

Future Megacities in Balance

New Alliances for Energy- and Climate-Efficient Solutions

October 11-13, 2010

at the World Heritage Site “Zeche Zollverein”, Essen, Germany

International Conference by the Federal Ministry of Education and Research, Germany

organised by the Project Management Agency, c/o German Aerospace Center

contact@future-megacities-2010.org

www.future-megacities-2010.org

October 9/10, 2010

BMBF's Young Researchers' Symposium at the University of Duisburg-Essen, Campus Essen
jointly organised by the German Academic Exchange Service (DAAD) and the University Duisburg-Essen

October 10, 2010

Pre-Event in the Audimax, University of Duisburg-Essen, Campus Essen

6.00 p.m.

Managing the Unmanageable – Dabbawalas – Hidden Champions of Future Metropolises

Public Event moderated by

Mr Ralf Ebert, StadtArt, Germany

Award Winning Film ‘Dabbawala - The Lunchbox Miracle’ by

Ms Antje Christ

and Moderated Discussion with

Mr Raghunath Medge, President, Mumbai Dabbawala Association, India

Ms Antje Christ, Filmmaker, Germany

Prof. Frauke Kraas, Department of Geography, University of Cologne, Germany

October 11, 2010

Conference Day I: Solutions and Good Practice for Visionary Urban Development

Moderated by

Dr. Werner Heinz, Expert in Urban and Regional Development, Germany

Ms Vanessa Watkins, Z_punkt The Foresight Company, Germany

8:00 a.m. onwards

Registration and Access to the Exhibition

9:00-10:30 a.m.

Morning Plenum: Welcome and Introduction

9:00-9:15 a.m.

Opening Ceremony

9:15-9:25 a.m.

Welcome by

Mr Franz-Josef Britz, Mayor, City of Essen, Germany

Prof. Ulrich Radtke, Rector, University of Duisburg-Essen, Germany

9:25-9:40 a.m.

Welcome Address by

Dr. Georg Schütte, State Secretary, Federal Ministry of Education and Research, Germany

9:40-10:30 a.m.

Keynote 1

Prof. Klaus Töpfer, Executive Director,
Institute for Advanced Sustainability Studies (IASS), Germany

Setting the Scene: Climate Change and Megaurbanisation – Challenges and Promising Approaches

Keynote 2

Dr. Michael Sutcliffe, City Manager, City of Durban, South Africa

Durban's Municipal Climate Protection Programme – Increasing Urban Resilience through Local Action

10:30-11:00 a.m.

Coffee Break

11:00 a.m.-12:45 p.m. **Panel Discussion 1: Challenging Areas for Megacity Development – Energy, Resources, Planning, Mobility, Governance and Finance**
Introduced and moderated by
Prof. Günter Meinert, Cities Alliance/GTZ, USA
Input by and Panel Discussion with
Prof. Miranda Schreurs, Director, Environmental Policy Research Centre, Freie Universität Berlin, Germany
Prof. Elke Pahl-Weber, Chair for Urban Renewal and Sustainable Development, Department of Urban and Regional Planning, Technische Universität Berlin and Director, Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Germany
Prof. Hermann Knoflacher, Research Center of Transport Planning and Traffic Engineering, University of Technology Vienna, Austria
Dr. Michael Lindfield, Asian Development Bank, Philippines
Dr. Rao Chelikani, President, International Foundation for Human Development (IFHD), India

12:45-2:00 p.m. Lunch Break and Access to the Exhibition

2:00-3:30 p.m. **Parallel Sessions**

A1
Smart Energy Systems

Energy Technologies for Megacities – Establishing the Links between Research and Market Implementation
Chair
Prof. Kai Rommel, Programme Director Energy Management, International School of Management, Germany
Instigator
Ms Isabel Thomas, SAP Deutschland AG, Germany
Input by and Panel Discussion with
Mr Sebastian Lange, UN Habitat Nairobi, Kenya
Energy Efficiency in Urban Agglomerations in Developing Countries
Mr Lars Waldmann, Schott Solar AG, Germany
Acceptance and Use of Solar Energy and Renewable Energy in General
Dr. Jörg Jasper, EnBW AG, Germany
Smart Grids and Smart Metering – Perspectives and Challenges for Industrialized and Developing Countries

