

# World Engineers' Convention 2011

## Program September 4<sup>th</sup> – 9<sup>th</sup> 2011

	Sunday 4 <sup>th</sup>	Monday 5 <sup>th</sup>	Tuesday 6 <sup>th</sup>			Wednesday 7 <sup>th</sup>			Thursday 8 <sup>th</sup>	Friday 9 <sup>th</sup>
TOPICS		Global Challenges	Education in Engineering	Mobility and Transportation	Buildings and Megacities	Power Plants and Networks	Renewable Energy and Storage	Rational End Use		
09:00	Meeting of the committees WFEO	Opening Ceremony	Plenary Sessions			Plenary Sessions			Committee-Meetings Assemblies WFEO FEANI EYE	Committee-Meetings Assemblies WFEO FEANI
10:00			Round Tables with Keynote Speakers			Round Tables with Keynote Speakers				
11:00		Round Table Energy and Environment Ministers	Parallel Sessions			Parallel Sessions				
12:00			Global Challenges			Fukushima – Facts and Consequences				
13:00	Registration	Global Challenges	Parallel Sessions			Closing Ceremony and Declaration			Apero FEANI	Gala Dinner WFEO, FEANI
14:00			Rolex Learning Center EPFL Night			Convention Dinner				
15:00	Welcome Cocktail	Concert / Chorus CERN								
16:00										
17:00										
18:00										
19:00										

### Social Programs

	Social Program Monday
09:00 – 17:00	Young Engineers Lounge
10:00 – 17:00	Visit of Gruyères / Chocolats Cailliers
19:30 – 21:30	Concert Cathedral St. Pierre, Geneva
19:00 – 24:00	Get together Young Engineers
20:00 – 24:00	WFEO-YE/FL-Event

	Social Program Tuesday
09:00 – 17:00	Young Engineers Lounge
10:00 – 17:00	Chamonix / Aiguille du Midi
18:00 – 22:00	Rolex Learning Center / EPFL-Night

	Social Program Wednesday
09:00 – 17:00	Castel of Chillon-Montreux-Lausanne
19:00 – 24:00	Convention Dinner on the lake of Geneva
19:00 – 24:00	Get together Young Engineers
20:00 – 24:00	WFEO-YE/FL-Event

## Sunday, September 4<sup>th</sup> 2011

### Specials for the Day

14:00 – 19:00 Registration

### Convention

18:00 – 21:00 Welcome Cocktail

19:00 – 19:15 Welcome Representative Republic Geneva (Renaud Gautier, Member of the parliament of the Canton of Geneva)

### Social Program

14:00 – 16:00 Tour Geneva City

20:00 – 24:00 Reception / Dinner Kuwait Woman Engineers

# Monday, September 5<sup>th</sup> 2011

## Opening Ceremony

09:30 – 11:30	Moderation: Philippe Mottaz, World Radio Switzerland
	Ruedi Noser, President of the Association World Engineers' Convention 2011, CH
	Doris Leuthard, Federal Councillor of Switzerland, Head of the Federal Dept. of the Environment, Transport, Energy and Communications, CH
	Gretchen Kalonji, Assistant Director-General for Natural Sciences, UNESCO, AT
	Marc Muller, Member of the Government of the Republique of Geneva, CH
	Pierre Maudet, Representant of the City of Geneva, CH
	Maria J. Prieto Laffargue, President of the WFEO, ES
	Maria van der Hoeven, Director of the International Energy Agency Paris, NL
	Nicolas Henchoz, EPFL-ECAL, CH: «Exhibition Sunny Memories: a new relationship between design and engineering»

## Round Table Energy and Environment Ministers

13:30 – 15:30	Doris Leuthard, Federal Councillor of Switzerland, Head of the Federal Dept. of the Environment, Transport, Energy and Communications, CH
	Günther Oettinger, European Commissioner for Energy (request running)
	Amina Benkhadra, Minister of Energy, Mines, Water and Environment, MA (request running)
	Tienan Liu, Viceminister, Head of the National Energy Administration, China (request running)
	Elizabeth Dipuo Peters, Minister of Energy of the Republic of South Africa (request running)
	Edison Lobão, Minister of Energy of Brazil (request running)

## Global Challenges

16:00 – 17:30	Dr. Matthias Bichsel, Member of the Executive Committee of Royal Dutch Shell plc, DE: «Job satisfaction guaranteed»
	Prof. Jean-Pascal van Ypersele de Strihon, Vice-chair of IPCC (Intergovernmental Panel on Climate Change), BE: «The climate change challenge: Which scope for action?»
	André Borschberg, CEO, Co-founder and pilot of Solar Impulse, CH: «Solar Impulse, flying around the world with no fuel and no pollution. From project to the first European solar flights.»

