polar Institute
- Jan Bakkes Netherlands Environmental Assessment Agency and TIAS Vice-President
- Carijn Beumer Doctoral Researcher, International Centre for Integrated Assessment and Sustainable development (ICIS), Maastricht University
- Lijbert Brussaard Professor, Soil Biology and Biological Soil Quality, Director Graduate School Production Ecology & Resource Conservation, Wageningen University
- John Callewaert Program Director, Integrated Assessment, Graham Environmental Sustainability Institute
- Gemma Carr Post Doctoral Research Assistant and Programme Coordinator, Vienna Doctoral Programme on Water Resource Systems, Centre for Water Resource Systems, Vienna University of Technology
- Dawn Conway Executive Director, Canadian Foundation for Climate and Atmospheric Sciences
- Veronique Garcon Senior Scientist, Laboratory of Space Geophysics and Oceanography
- Michael Goodsite Director, Nordic Center of Excellence for Strategic Adaptation Research, Aarhus University; RESCUE Working Group Chair, Collaboration between the natural, social and human sciences in global change studies (**Presenter**)
- Jill Jäger Researcher, Sustainable Europe Research Institute; TIAS Vice-President and RESCUE Working Group Chair: Interface between science and policy, communication and outreach (**Webinar co-chair**)
- Christian Knieper Researcher, Inst. of Environmental Systems Research, University of Osnabrück (**co-moderator**)
- Karen O'Brien Professor, Sociology and Human Geography, University of Oslo; RESCUE Working Group Chair: Towards a 'revolution' in education and capacity building (**Presenter**)

Ilona Otto	Researcher, Potsdam Institute for Climate Impact Research
Claudia Pahl-Wostl	Professor, Inst. of Environmental Systems Research, University of Osnabrück; TIAS President; RESCUE Working Group Co-chair, Data and Methodologies (Webinar co-chair)
Margaret Palmer	Director, National Socio-Environmental Synthesis Center, Palmer Lab
Gísli Pálsson	Professor, Anthropology, University of Iceland, RESCUE Working Group Chair: New, emerging and neglected science questions (Presenter)
Stefan Reis	Environmental Modeller, Centre for Ecology & Hydrology
Joan David Tàbara	Associate senior researcher, Institute of Environmental Sciences and Technology of the Autonomous University of Barcelona
Caroline van Bers	Senior Consultant and General Manager, seeconsult GmbH (Co-moderator)
Mathijs van Vliet	Researcher, Institute for Environmental Studies, VU University Amsterdam
Tanja Wolf	WHO European Centre for Environment and Health

### **Regrets**

Peter Moll, Senior Science Policy Advisor & Knowledge Broker Science Development - Consulting for Sustainable Development

Robert Sanchez Rodriguez, Professor, Department of Urban and Environmental Studies, El Colegio de la Frontera Norte (Mexico)/ The University of California

Sverker Sörlin, Professor, Environmental History Division of History of Science, Technology, and Environment, Royal Institute of Technology, Sweden.

Serge Stalpers, SENSE Education Desk, SENSE Research School for Socio-Economic and Natural Sciences of the Environment. Netherlands

## **Welcome and Introduction**

### **Moving towards a new global change science: From Discourse to Action - The design of demonstration projects**

*Claudia Pahl Wostl, Introduction to the RESCUE initiative and the Belmont Forum*

The presentation is downloadable from

[http://tias-web.info/webinar\\_doc/1a\\_Claudia\\_Pahl-Wostl\\_Rescue\\_Belmont.pdf](http://tias-web.info/webinar_doc/1a_Claudia_Pahl-Wostl_Rescue_Belmont.pdf)

### ***The RESCUE Synthesis Report***

*Bernard Avril, former Science Officer, RESCUE, European Science Foundation*

The presentation is downloadable from

[http://tias-web.info/webinar\\_doc/1b\\_Bernard\\_Avril\\_RESCUE\\_Synthesis.pdf](http://tias-web.info/webinar_doc/1b_Bernard_Avril_RESCUE_Synthesis.pdf)

### **Discussion**

**Responses to results of the RESCUE initiative:** The results of the initiative have been welcomed and well received. It is not yet possible to say what any of the recipients of the results will do with them. The likely successor to the *European Science Foundation* (ESF), *Science Europe*, has welcomed these results and will work on implementation of RESCUE recommendations. ESF is going through a major change but has carried the message as far as possible. It has been supported by *European Cooperation in Science and Technology* (COST) and it is hoped that they will also take the work further. It is a long-term effort. It would have been good to have “the road map” (mentioned in the presentation) in the RESCUE report but the internal review process led to its

omission. Progress on implementation will be monitored. ICSU has also been influenced by RESCUE in designing the Future Earth Initiative.

