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Swiss-US Energy Innovation Days 2015

Integrated Building Systems

August 19 – 21, 2015, Zurich, Switzerland

Image: NEST / Source: EMPA

Zurich University of Applied Sciences
zh aw School of Management and Law

sia
schweizerischer ingenieur- und architektenverein
société suisse des ingénieurs et des architectes
società svizzera degli ingegneri e degli architetti
swiss society of engineers and architects

Introduction

The United States of America and Switzerland are currently undergoing a fundamental transformation of the energy sector. In Switzerland, the political conversion has been taking place since some time and is being promoted by Federal Councillor Doris Leuthard, Head of the Federal Department of the Environment, Transport, Energy and Communications DETEC. The challenges to build a more energy efficient, sustainable economy are huge and are demanding new technological, entrepreneurial and governmental approaches. The success will depend on the ability to put in place the right programs for research and education, economic development schemes and adequate energy infrastructures. Both countries, the USA and Switzerland, possess world class expertise, excellence in research and technological development, renowned universities and companies, brilliant minds. The Swiss-US Energy Innovation Days intend to bring them all together in order to exchange perspectives and to share expertise as well as practical experiences in the emerging new energy world. The first Swiss-US Energy Innovation Days were held in Boston in July 2014 and were attended by around 300 researchers and representatives from companies and industry associations from Switzerland and the US.

The 2015 edition of the Swiss-US Energy Innovation Days focuses on Integrated Building Systems. The aim is to explore and identify innovation potentials (applied research projects for universities & companies) and economic potentials (business opportunities) in both countries. On the basis of the findings, the participants are invited to make specific policy recommendations to the Swiss and US governments considering their cost efficiency, practicability and social acceptance.

We cordially invite you to join the Swiss-US Energy Innovation Days 2015 in Zurich in the presence of Federal Councillor Doris Leuthard, Head of the Federal Department of the Environment, Transport, Energy and Communications DETEC, and Suzan G. LeVine, Ambassador of the United States of America to Switzerland, and benefit from this excellent platform intended to stimulate discussion and collaboration between science, industry and policy makers.

Main topics

To enhance the technical exchange, the overall topic of the event will be discussed in four parallel workshops in the following areas:

A Society & Economy – Sustainable Decision-Making

Specific steering measures are needed to promote a more sustainable behavior and energy consumption of individuals, companies and private and public institutions. These measures may consist of financial incentives and information campaigns fostering the provision and demand of alternative resources, products and services, the application of new technologies and the change of lifestyles resp. company strategies. All of which require a deep understanding of decision processes and criteria. The presentations and discussions will focus on empirical research as well as on practical projects and experiences.

Chair: Linda Looft, Assistant Vice President for Government and Community Relations, Worcester Polytechnic Institute WPI

B Energy Technologies – Buildings and Districts for the Future

The ecological footprint of buildings is tremendous. In order to significantly reduce the energy consumption and the output of CO2, as well as meet economic and social challenges, the building stock has to undergo a deep transformation. However, a more sustainable building stock is not only achieved by more efficient buildings, but also by more efficient building systems. An increase in decentralized, small-scale energy supply units based on renewable sources and an optimized coupling with the existing centralized energy systems are key in this respect and require more integral design and redesign of buildings, urban districts and communities. New approaches together with empirical and practical experiences will be presented and discussed.

Chair: Dr. Peter Richner, Deputy Director of EMPA - Swiss Federal Laboratories for Materials Science and Technology

C Mobility – Future Supply and Demand

The sustainability of buildings doesn't stop at the doorstep. Location-dependent mobility has a high impact on the sustainability of buildings and can be reduced, amongst others, by car-free housing estates with excellent access to public transport and supply infrastructure, by attractive and secure public transport systems and networks for pedestrians and cyclists, energy-efficient vehicle technologies and mobility management in communities, companies and housing estates. The presentations and discussions focus on evolutions and trends, as well as good practices and experiences in this respect.