A2
Valuable Urban Resources (Waste)

Waste: A Chance for GHG Reduction and Job Creation
Chair
Mr Dieter Steinbach, AT Association Stuttgart, Germany
Mr Tekle W. Kahsay, Executive Director, Gullele Botanical Garden Addis Ababa, Ethiopia
Instigator
Mr Arduroshakin Babawale, Head of Waste Management Unit, Ministry of Environment, Nigeria
Input by and Panel Discussion with
Dr. Thomas Sterr (Head) and
Dr. Werner Krause (Managing Director), Institute for Eco-Industrial Analyses (IUWA) Heidelberg e.V., Germany and
Mr Jiao Jian, Senior Engineer, Xinjiang Academy for Environmental Protection Science, PR China and
Mr Michael Seyboth, Director, Miguel-Soft, Germany
Waste Management Software as an Instrument for the Promotion of Circular Economy in Urumqi, Xinjiang Province, PR China
Dr. Shuaib Lwasa, Department of Geography, Makerere University Kampala, Uganda
Reaching the Baseline of Kampala's Landfill for GHG Reduction – From Waste to Energy
Prof. Frank Baur, Head of the Department for Material Flow Management & Biomass Utilisation, Institute for Future Energy Systems (IZES), Germany and
Mr Getaneh Gebre, Addis Ababa Environmental Protection Authority, Ethiopia
Valorising Waste – the Organic Waste Chain in Addis Ababa

A3

Sustainable Urban Planning and Building (Mitigation)

Mitigating Climate Change in Urban Areas – the Integration of Promising Approaches

Chair and Instigator

Dr. Irene Wiese - von Ofen, Past President, International Federation for Housing and Planning, Germany

Input by and Panel Discussion with

Prof. Andreas Oberheitmann, Director, Center for International Environmental Policy, Tsinghua University, PR China and Senior Research Fellow at RWI Essen, Germany

Low Carbon City Framework for Xiamen, PR China

Ms Nicci Diederichs Mander, Managing Director, Greening Durban 2010 Programme, South Africa

Thinking Globally, Acting Locally: How the EtheKwini Municipality Managed Event-Related Carbon Emissions from Hosting the 2010 FIFA World Cup in Durban

Mr Li Hong, Partner of SBA International and Chief Representative of SBA China, PR China and

Prof. Alexander Schmidt, Chair of City Planning and Urban Design, University of Duisburg-Essen, Germany

Thinking Low-Carbon for Urban Planning and Designing – The Hongqiao Plan

Dr. Bernd Sommer, Research Analyst, Institute for Advanced Study in the Humanities (KWI), Germany

Climate Change Requires Cultural Change. The Limits of Technology in Mitigating Global Warming

A4

Intelligent Transport for Metropolises

Interlinking Transport, Settlement Planning and the User – a Shortcut towards Future-proof Metropolises?

Chair

Dr. Wulf-Holger Arndt, Innovation Center Habitat Design, Technische Universität Berlin, Germany

Instigator

Prof. Günter Emberger, Center for Transport Planning and Traffic Engineering, University of Technology Vienna, Austria

Input by and Panel Discussion with

Dr. Fabio Duarte, Director, Graduate Programme on Urban Management, Pontifical Catholic University of Paraná, Brasil

Urban and Regional Planning and Urban Mobility for Climate Protection, the Curitiba Case

Ms Tanja Schäfer, Project Manager, PTV - Planung Transport Verkehr AG, Germany

Adaptation of Transport Infrastructure in Hyderabad to Climate Change

Ms Carolin Höhnke, Department of Urban and Environmental Sociology, Helmholtz Centre for Environmental Research (UFZ), Germany