### **Short Presentations by RESCUE participants on outcomes of the RESCUE Working Groups**

*(Chaired by Jill Jäger)*

#### **Reconceptualizing the ‘Anthropos’ in the Anthropocene: Integrating the social sciences and humanities in global environmental change research**

*Gísli Pálsson, Working Group Chair: New, emerging and neglected science questions*

The presentation is downloadable from

[http://tias-web.info/webinar\\_doc/2\\_Gisli\\_Palsson\\_Anthropocene.pdf](http://tias-web.info/webinar_doc/2_Gisli_Palsson_Anthropocene.pdf)

#### **Changing the research framework**

*Michael Goodsite, RESCUE Working Group Chair, Collaboration between the natural, social and human sciences in global change studies*

The presentation with the above title is downloadable from

[http://tias-web.info/webinar\\_doc/3\\_Michael\\_Goodsite\\_changing\\_the\\_Research\\_Framework.pdf](http://tias-web.info/webinar_doc/3_Michael_Goodsite_changing_the_Research_Framework.pdf)

#### **RESCUE Working Group: Requirements for Methodologies and Data in Global Environmental Change Research**

*Claudia Pahl-Wostl, RESCUE Working Group Chair, Data and Methodologies*

The presentation is downloadable from

[http://tias-web.info/webinar\\_doc/4\\_Claudia\\_Pahl-Wostl\\_WG\\_Methods.pdf](http://tias-web.info/webinar_doc/4_Claudia_Pahl-Wostl_WG_Methods.pdf)

#### **You Say you want a Revolution? Transforming Education and Capacity Building in Response to Global Change**

*Karen O'Brien, RESCUE Working Group Chair: Towards a 'revolution' in education and capacity building*

The presentation is downloadable from

[http://tias-web.info/webinar\\_doc/5\\_Karen\\_O'Brien\\_Revolution.pdf](http://tias-web.info/webinar_doc/5_Karen_O'Brien_Revolution.pdf)

#### **Knowledge and global environmental change: The challenge of opening up knowledge systems**

*Jill Jäger, RESCUE Working Group Chair: Interface between science and policy, communication and outreach*

The presentation is downloadable from

[http://tias-web.info/webinar\\_doc/6\\_Jill\\_Jaeger\\_Knowledge.pdf](http://tias-web.info/webinar_doc/6_Jill_Jaeger_Knowledge.pdf)

#### **Discussion**

"The **KTH Environmental Humanities Laboratory** at the Royal Institute of Technology in Stockholm "is a post-disciplinary environment that combines education, research and postgraduate studies in new ways that will help to modernize and develop the humanities as a field of knowledge." according to Sverker Sörlin, Professor, Environmental History Division of History of Science, Technology, and Environment, who was registered for, but unable to participate in the webinar. For more information on EHL :

[www.kth.se/en/alumni/2.37896/carl-bennet-skanker-15-miljoner-till-kth-1.286194](http://www.kth.se/en/alumni/2.37896/carl-bennet-skanker-15-miljoner-till-kth-1.286194)

or contact\_ Sverker Sörlin [sorlin@kth.se](mailto:sorlin@kth.se)

See also the activities of the **Environmental Humanities Education Center** at the University of Utah, [www.ehec.utah.edu/](http://www.ehec.utah.edu/)

***Uptake by decision/policymakers:*** Challenges posed to leading decision makers seems to be too innovative for them, so the question remains open how can we adapt to what those leaders are saying. We cannot ensure uptake of the results and recommendations we are making, but through demonstration projects, we can show their value and make them very attractive.

Furthermore, it is useful to remember that in order to change the interactions between 'experts' and 'agents/stakeholders', we need to take the **sustainability learning approach**: You only learn that by practicing (and failing). The experiential part is often forgotten in academia.

***An anthropocentric perspective:*** There was a brief exchange relating the concept of the Anthropocene with a general anthropocentric view of the world and in particular the view of the environment as a social category. The view of Gísli Pálsson is that *humans* are key players because we are aware of what is going on, but that does not mean we are anthropocentric. We should respect the various forms of agency in the world.

### **Recommendations for future calls for proposals of the Belmont Forum and other possible funding opportunities**

*(chaired by Claudia Pahl-Wostl)*

With regard to a call for proposals, the following recommendations were made:

- First identify themes and then how demonstration projects could be structured.
- Develop a high level plan of action (try not to replicate too much the structure of RESCUE)
- Ensure a long-term perspective (since 4 years for a project is simply too short). Research could be coordinated in a **network of connected studies**, with a long term vision, and global cooperation.
- Determine how to integrate the social sciences. A massive effort is needed to incorporate these neglected fields. We need to understand politics, governance and human behaviour.
- Implement a COST action to develop a team to work further on this research (e.g. COST proposal derived from The Knowledge, Learning and Societal Change (KLSC) project, RESCUE and VISION Research and Development for Sustainable Development). Related to this, it may be possible to approach COST and ESF/ScienceEurope, and possibly other regional funders (EC, US-NSF, ...) to help them draw the roadmap of RESCUE (i.e. follow up to RESCUE).
- If the Belmont Forum is the key target, we should clearly and carefully consider the positioning of this call with respect to "Future Earth" initiative, the 4 GCR programmes, ICSU and ISSC among others.

### **Next Steps**

By the end of August a draft Call for Proposals for a set of demonstration projects based on the presentations and discussions will be circulated among the participants for their input. The final draft will be sent to the Belmont Forum and other potential funders.