

The Future for Sustainable Built Environments

- Integrating the Low Exergy Approach

Conference 2009

Program of the COSTeXergy / IEA ECBCS Annex 49 Conference on the 21st of April 2009 at Corneliushuis Heerlerheide, Heulsstraat 2, 6413EJ Heerlen

time

- 10:00** **Opening**
(Chair: Dietrich Schmidt)
- 10:00 - 10:05 **"Welcome! Opening of the Conference"**
Dietrich Schmidt
(Conference Chair / Fraunhofer Institute for Building Physics, Germany)
- 10:05 - 10:25 **"Energy Transition Policies in The Netherlands – PEGO and the National Dutch Energy and Research Programme"**
Paul Ramsak (SenterNovem, The Netherlands)
- 10:25 - 10:45 **"Planning of sustainable community energy systems: the experience of CONCERTO communities.1"**
Olivier Pol (arsenal research, Austria)
- 10:45 - 11:30 **Keynote: " Toward near-zero Primary Energy Use in Buildings and Communities"**
Morad Atif (Chairman IEA ECBCS / National Research Council Canada)
- 11:30** **The Low Exergy Approach**
(Chair: Dietrich Schmidt)
- 11:30 - 12:00 **"Low Exergy Systems for High-Performance Buildings and Communities"**
Dietrich Schmidt
(Fraunhofer Institute for Building Physics, Germany)
- 12:00 - 12:30 **"European Exergy Research Network – COSTeXergy"**
Elisa Boelman
(Conference Co-Chair / Technical University Delft, The Netherlands)
- 12:30 - 13:00 **"Exergetic Thinking: Its Fundamentals and Applications Looking into the Future"**
Masanori Shukuya (Musashi Institute of Technology, Japan)
- 13:00 - 14:00 **Lunch Break**
(Posters)
- 14:00 - 17:00** **Session 1** (Chair: Gudni Johannesson):
Projects on Buildings/Technologies
(Program see next page)
- Session 2** (Chair: Peter Op't Veld):
Projects on Communities
(Program see next page)
- 17:00 - 17:15 **Coffee Break**
(Posters)
- 17:15 - 18:30 **Round Table Discussion in Session 1 and 2 separately**
- 18:30 - 19:30 **Summary Session**
Rapporteurs and general summary
Masanori Shukuya (Musashi Institute of Technology, Japan)
- 20:00 **Conference Dinner**
(and Posters)

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14:00 - 17:00 **Session 1: Projects on Buildings/Technologies**
(Chair: Gudni Johannesson)

- 14:00 - 14:25 **"Adaptive Comfort and Exergy Design"**
Wouter MarkenLichtenbelt
(University of Maastricht, The Netherlands)
- 14:25 - 14:50 **"Decentralised LowEx Air Handling Unit with Integrated PCM Storages"**
Bruno Lüdemann
(Imtech, Germany)
- 14:50 - 15:15 **"Utilisation of Capillary-Tube-Systems with PCM Storages"**
Dirk Müller
(E.ON Energy Research Center, Germany)
- 15:15 - 15:40 **"Design of Responsive Building Elements in an Integrated Design Process"**
Ad van der Aa
(CHRI, The Netherlands)
- 15:40 - 16:05 **"Exergetic System Approach for an Efficient, People-Friendly and Affordable Use of Energy in the Built Environment"**
Elisa Boelman (Technical University Delft, The Netherlands)
- 16:05 - 16:30 **"Demonstration and Training Houses in 'Tomorrows' Neighbourhood' - The Exergy Concept Versus the Passive House Concept"**
Ludo Kockelkorn (Hogeschool Zuyd, The Netherlands)
- 16:30 - 17:00 **"LowEx Retrofit of a Printing Workshop in Germany"**
Doreen Kalz
(Fraunhofer Institute for Solar Energy Systems, Germany)

14:00 - 17:00 **Session 2: Projects on Communities**
(Chair: Peter Op't Veld)

- 14:00 - 14:30 **"Transition in Energy Efficient Community Planning"**
Derk Loorbach
(Erasmus University Rotterdam, The Netherlands)
- 14:30 - 15:00 **"Transition in Energy and Process for Sustainable Community Development: Description and Problems"**
Frans de Haas (PGDEPW, The Netherlands)
- 15:00 - 15:30 **"Strategic Guidance for Decision Makers in Energy Efficient Communities"**
Jacques Kimman (Hogeschool Zuyd, The Netherlands)
- 15:30 - 16:00 **"Integrated Exergy Concepts for Sustainable Regional and Urban Planning"**
Ronald Rovers (Hogeschool Zuyd, The Netherlands)
- 16:00 - 16:30 **"100% RES for the Community of Wolfhagen - Putting Community Efficiency on the Map"**
Christina Sager (Fraunhofer Institute for Building Physics, Germany)
- 16:30 - 17:00 **"CONCERTOproject Remining LowEx – Low Exergy in Practice in the Mine Water Project in Heerlen"**
Peter Op't Veld (CHRI, The Netherlands)