With or Without the City – Planning and Implementation of Public Transport Reforms in Santiago de Chile and Bogotá

A5

Multi-Level Cooperation and Governance

Multi-level Cooperation and Governance in Megacities

Chair

Prof. Konrad Hagedorn, Humboldt-Universität Berlin, Germany

Instigator

Dr. Fritz Reusswig, Potsdam Institute for Climate Impact Research, Germany

Input by and Panel Discussion with

Prof. Jonathan Barton, Instituto de Estudios Urbanos y Territoriales, Pontificia Universidad Católica de Chile, Chile

Governance Experiments for Sustainable Development of Santiago de Chile

Prof. Gail Whiteman, Erasmus University Rotterdam, The Netherlands

Companies, Climate Change and Cities

Mr Olaf Merk, Programme Manager, Organisation for Economic Co-operation and Development (OECD), France

Multi-level Governance: International Comparative Perspective

A6

Valuable Urban Resources (Agriculture)

Urban Agriculture: Just a New Fashion or a Strategy for the Future?

Chair and Instigator

Dr. Karlheinz Steinmüller, Scientific Director, Z_punkt The Foresight Company, Germany

Input by and Panel Discussion with

Prof. Undine Giseke, Project Director and Head of Chair of Landscape Architecture, Technische Universität Berlin, Germany

Model City Casablanca – Urban Agriculture as a Contribution to a Climate-Optimised Urban Development

Dr. Wolfgang-Peter Zingel, Senior Research Fellow, South Asia Institute of Heidelberg University, Germany

The Megaurban Food System in Dhaka Bangladesh – Understanding Urban Food Chains

Mr Nevin Cohen, Assistant Professor, Chair for Environmental Studies at The New School New York, USA

New York City – First City Wide Farming Plan for Urban Agriculture

A7

World Café on Sustainable and Climate-Efficient Urban Structures in the Making

Low Carbon Cities in the Making: Masdar City and the 35 ha Area in Hashtgerd New Town

Chair

Prof. Elke Pahl-Weber, Chair for Urban Renewal and Sustainable Development, Department of Urban and Regional Planning, Technische Universität Berlin and Director, Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), Germany

Input by

Mr Tobias Fiedler, Senior Project Manager, Transsolar Climate Engineering GmbH, Germany and Professor for Environmental Technologies at GSD, Harvard University, USA

The Masdar City Project

Prof. Christoph Nytsch-Geusen, Chair for Building, Services, Engineering, Berlin University of the Arts (UdK), Germany and

Mr Sebastian Seelig, Research Associate, Department of Urban and Regional Planning, Technische Universität Berlin, Germany

The 35 ha Area Pilot Project, Hashtgerd New Town

A8

Sustainable Urban Planning and Building (Adaptation)

Adapting Cities: How Climate Changes Spatial Planning

Chair and Instigator

Prof. Michael Schmidt, Head of the Department of Environmental Planning, Brandenburg University of Technology Cottbus, Germany

Input by and Panel Discussion with

Prof. Chris Zevenbergen, Water Engineering Department of UNESCO-IHE, TU Delft and Director of Business Development Department, Dura Vermeer Group, The Netherlands

Adapting the Urban Environment to Climate Change. Robust Findings, Key Uncertainties and Major Challenges.

Dr. Kerstin Krellenberg, Researcher and Project Coordinator, Department of Urban and Environmental Sociology, Helmholtz Centre for Environmental Research (UFZ), Germany

Urban Governance and Adaptation Planning: The Case of Santiago de Chile

Dr. Harry Storch (Department of Environmental Planning) and

Prof. Frank Schwartz (Head of Department of Urban Planning), Brandenburg University of Technology Cottbus, Germany

Spatial Planning as an Adaptation Strategy to Climate Change in Ho Chi Minh City, Vietnam

3:30-4:00 p.m.

