

Challenges and Opportunities for Sustainability

Environmental Technologies in the Context of Climate Change
Renewables Land Resources Financial Tools

US EPA UBA CiF e. V.

November 7-9, 2007
Naples, Florida, USA



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Prof. Dr. **Herbert Klapperich**, CiF e. V., Germany
Dr. **Alan Hecht**, Director for Sustainable Development, US EPA, USA

Honorary Chair

Prof. Dr. **Klaus Töpfer**, Former Under Secretary General, United Nations

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6 MetroTech Center - Brooklyn, NY 11201, USA

Phone: 1-718-260-3743 - Fax: 1-718-260-3754

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Wednesday, November 7, 2007

17:00 - 18:30	Registration
18:30 - 19:30	Reception
19:30 – 21:00	Dinner
21:00 – 22:00	Social Hour

Thursday, November 8, 2007

08:00 – 09:00	Breakfast
09:00 – 10:00	Opening

- Welcome
 - Herbert Klapperich, TU Bergakademie Freiberg & CIF e. V., Germany
 - Alan Hecht, Director for Sustainable Development, U. S. EPA, Washington, USA
 - Dale Medearis, Northern Virginia Commission, USA
 - Doug MacCourt, Ater Wynne LLP, USA
 - Barbara Hickernell, ECI, N. Y., USA
- Honorary chair
 - Prof. Dr. Klaus Töpfer, Former Under Secretary General United Nations
- Keynote
 - Arthur H. Purcell, Resource Policy Institute, USA
"The evolution of sustainability : Planning future initiatives"

C consultants/industries
A authorities/politics
R research

10:00 – 13:00 **Session I: Urban sustainability**

- Keynote Lectures:
 - A ○ "US-German bilateral treaty"
Ann Gatchette, U. S. EPA
 - R ○ Darryl Newport, Sustainability Research Institute, University of East London, UK
"Community Sustainability"
 - C ○ Doug MacCourt, Ater Wynne LLP
"Building the High-Density Sustainable Community – Connecting Brownfields, Green Building and Transportation"
 - C ○ Christopher Kirvan, NEWWORK, Newark, USA
"Real Estate – Sustainable design & development"

- Statements
- A ○ "Brownfield rehabilitation"
Detlev Grimski, UBA, Dessau Germany
- R ○ "The 'Green Brownfield' approach – An instrument for sustainable land rehabilitation – also by renewables"
Herbert Klapperich, CiF e. V. & TU Bergakademie Freiberg, Germany
- C/R ○ "Land use planning and sustainability"
Claudia Werner, TU Berlin, Germany
- R ○ "PPP for land resources"
Dieter Jacob, TU Bergakademie Freiberg & CiF e. V., Germany

11:00 – 11:30 Coffee Break

- paper presentations
- C ○ "Environmental Due Diligence & more"
Dietrich Mehrhoff, Landplus GmbH & CiF e. V., Germany
- R ○ "Technology for rapid detection of hazards"
Ed J. Bell, Crown Biotech Ltd, UK
- C ○ "World water – Future crisis of today challenges"
Yossi Lavi, Netafim Company, Israel
- "Simultaneous and competitive adsorption kinetics of cr(vi) and cu(ii) from aqueous mixtures"
Chaitanya Bharathi Institute of Technology, India
- "Recycling of exhaust electrodes used on aluminium metallurgy"
Giovanni Mei, Cagliari University, Italy
- "Functional re-use of quarries and incentive hypothesis for the disposal of stone waste"
Ginevra Balletto, Cagliari University, Italy
- special lecture
- R ○ "Next generation greener surface active reagents for a sustainable chemical industry"
– P. Somasundaran, S. Lu, Columbia University, USA
- poster session

13:00 – 15:00 Lunch

15:00 – 19:30 **Session II: Energy / Renewables**

- Keynote lectures
- A ○ "Policy tools"
Thomas Hartkopf, TU Darmstadt, Germany
- C ○ "Current economic and legal developments concerning renewable energies in Germany – investors view"
Martin Maslaton, Leipzig, Germany
- Statements: Renewables
- C ○ "Geothermal energy"
Horst Kreuter, Geothermal Engineering GmbH, Karlsruhe & GtV e. V., Germany
- "Wind energy"
NN, USA
- R ○ "Financing climate change"
– Jan Bongaerts, TU Bergakademie Freiberg, Germany
- C ○ "BHP-Billiton Carbon-markets"

- R
 - "State-of-the-art research on CO2 sequestration in Europe – Carbon dioxide storage on residues from coal processing"
Rafiq Azzam, RWTH Aachen & CiF e. V., Germany
- R
 - "US department of energy's carbon sequestration atlas of the United States and Canada"
Timothy R. Carr, Science Applications International Corporation (SAIC) & West Virginia University, USA

17:00 – 17:30 Coffee Break

- Paper presentations
 - R
 - "The waters network : Transforming environmental science and engineering research and education through an integrated environmental observatory network"
Nick Clesceri, NSF, WATERS Network Project Office, U. S.
 - C
 - "Energy from hydropower – Innovative and regenerative"
Rudolf Pöttler, ILF, Austria
 - C
 - "From coal to geothermal energy – renewables from former mining sites"
Wolfgang Quecke, MGG GmbH, Essen, Germany
- Statements
 - R
 - "The TU Darmstadt energy engineer – A new approach to future energy engineering education"
Rolf Katzenbach, TU Darmstadt, Germany
- Paper presentations
 - "Power supply resources of Republic of Tajikistan and Perspective of development of hydrogen power engineering"
Inom Normatov, Intitute of Water problems, Hydropower and Ecology, Russia
 - "Biodiesel - The next generation fuel"
Harjot Singh Nibber, Baba Kuma Singh ji Engineering College, India
 - "Global warming : Renewable energy resources an alternative"
V. K. Bajpai, National Institute of Technology, Kurukshetra, India
 - "Geothermy in Sardinia – Preliminary report"
Paolo Valera, DIGITA, Department of Geoengineering and Environmental, Italy
 - "Simulation of absorption heat transformer using tfe-nmp as working pair and using solar heat"
Anna Gowsalya, B. S. A. Crescent Engineering College, India
- Keynote Lecture
 - R
 - "Energy"
Carsten Drebenstedt, TU Bergakademie Freiberg, Germany
- **podium discussion**
"lessons learned"

20:00 – 22:00 Conference Dinner

22:00 – 23:00 Social Hour and Poster Session

Friday, November 9, 2007

08:00 – 09:00 Breakfast

09:00 – 12:00 **Session III: Geohazards**

Geohazards:

hurricanes/earthquakes/tsunamis/landslides/floods/volcanoes

→ sustainable management

→ assessment & mitigation

→ new techniques in geohazard management

- Keynote Lecture
- R ○ Keh-Jian Shou, National Chung-Hsing University, Taiwan

- Paper presentations
- "Framework for evaluating the sustainability of post-tsunami housing reconstruction projects in coastal fishing villages around the Indian ocean"
Emily Kunen, Brown University, RI, USA
- "A cross hazard approach to sustainable structural design : Lessons from reconnaissance and prescriptive codes"
Mary Beth Oshnack, University of Pittsburgh, PA, USA
- "Geohazards and their mitigation : India's plans"
K. S. Murty, NIL, India

10:00 – 10:30 Coffee Break

- Statement
- C ○ "On hazards: political & legal implications"
Reiner Wolf, TU Bergakademie Freiberg & CiF e. V., Germany
- Poster session

12:00 – 13:00 Lunch and Departure