Chair: Nick Nigro, Founder of Atlas Public Policy

D Architecture & Space – Energy as Context or Driver

Current technologies and an increasing amount of projects show the compatibility of energy efficiency and building performance with comfort and esthetics for a sustainable building design. On a larger scale however, current challenges lie in acknowledging and integrating the necessary transition towards local, renewable energy sources and systems. This, in turn, raises fundamental questions about potential interactions between energy supply and urban development and design. What are the spatial, social and esthetic aspects of renewable energy generation and infrastructure? Should energy be a context or even a driver for holistic urban design and planning? How do we integrate, manage and coordinate such design and planning processes?

Chair: Prof. Dr. Arno Schlueter, ETH Zurich, Institute of Technology in Architecture ITA

Program

Wednesday, August 19	Thursday, August 20	Friday, August 21
Workshops I (ZHAW Classrooms, Toni Areal) 8.00-8.30am Registration & Coffee 8.30-9.00am Welcome & Introduction 9.00-12.00am Parallel workshop sessions **A. Society & Economy** Leverage points for behavioral change and sustainability **B. Energy Technologies** Sustainable transformation of the building stock **C. Mobility** Less is more: shared-use and zero emission mobility **D. Architecture & Space** Interrelations between energy and urban systems	**Workshops II (ZHAW Classrooms, Toni Areal)** 8.30-9.00am Registration & Coffee 9.00-12.00am Parallel workshop sessions **A. Society & Economy** Technology innovation as a driver of behavioral change and economy **B. Energy Technologies** The role of districts in the future energy system **C. Mobility** Technology and urban design as decisive factors of sustainable mobility **D. Architecture & Space** Holistic energy planning and urban design	**Closing Session (ZHdK Concert Hall, Toni Areal)** accompanied by Watt d'Or 2015 mini-exhibition in the Foyer 8.30-9.00am Registration 9:00-11.30am Welcome addresses by Walter Steinmann, Director SFOE, Daniel Küng, Director S-GE, and Alicia Barton, Director MassCEC Key notes by Patrick Warnking, Country Director, Google Switzerland and Lino Guzzella, President ETH Zurich Short address by Felix Moesner, Consul Swissnex Boston Panel discussion with workshop Chairs Conclusions from the US perspective: Ambassador Suzan G. LeVine, Ambassador of the United States of America to Switzerland Conclusions from the Swiss perspective: Federal Councillor Doris Leuthard, Head of the Federal Department of the Environment, Transport, Energy and Communications DETEC Moderation: Marianne Zünd, SFOE
Lunch & Transfer / 12.00am-2.00pm	**Lunch & Transfer / 12.00am-2.00pm**	**Farewell Lunch / 11.45am-1.00pm**
Site Visits I / 2.00-5.30pm University of Applied Sciences & Arts Luzern: iHomeLab and your+ prototype www.en.ihomelab.ch/1/ «Suurstoffi» Rotkreuz: 2000 Watt urban development www.suurstoffi.ch	**Site Visits II / 2.00-7.00pm** EMPA Dübendorf: Lab Tour, pilot project NEST, Mobility Demonstrator http://nest.empa.ch/en/ IBM Rüschlikon: Research Lab Tour and Reception by Dr. Alessandro Curioni, Vice President IBM Europe and Director IBM Research - Zurich www.zurich.ibm.com	
Transfer to Zug / 5.30-6.00pm	**Return to Zurich / 7.00-7.30pm**	
Networking Reception & Dinner I 6.15pm Welcome & Introduction by Heinz Tännler, Cantonal Councilor, Canton of Zug and Johannes Milde, former CEO Siemens Building Technologies 7.00pm Apero riche 8.30pm Return to Zurich Location: Siemens AG, Zug	**Networking Reception & Dinner II** 7.30pm Welcome & Introduction by Markus Assfalg, Director Business and Economic Development, Canton of Zurich and Martin Naville, CEO Swiss-American Chamber of Commerce 8.00pm Dinner 11.30pm Closing Location: GnÜSSEREI, Zurich	

Please notice that the topics in the workshops on <u>Thursday differ</u> from those discussed on Wednesday!
The official language for all events is English. No interpretation will be provided.

On Tuesday, August 18, 2015 from 6pm, a welcome cocktail will be served to the US participants in the restaurant «les halles» (see Map and Directions) to make acquaintance and to launch the event.