Coffee Break

4:00-5:30 p.m.	Late Afternoon Plenum
4:00-4:15 p.m.	Key Messages of the Sessions
4:15-5:00 p.m.	<p>Presentation: Aggregated Mitigation and Adaptation Potential from Future Megacities – an Overview on Intermediate Project Results</p> <p>Presented by Dr. Ludger Eltrop, Institute of Energy Economics and the Rational Use of Energy, University of Stuttgart, Germany Prof. Alexander Schmidt, Chair of City Planning and Urban Design, University of Duisburg-Essen, Germany on behalf of the BMBF Future Megacities Projects</p> <p>Introduced and moderated by Prof. Eckart Ehlers, Senior Fellow, Center for Development Research (ZEF), University of Bonn, Germany</p>
5:00-5:30 p.m.	<p>Keynote 3 Mr Holger Robrecht, Director Sustainability Management, ICLEI, Germany <i>Motivation for Action: Cities and their Potential for Global Climate Mitigation and Adaptation</i></p>
5:30-7:00 p.m.	Individual transfer to the Philharmonie / Saalbau
7:00 p.m. onwards	<p>Evening Reception and Dinner Young Researchers' Awards Ceremony by Mr Wilfried Kraus, Deputy Director General 'Sustainability, Climate, Energy', Federal Ministry of Education and Research, Germany Philharmonie / Saalbau, Essen</p>

October 12, 2010

Conference Day II: Triggering Urban Change through New Alliances

Moderated by

Dr. Werner Heinz, Expert in Urban and Regional Development, Germany

Ms Vanessa Watkins, Z_punkt The Foresight Company, Germany

9:00-9:45 a.m.

Morning Plenum: Introduction

9:00-9:15 a.m.

Welcome and Resumé of Previous Day

9:15-9:45 a.m.

Keynote 4

Prof. Winnie V. Mitullah, Institute for Development Studies, University of Nairobi, Kenya

The Role of Stakeholder Cooperation for Sustainable Megacity-Development at Local and Global Levels

9:45-10:15 a.m.

Coffee Break

10:15 a.m.-12:00 p.m.

Panel Discussion 2: Good Practice Showcases of New Alliances: How to Walk the Talk Among Economy, Policy, Science and Civil-Society

Introduced and moderated by

Dr. Werner Heinz, Expert in Urban and Regional Development, Germany

Dr. Andrea Koch-Kraft, Programme Manager, Project Management Agency, German Aerospace Center, Germany

Presentation by

Mr Markus Palm, CEO, InnovationCity Management GmbH

The Innovation City-concept

Input by and Panel Discussion with

Dr. Irene Wiese - von Ofen, Past President, International Federation for Housing and Planning, Germany

Mr Markus Palm, CEO, InnovationCity Management GmbH, Germany

Prof. Zhang Xiaolei, Director General of Chinese Academy of Sciences (CAS) Xinjiang and Director General, Department of Science and Technology of the Government of Xinjiang Uygur Autonomous Region, PR China

Prof. Kurt Roth, Past Vice Rector for Research and Structure, University of Heidelberg, Germany

Mr Ralf Bermich, Head of Energy and Climate Protection Department, Office of Environmental Protection, Trade Supervision and Energy, City of Heidelberg, Germany

Ms Margrit Knapp-Meimberg, Teacher and Environmental Commissioner, Internationale Gesamtschule Heidelberg (IGH), Germany

12:00-1:30 p.m.

Lunch Break and Access to the Exhibition

1:30-3:00 p.m.

