



Symposium "Sustainable Energy Technology in Germany and Canada"

Ontario Investment and Trade Centre

250 Yonge Street, 35th Floor

Toronto, Ontario M5B 2L7

Monday, February 9 2009, 8:00 am – 2:00 pm



Research in
Germany





Sustainable Energy Technology

Protecting the environment means much more than ensuring clean air and pure water. It is a way of life and a way of thinking. The State of Baden-Württemberg, which lies in the south-west of Germany and has a population of almost 11 million, is a successful economic region and home to international companies such as DaimlerChrysler, Bosch and SAP, as well as numerous SMEs. Baden-Württemberg's long tradition of inventiveness and engineering expertise has led to an energy productivity level that is 33% higher than Germany as a whole. Baden-Württemberg is a leading European region in terms of innovation and is devoting considerable resources to the research and testing of efficient technologies such as fuel cells technology and renewable energies. Efficient building technologies are used in specific projects with various countries to raise awareness of such technologies. This technology transfer is key for promoting sustainable development in emerging economic regions of the world.

Baden-Württemberg intends to increase its energy efficiency still further to reduce its dependence on fossil fuels and make a positive contribution to climate protection. We have seen that climate protection policies can have a positive effect on the economy as investments in energy efficiency measures reduce energy costs for local consumers and businesses. For instance, it is estimated that savings of 30% in electricity consumption will be possible by 2020. Upgrading the energy efficiency of existing buildings will bring energy savings of 40 to 50%. The aim of our energy policies is to provide a support framework for such potential savings.

This symposium will provide a forum for Canadian and German companies, developers, architects, engineers and designers to share expertise and discuss experiences with their transatlantic counterparts.

Initiators of the symposium are zafh.net and Baden-Württemberg International

Zafh.net is the the Centre of Applied Research on Sustainable Energy Technology. Founded in 2002 as a research network with the focus on energy consumption and energy efficiency of buildings, city districts and regions, the zafh.net

is one of three centres of excellence in the federal state of Baden-Württemberg. The research network offers a pool in which universities of applied sciences in Baden-Württemberg can accumulate expertise to profit of synergies and interactive research power. The target of the zafh.net is to extremely reduce the energy consumption of buildings making them more and more energy-efficient and sustainable.

The fields of expertise at the Centre of Applied Research include remote control of buildings, sustainable estival building climatisation, integration of renewable energy sources like solar thermal cooling, energy management of buildings using predictive operation and control strategies, energy management of city districts and the energy consumption of specified "Green Buildings".

Baden-Württemberg International is tasked with fostering and expanding international cooperation for the Baden-Württemberg's business, education, and research communities.

The mission of Baden-Württemberg International is to raise the State's profile as a leading site for business, as well as a center of excellence for higher education, science, and research.

A variety of campaigns have been designed to promote Baden-Württemberg's universities and research institutions throughout the world. Furthermore, Baden-Württemberg International supports these organizations in the development of internationalization and marketing strategies as well as in initializing and maintaining international cooperation. Another important task is to foster cooperation between the higher education and research sector and the industry.

Baden-Württemberg International's activities also include initiating cooperation between local and foreign companies through programs aimed at penetrating key markets across the globe

Baden-Württemberg International is the first point of contact for companies, research institutions and universities, looking to cooperate with local partners in industry and sciences or to invest in Baden-Württemberg.



Agenda

8:00 am	Registration
8:30 – 8:45	Adresses of Welcome by Baden-Württemberg International (bw-i) and Canadian host Ulrich Mack Member of the Board of Management, bw-i and N.N.
8:45 – 9:05	Research in Germany: zafh.net Research Group as Part of Research Campaign Land of Ideas Prof. Elmar Bollin Director of the Research Group NET – Sustainable Energy Technologies, University of Applied Sciences Offenburg
9:05 – 9:35	Sustainable Energy for Green Buildings in Canada Oliver Baumann LEED® AP; President Ebert & Baumann Consulting Engineers, Inc., Washington, DC
9:35 – 10:05	Sustainable Cities in Europe Prof. Dr. Ursula Eicker University of Applied Sciences Stuttgart
10:05 – 10:35	Predictive Operation of Sustainable Buildings Thomas Feldmann University of Applied Sciences Offenburg
10:35 – 10:55	Coffee Break
10:55 – 11:25	Energy Savings Potential with Advanced Room Automation Alexander Adlhoch University of Applied Sciences Biberach
11:25 – 11:55	Dynamic Simulation of Sustainable Energy Systems Dr. Jürgen Schumacher University of Applied Sciences Stuttgart
11:55 – 12:25 pm	
12:25 – 12:55	Research at Universities of Applied Sciences in Baden-Württemberg Dr. Rolf Thum Research Coordinator, University of Applied Sciences Mannheim
1:00	Lunch Break and Networking



Presenters include

Oliver Baumann holds a Diploma degree (MSc) in Mechanical Engineering from the Technical University of Munich. He joined the Ebert-Group in 1996 where he first became leader of the Simulation Group and later head of the International Projects Group. In 2004, he visited Lawrence Berkeley National Laboratory (LBNL) as a guest researcher in the field of Commissioning and Building Operation. His extensive and acknowledged experience comprises conceptual design, building simulations, building physics, international projects (e.g. Europe, USA, Russia, Middle East, Africa), national and international research projects (e.g. IEA Annex 40/47 on Commissioning), project management for national and international projects (e.g. Complex Federation Moscow).

Prof. Elmar Bollin graduates as Diplom-Ingenieur for Mechanical Engineering at University Karlsruhe in 1981. From 1982 until 1992 he works as Scientific Employee at Fraunhofer Institute for Solar Energy Systems ISE at Freiburg/Germany, Department System Technique (Head of the group Solar Thermal Systems; Vice Department Head). Since 1993 he is Professor for Control Techniques, Building Services, Building Automation, Solar Engineering and Energy Conversion Techniques at the University of Applied Sciences Offenburg in the Department of Mechanical and Process Engineering. Since 1999 he is the Director of the Research Group NET on Sustainable Energy Conversion with research activities on the areas of Sustainable Energy Techniques and Solar Thermal Applications.

Alexander Adlhoch holds a Diploma degree in Building Climate Design from the University of Applied Sciences in Biberach. During the studies for his Master Degree he had been working as graduate assistant at the University of Applied Sciences in Biberach. In 2007 he received the Master of Science (M.Sc.) in Building Climate Design. Since 2007 he is working at the University of Applied Sciences as a research assistant. His main focus is on building simulation and building automation.

Thomas Feldmann holds a Diploma degree (Dipl.Ing) in Technical Cybernetics from the University in Stuttgart. After his studies he worked in industrial automation and process management. Since 2003 Thomas Feldmann is employed

as a Senior Scientist at the University of Applied Science in Offenburg. His main focus is on building automation, dynamic simulation and predictive methods of building operation.

Dr. Rolf M. Thum studied geoscience at the University of Heidelberg, PhD in 1981, working in geophysics at a private company in Hannover, Germany (1981 – 1985), and as an advisor at the geological survey at Santo Domingo, Dominican Republic (1985 – 1987); since 1988 Coordinator for R&D at the Universities of Applied Sciences of the federal state of Baden-Württemberg (with office in Mannheim); teaching experience in chemistry, material science and public relations.