

## Annual Conference 2014

# Challenges and prospects for Hydro-Power and Deep Geothermal Electricity Production in Switzerland

September 30, 2014, ETH Zürich, AudiMax, main building, Rämistr. 101, Zürich



The Swiss Energy Strategy 2050 asks for new solutions to increase hydropower and geothermal electricity production. The Swiss competence center for energy research - 'supply of electricity' has been established with 13 academic institution and industrial partners, federal offices.

Key representatives from industry, federal offices and academia will present challenges, R&D answers to these challenges and strategies to increase hydro-power electricity production by 10% and will discuss opportunities and risks to build the next generation of geothermal power plants to reach by 2050 the target of 5-10% of the electricity production. The R&D roadmaps of the SCCER-SoE will be presented.

Free entrance; conference language is English and German

Register on homepage [www.sccer-soe.ch](http://www.sccer-soe.ch) until September 22, 2014

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## Program

08:30 – 09:00	Registration and coffee
09:00 – 09:10	Welcome address Prof. Marco Mazzotti, Director of the energy science center of the ETH
09:10 – 09:30	Energy strategy 2050 and the new SCCER Prof. Domenico Giardini, Chair of Seismology and Geodynamics, ETHZ
09:30 – 10:00	Climatic change and hydropower Prof. Paolo Burlando, Chair of Hydrology and Water Resources Management, ETHZ
10:00 – 10:25	Aktuelle wirtschaftliche Herausforderungen der Wasserkraft Michael Wider, Head of Generation, ALPIQ
10:25 – 10:55	Coffee break
10:55 – 11:20	Challenges for Hydropower within the Framework of the ES2050 and their Implications for Research Chr. Bühlmann, Stv. Sektion Energieversorgung und Monitoring, Bundesamt für Energie
11:20 – 11:40	Broadening the hydraulic turbine operating range for a lean grid integration of new renewable energy resources Prof. François Avellan, Director of the EPFL Institute of Mechanical Engineering
11:40 – 12:00	Hydropower challenges in Switzerland and SCCER-SoE 10 years R&D roadmap Prof. Anton Schleiss, Laboratoire de constructions hydrauliques, EPFL
12:00 – 13:00	Lunch break
13:00 – 13:30	The Role of Geothermal Energy in the Swiss Confederation's Energy Strategy 2050 G. Siddiqi, Deputy Section Energy Research, Bundesamt für Energie
13:30 – 13:50	EGS pilot projects in Switzerland: status and outlook Dr. Peter Meier, CEO of Geo-Energie Suisse
13:50 – 14:10	Successes and failures in the development of deep geothermal projects in the Bavarian Molasse basin Dr. Jörg Uhde, Head of Business Unit Geothermal Power Plants, Axpo
14:10 – 14:40	TA-SWISS report on challenges and opportunities of deep geothermal energy in Switzerland Dr. Stefan Hirschberg, Head, Laboratory for Energy Systems Analysis, PSI
14:40 – 15:10	The nature and properties of fracture damage surrounding faults Prof. Dan Faulkner, Earth, Ocean and Ecological Sciences, University of Liverpool
15:10 – 15:30	Coffee break
15:30 – 16:00	A multi-scale, multi-disciplinary approach to understanding and managing induced seismicity Prof. Wiemer, Director, Swiss Seismological Service, ETHZ
16:00 – 16:20	Deep Geothermal challenges in Switzerland and SCCER-SoE 10 year R&D roadmap Prof. Domenico Giardini, Chair of Seismology and Geodynamics, ETHZ
16:20 – 17:00	Round-table discussion on the future electricity supply for Switzerland
17:00	Aperitiv

## Research Partners

**ETH zürich**

Lucerne University of Applied Sciences and Arts

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aquatic research

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