Parallel Sessions

B1

Smart Energy Systems

Smart Energy Systems for Sustainable Megacities – Good Practice and Cooperation Examples

Chair and Instigator

Dr. Ludger Eltrop, Institute of Energy Economics and the Rational Use of Energy, University of Stuttgart, Germany

Input by and Panel Discussion with

Prof. Harold Annegarn, Environmental Management and Energy Studies, University of Johannesburg, South Africa

Best Practice iEECo Concepts in Sustainable Social Housing and Domestic Energy in South Africa

Dr. Angela Jain, Head of Unit 'Mobility, Spatial Planning and Demographics', nexus Institute for Cooperation Management and Interdisciplinary Research, Germany

Solar Powered Schools for Hyderabad / India

Mr Wolfgang Hofstätter, KAITO AG, Germany

Energy Kiosks and Mini-grid Systems for Reliable Energy Supply in City Quarters and Settlements

B2

Valuable Urban Resources (Water)

Growing Thirst – Managing Water in Megacities

Chair

Prof. Artur Mennerich, Ostfalia University of Applied Sciences, Germany

Instigator

Dr. Jonathan Parkinson, Programme Co-ordinator, International Water Association (IWA), UK

Input by and Panel Discussion with

Mr Humberto Reyes Rocha, Research and Development Manager, SEDAPAL, Peru and

Dr. Manfred Schütze, Project Coordinator, ifak e. V. Magdeburg, University of Magdeburg, Germany
Water and Wastewater Management in Megacities – the Lima Example

Mr Wolfgang Sehr, Chairman of Abwasserverband Braunschweig KdÖR, Germany

Reuse of Wastewater and Quality-proven Sludge in Agriculture – The Braunschweig Experience

Ms Anke Althoff, Project Management European Cooperation, Lippeverband, Germany and

Dr. Torsten Frehmann, Advisor for Strategic Affairs, Emschergenossenschaft, Germany
FUTURE CITIES – Integrated European Solutions for Adaptation to Climate Change

B3

Sustainable Urban Planning and Building (Mitigation)

Design for the Future – Energy Efficient Buildings

Chair and Instigator

Mr Bernd Franke, Scientific Director, Institute for Energy and Environmental Research (IFEU) Germany

Input by and Panel Discussion with

Ms Jessica Grove-Smith, Senior Scientist, Passive House Institute, Germany

Building Rating Systems and the Passive House Concept for Different Climate Zones

Mr Christian Hennecke, Architect and Urban Designer, Culturebridge Architects, Germany and PR China

Mr Ahati Jiaerheng, Director, Xinjiang Academy of Environmental Protection Sciences, PR China
Planning of Very Low Energy Buildings in Urumqi, PR China

Ms Florentine Visser, Architect, MED-ENEC, Egypt

The Aqaba Residence Energy Efficiency (AREE) in Jordan

B4

Intelligent Transport for Metropolises

Avoiding the Collapse – Intelligent Transport for Metropolises

Chair and Instigator

Prof. Rudolf Petersen, Consultant, Wuppertal Institute, Germany

Input by and Panel Discussion with

Mr Martin Koppenborg, Head of Business Development, Mercedes-Benz Technology, Germany
E-mobility: Fresh Power for Clean City Mobility?

Dr. Yan Ping, Vice Director, Hefei Municipal City Planning Bureau, PR China

Last Stage Management Platform for Intelligent Transport Systems

Mr Jörg Hanser, Project Manager, DHL Solutions & Innovations, Germany

City Logistic – High Impact on Sustainable Mobility of Mega Cities

B5

Multi-Level Cooperation and Governance

Multi-level Cooperation and Governance: Strategies for Integrated Urban Development Implementation

Chair

Prof. Rudolf Schäfer, Technische Universität Berlin, Germany

Instigator

Prof. Bernd Kochendörfer, Technische Universität Berlin, Germany

Input by and Panel Discussion with

Mr Ho Long Phi, Senior Advisor and Director of Project Management Unit, Steering Center of the Urban Flood Control Program Ho Chi Minh City, Vietnam

The Challenges for Urban Flood Management in Ho Chi Minh City

Mr Seyed Mahmoud Mirian, Tehran City Renovation Organisation, IR Iran

Sustainable Urban Renewal in Deteriorated Areas – the Tehran Approach

Ms Ghazaleh S. Hossein Jasbi, Technische Universität Berlin, Germany

Iranian Municipalities as Key Facilitators for an Energy Efficient Urban Fabric: The Case of Hashtgerd