Registration

The entire event is free of charge for all participants. A personal invitation is required to register for the workshops, site visits and receptions on Wednesday, August 19 and Thursday, August 20, 2015. The number of participants is limited, thus, a binding registration is needed for all parts. Once your registration has been successfully cleared, you will be notified via email. Participation in the closing session on Friday morning, August 21, 2015 is open to everyone (registration necessary). Deadline for registration to all parts of the event is June 30, 2015, using the following link: www.sia.ch/innovation-days.

Accommodation

For participants, contingents of 20 rooms have been reserved at special rates in the following hotels (see «Map and Directions»). Please note that these offers are limited in time and quantity: first come first served.

Renaissance Zurich Tower Hotel (www.renaissancezurichtower.com)

- Contact: Turbinenstrasse 20, 8005 Zurich, +41 44 630 30 30
- Rates: CHF 285 (single room) and CHF 310 (double room) incl. breakfast, valid until July 6th, 2015

25hours Hotel (www.25hours-hotels.com)

- Contact: Pfingstweidstrasse 102, 8005 Zurich, +41 44 577 25 25, zuerichwest@25hours-hotels.com
- Rates: CHF 239 (single room) and CHF 258 (double room) incl. breakfast, valid until July 10th, 2015

Novotel Hotel Zurich City-West (www.novotel.com)

- Contact: Schiffbaustrasse 13, 8005 Zurich, +41 44 276 22 00, H2731@accor.com
- Rates: MON-THU: CHF 188 (single room) and CHF 212 (double room) incl. breakfast
  FRI-SAT: CHF 163 (single room) and CHF 187 (double room) incl. breakfast, valid until July 17th, 2015

Ibis Hotel Zurich City-West (www.ibis.com)

- Contact: Schiffbaustrasse 11, 8005 Zurich, +41 44 276 21 00, H2942@accor.com
- Rates: CHF 149 (single room) and CHF 149 (double room) excl. breakfast CHF 16, valid until July 15th, 2015

Zurich Youth Hostel (www.youthhostel.ch/zurich)

- Contact: Mutschellenstrasse 114, 8038 Zurich, +41 43 399 78 00, zuerich@youthhostel.ch
- Rates: Rates: CHF 112.10 (single room) and CHF 132.05 (double room) incl. breakfast, valid until July 10th, 2015

Booking and payment are the responsibility of the participants. In order to benefit from these special rates, please specify the following code upon reservation: Swiss-US Energy Innovation Days. Please note that the rates stated above do not include the compulsory city tax of CHF 2.50 per person/night.

Contact

For further inquiries please contact the Swiss Federal Office of Energy SFOE: info@bfe.admin.ch

Map and Directions

All locations are within walking distance of the recommended hotels. (see «Accommodation» on next page)

Welcome cocktail for the US participants, Tuesday, August 18

Restaurant «les halles», Pfingstweidstrasse 6, 8005 Zurich (http://www.les-halles.ch)
From Zurich Main Station, a 10-minute ride with tram no. 4 towards «Bahnhof Altstetten» to tram stop «Schiffbau».

Workshops Wednesday, August 19 – Thursday, August 20

Zurich University of Applied Sciences (ZHAW), Toni Areal, Pfingstweidstrasse 96, 8005 Zürich
From Zurich Main Station, a 10-minute ride with tram no. 4 towards «Bahnhof Altstetten» to tram stop «Toni Areal». Please check the room information at the entrance.

Reception II, Thursday, August 20

Restaurant «GnÜSSEREI», Giessereistrasse 18, 8005 Zürich (https://www.gnuesserei.ch)
From Zurich Main Station, a 10-minute ride with tram no. 4 towards «Bahnhof Altstetten» to tram stop «Escher-Wyss-Platz».

Closing Session, Friday, August 21

Zurich University of the Arts (ZHdK), Toni Areal, Pfingstweidstrasse 96, 8005 Zürich

Several regional and long-distance trains run from Zurich Airport to Zurich Main Station (10-minute ride). The Main Station can also be reached in 30 minutes with the no. 10 tram from Zurich Airport. The regional train S16 goes directly from Zurich Airport to train stop «Zurich Hardbrücke» (8-minute ride) which is in walking distance to all locations and the recommended hotels (see «Accommodation»). Timetables are available at: www.zvv.ch/zvv/en/home.html.

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