IEA-ETSAP WORKSHOP

INTEGRATED WATER-ENERGY MODELLING

Organised by Paul Scherrer Institute, Switzerland

Cooperation partner: The Swiss Competence Center for Energy Research – Supply of Electricity (SCCER SoE)

WENDESDAY 13TH DECEMBER 2017 (9:00-18:00)

ETH Zürich
Main Building, HG D 7.1 (morning) and HG D 1.2 (afternoon)
Rämistrasse 101
Zürich, Switzerland

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To join the workshop please register at http://iea-etsap.org/index.php/meeting-zurich.

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The Energy Technology Systems Analysis Program (ETSAP) is the Technology Collaboration Programme of the International Energy Agency (IEA). The IEA-ETSAP leads a major initiative for open source solutions for energy scenario modelling, i.e. MARKAL/TIMES modelling frameworks.

The Swiss Competence Center for Energy Research – Supply of Electricity (SCCER SoE) has the objective to carry out innovative and sustainable research in the areas of geo-energy and hydropower. SCCER SoE leads the Joint Activity Scenarios and Modelling, which aims at establishing an SCCER-wide modelling environment and to join forces across all SCCERs on future long-term energy scenario analysis.
WEDNESDAY 13TH DECEMBER 2017 (9:00-18:00)

WORKSHOP ON MODELLING THE WATER ENERGY NEXUS

Venue: Main Building HG, Room D 7.1 and D 1.2, ETH Zürich, Zurich, Switzerland

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8:30- 9:00 REGISTRATION
9:00- 9:15 WELCOME
Tom Kober, Paul Scherrer Institute, Switzerland

9:15- 10:45 SESSION 1 (Main Building HG, Room D 7.1)
Paolo Burlando, Institute of Environmental Engineering, ETH Zürich

Prospects for Hydropower in Ethiopia: An Energy-Water Nexus Analysis
Bob van der Zwaan, ECN, Netherlands

Developing a multi-scale approach for the quantification and analysis of the trade-offs in the nexus. A nexus stress test for investments in water, energy and food sectors
Monica Alejandra Altamirano, Deltares, Netherlands

10:45-11:15 COFFEE BREAK

11:15-12:45 SESSION 2 (Main Building HG, Room D 7.1)
The Importance of the Water-Energy Nexus for Emerging Countries
Gary Goldstein, DecisionWare, LLC - on behalf of the World Bank, United States

Data Challenges for Analysing the Water-Energy Nexus
Morten Andreas Dahl Larsen, Technical University of Denmark, Denmark

Energy mix data for global economic analysis of water scarcity impacts
Victor Nechifor, University College London, United Kingdom

12:45-14:00 LUNCH

14:00-16:00 SESSION 3 (Main Building HG, Room D 1.2)
Climate, Land, Energy and Water Nexus (CLEWs) – Integrated resource assessment at different scales
Vignesh Sridharan, The Royal Institute of Technology (KTH), Sweden

Impact of future energy policy on water resources in Kazakhstan
Marat Karatayev, Al-Farabi Kazakh National University, Kazakhstan

The new water module of the JRC-EU-TIMES model
Rocco De Miglio, E4SMA Ltd., Italy and Wouter Nijs, EU JRC, Netherlands

Impact of the Spanish electricity system transition on water resources using energy modelling and life cycle assessment
Helena Cabal, CIEMAT, Spain

16:00-16:30 COFFEE BREAK

16:30-18:00 SESSION 4 (Main Building HG, Room D 1.2)
Assessing water needs for power production in Iberian Peninsula at watershed level
Sofia Simões, CENSE DCEA-FCT/Universidade NOVA, Portugal

The use of TIMES to model city water and energy systems – Insights from the application to Evora and Almada municipalities
Luis Dias, CENSE DCEA-FCT/Universidade NOVA, Portugal

Energy-Water-Land Nexus in Germany
Vera Sehn, University of Stuttgart, Germany