B6

Sustainable Financing

Sustainable Financing: Rethinking Urban Finance

Chair and Instigator

Prof. Bernd Hansjürgens, Helmholtz Centre for Environmental Research (UFZ), Germany

Input by and Panel Discussion with

Dr. Michael Lindfield, Asian Development Bank, Philippines

Post Copenhagen Financing Arrangement for Climate Change Investments – the Urban Context

Prof. Nils Otter, University of Klagenfurt, Austria

Urban Finance – Sources of Revenue and Principles

Mr Mathias Gauger, Senior Vendor Manager international, Siemens Financial Services, Germany

Financial solutions for sustainable cities

B7

World Café on the Dos and Don'ts of New Alliances

The Dos and Don'ts of New Alliances

Chair

Dr. Hans-Liudger Dienel, nexus Institute and Berlin Institute of Technology, Germany

Dr. Raban Fuhrmann, Berlin Institute of Technology, Germany

Dr. Thomas Sterr, Institute for Eco-Industrial Analyses (IUWA) Heidelberg e.V., Germany

Input by

Dr. Thomas Sterr, Institute for Eco-Industrial Analyses (IUWA) Heidelberg e.V., Germany

Prof. Jonathan Barton, Instituto de Estudios Urbanos y Territoriales, Pontificia

Universidad Catolica de Chile, Chile

Dr. Rao Chelikani, President, International Foundation for Human Development (IFHD), India

Dr. Helmut Lehn, KIT (Karlsruhe Institute of Technology) / ITAS, Germany

Dr. Christian Schlosser, Chief (ag.) Transport and Energy Policy Section, Water, Sanitation and Infrastructure Branch, UN-Habitat, Kenya

Dr. Dimitrios Zikos, Project Coordinator, Humboldt University Berlin, Germany

Dr. Hans-Liudger Dienel, nexus Institute and Berlin Institute of Technology, Germany

Dr. Raban Fuhrmann, Berlin Institute of Technology, Germany

3:00-3:30 p.m.

Coffee Break

3:30-5:45 p.m.

Late Afternoon Plenum

3:30-3:45 p.m.

Key Messages of the Sessions

3:45-5:10 p.m.

Panel Discussion 3: The Added Value of Science for Local Level Cooperation for Future Megacities

Introduced and moderated by

Prof. Eckart Ehlers, Senior Fellow, Center for Development Research (ZEF), University of Bonn, Germany

Dr. Andrea Koch-Kraft, Programme Manager, Project Management Agency, German Aerospace Center, Germany

Input by and Panel Discussion with Future Megacity Project Representatives from Casablanca

Mr Azzedine Hafif, Director, Department of Real Estate and Urban Planning, City Planning Authority for Casablanca Region, Morocco and

Prof. Undine Giseke, Technische Universität Berlin, Germany

Addis Ababa

Mr Getaneh Gebre, Addis Ababa Environmental Protection Authority, Ethiopia and

Mr Dieter Steinbach, AT Association Stuttgart, Germany

Hefei

Prof. Fang Tingjian, The Research Centre for Software Engineering, Hefei, PR China and

Mr Martin Ruhé, German Aerospace Center, Germany

and others

5:10-5:20 p.m.

Conclusions by

Dr. Gisela Helbig, Head of Division 'Global Change', Federal Ministry of Education and Research, Germany

5:20-5:30 p.m.

Wrap-Up

5:30-5:45 p.m.

Ceremony: Building a Base for Future Megacities in Balance

5:45 p.m. onwards

Get-Together at Zeche Zollverein

6:30-7:15 p.m.

Introduction to Field Trips Next Day by

Mr Hans-Jürgen Best, Deputy Mayor Urban Planning, City of Essen, Germany

Mr Michael Schwarze-Rodrian, Business Development Agency Metropol Ruhr GmbH, Germany
Urban Development Practice in Essen and the Ruhr Metropolis

13 October 2010

Conference Day III: Field Trips

More information: www.future-megacities.org