Public Evening Event

SCIENCE IN THE EYE OF THE STORM

Angelika Hilbeck
ENSSER Chairperson
A Provocative Note

Angelika Hilbeck
ENSSER Chairperson
Exceeding planetary boundaries – the safe operating space for humanity

Authors warn: the planet may be on the brink of massive shifts

Rockström et al., Nature 2009
Earth responds to the totality of all interventions we made

EVERYTHING’S CONNECTED!

Yet, we do
- Respond in a disconnected, disciplinary way
- are as of today largely incapable to develop effective integrated solution strategies at the required level of complexity
Nature | News Feature
Earth summit: Rio report card

Jeff Tollefson & Natasha Gilbert
6 June 2012
REPORT CARD
UN FRAMEWORK CONVENTION ON CLIMATE CHANGE

MAIN ASSIGNMENT
STABILIZE GREENHOUSE-GAS EMISSIONS  F
REPORT CARD
UN FRAMEWORK CONVENTION ON CLIMATE CHANGE
MAIN ASSIGNMENT
STABILIZE GREENHOUSE-GAS EMISSION

REPORT CARD
CONVENTION ON BIOLOGICAL DIVERSITY
MAIN ASSIGNMENT
THE RATE OF BIODIVERSITY LOSS

REPORT CARD
UN CONVENTION TO COMBAT DESERTIFICATION
MAIN ASSIGNMENT
REVERSE DESERTIFICATION AND LAND DEGRADATION
**UN FRAMEWORK CONVENTION ON CLIMATE CHANGE**

**MAIN ASSIGNMENT**

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<tr>
<td>STABILIZE GREENHOUSE-GAS EMISSIONS</td>
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**OTHER ASSIGNMENTS**

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<td>TRACK GREENHOUSE-GAS EMISSIONS AND SINKS</td>
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<td>PROMOTE AND DISPERSE CLIMATE-FRIENDLY TECHNOLOGIES</td>
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<td>PROMOTE SUSTAINABLE LAND MANAGEMENT</td>
<td>C</td>
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<td>PREPARE FOR THE IMPACTS OF CLIMATE CHANGE</td>
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<td>ADVANCE CLIMATE RESEARCH AND POLICY ANALYSIS</td>
<td>A</td>
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<td>ESTABLISH A DIPLOMATIC PROCESS</td>
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*The climate convention has helped to create national inventories of greenhouse-gas emissions, land-use trends and carbon uptake by forests.*

*The Clean Development Mechanism allows industrialized countries to offset their emissions by paying for clean energy and other projects in developing countries, but the programme has been limited in both reach and effectiveness.*

*The climate talks have encouraged efforts to advance sustainable agriculture and reduce tropical deforestation.*

*Many of the 194 countries that are party to the convention have only recently begun formulating plans to prepare for a warmer world.*

*The UN process has encouraged investments in climate science, energy technologies and social sciences.*

*The annual ‘Conference of the Parties’ to the climate convention, or COP, has become an international roadshow for professional climate diplomats.*

Talk shops and diplomacy....
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<th>UN Framework Convention on Climate Change</th>
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<td>Track Greenhouse-Gas Emissions and Sinks A</td>
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<td>Promote Sustainable Land Management A</td>
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<td>Prepare for the Impacts of Climate Change A</td>
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<td>Advance Climate Research and Policy Analysis A</td>
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<td>Establish a Diplomatic Process A</td>
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- **Research and reveal mechanisms and causation...**
Monitor and document our failing....
Back to Earth

“On urgent environmental issues, the world has perfected the art of incremental negotiation and redefined circular motion.

...

Countries have increased the rhetoric and their political commitments, but there is little to show for 20 years of work, apart from an impressive bureaucratic machine that has been set to indefinite idle.”

What it needs from the second Earth summit in Rio is firm leadership and a viable plan for success.

Nature 486, 5 (07 June 2012) doi:10.1038/486005a Published online 06 June 2012
1. **Economic Prosperity**
   Prosperidade Econômica

2. **Social Inclusion**
   Inclusão Social

3. **Environmental Protection**
   Proteção Ambiental
The Vision of a ‘Green Economy’!
The Vision of a ‘Green Economy’!

...leaving the reference frame and business as usual intact
Business as usual

Economy

Ecology
Business as usual

New economic / business models

Economy

Ecology

Ecology

Economy
ANALYSIS & CONCLUSIONS

Science really is relevant only as is supports pre-conceived political agendas/goals/positions

It needed an unspectacular, unambitious, mediocre summit to show:

Cognitive gap in perception of urgency and outcomes of environmental problems between governments (and the ruling elites = 1%) and (civil) society (‘The 99%’) is widening and can even be diametrically contradictory

Limits of Mega-Negotiations of global problems are reached - run by elites confined in narrow national/political agendas and in the grip of global corporations (with even more narrow agendas) – all belong to the winners of the current dysfunctional system – hence understanding of urgency, personal concern and factual competence underdeveloped if not missing at all.
Nasa-funded study: industrial civilisation headed for 'irreversible collapse'?

Natural and social scientists develop new model of how 'perfect storm' of crises could unravel global system

This Nasa Earth Observatory image shows a storm system circling around an area of extreme low pressure in 2010, which many scientists attribute to climate change. Photograph: AFP/Getty Images

Nafeez Ahmed
Friday 14 March 2014 18.28 GMT

1483 comments
In unequal societies, Elite wealth monopolies … are buffered from the most "detrimental effects of the environmental collapse until much later than the Commoners", allowing them to "continue 'business as usual' despite the impending catastrophe."

Applying this lesson to our contemporary predicament, the study warns that: "While some members of society might raise the alarm that the system is moving towards an impending collapse and therefore advocate structural changes to society in order to avoid it, Elites and their supporters, who oppose making these changes, could point to the long sustainable trajectory 'so far' in support of doing nothing."
BAND PLAYED TILL END!

Titanic Sacrifice to Speed God – Hurléd Through Water at 21 Knot Clip “TO SMASH A RECORD”

LIST OF FAMOUS MEN LOST CORRECT

Stories of Saved Received To 4 A.M
THE DEBATE TONIGHT:

How can we differentiate proposals for the ‘old’ business model from genuinely ‘novel’ approaches?

How can we communicate the severity of the state of affairs without causing resignation or ‘retreating to fetal position’ (= right-wing nationalism)?

How can we overcome the obstacles to progress (= future obsolete stakeholders)?
Panel members: David Gee (former Senior Advisor for Science, Policy & Emerging Issues at the European Environment Agency):

KEY NOTE: “Some common causes, consequence and solution to the 3 crises: Financial, Energy/Climate, Ecosystems”

Debate: Hartmut Grassl (VDW, former director Max Planck Institute for Meteorology, Germany)

Brian Wynne (Science Studies at CSEC and at the Centre for Economic and Social Aspects of Genomics, Lancaster University, UK – founding member

Ernst Ulrich von Weizsäcker (Co-President Club of Rome, ENSSER)

ESRC Genomics, ENSSER

Rome, ENSSER
THANK YOU!