# Tuesday, September 6<sup>th</sup> 2011

## Education in Engineering

09:00 – 11:00 Keynote Speakers	Dipl. Ing. Mauro Pellegrini, President of Swiss Engineering, CH: «Introduction»
	Dr. Ing. Willi Fuchs, Executive Director of the Association of German Engineers (VDI), DE: «The global responsibility of engineers in the 21. century – Challenges for the engineering education»
	Prof. Torsten Fransson, Royal Institute of Technology, SE: «Boosting worldwide collaborations in education using e-learning platforms»
	Prof. Hiroshi Komiya, Former President of the University of Tokyo, JP: «Information structuring: a challenge for both education and research»
	Julien Roitman, President of the National Council of Engineers and Scientists of France, FR: «Grow the right kind of engineers to face the new challenges»
	Kathy J. Caldwell, P.E., F.ASCE, ASCE President 2010-2011, US: «Vision 2025 – Engineering leadership for sustainability»

## Mobility and Transportation

09:00 – 11:00 Keynote Speakers	Prof. Lino Guzzella, Professor for Thermotronics ETH-Zurich, CH: «Introduction»
	Prof. Chris Edwards, Professor Stanford University, US: «Green mobility – Taking the long view»
	Dr. Markus Montigel, CEO of Systransis Ltd, CH: «Higher capacity, better punctuality and lower energy consumption in railway networks – Thanks to smart IT behind the scene»
	Yohan Allouche, Airbus, Environment & Alternative Fuels, FR: «Alternative fuels in Airbus»

## Buildings and Megacities

09:00 – 11:00 Keynote Speakers	Prof. Daniel Kündig, President of the Swiss Society of Engineers and Architects SIA, CH: «Introduction»
	Adrian Altenburger, Amstein + Walthert AG, President of the Energy Commission SIA, CH: «The LowEx-Transformation Challenge»
	Prof. Dr. Dr. E.h. Werner Sobek, Illinois Institute of Technology Chicago and University of Stuttgart, DE: «Sustainable building techniques»
	Dr. Johannes Milde, CEO Siemens Schweiz AG, Building Technologies Division, CH: «The future of building technologies»
	Prof. Dr. Qizhi Mao, Tsinghua University, IEAS Consultant, CN: «The challenge of megacities in China»

## Round Tables with Keynote Speakers

11:30 – 12:30	Education in Engineering, Mobility and Transportation, Buildings and Megacities
---------------	---

## Parallel Sessions and Poster Session

14:00 – 18:00	Parallel Sessions about all topics (details see backside)
14:00 – 18:00	Presentations Project Young Engineers
13:00 – 16:45	Poster Session: Education in Engineering, Mobility and Transportation, Buildings and Megacities (break 14:00 – 15:45)

## Special Sessions Tuesday, September 6<sup>th</sup>

### Special Sessions

14:00 – 18:00	Addressing infrastructure in a changing climate
	Presentations Project Young Engineers
	America's view on energy challenges
	China's view on energy challenges
	Engineering for international development

## Wednesday, September 7<sup>th</sup> 2011

### Power Plants and Networks

09:00 – 11:00 Keynote Speakers	Gian-Luca Bona, CEO of Empa, Switzerland, CH: «Introduction»
	Prof. Dr.-Ing. Anke Rita Kaysser-Pyzalla, Helmholtz-Zentrum, Berlin, DE: «Materials for energy systems»
	Anne Lauvergeon, Ex-CEO of AREVA, FR: «Future of nuclear energy»
	Prof. Koichi Yamada, Senior Advisor to the President office at the University of Tokyo, JP: «Perspectives for decentralized power generation with fuel cells»
	Ph. D. XU Shisen, President China Huaneng Group Clean Energy Research Institute, CN: «Clean coal power generation and/or utilization»

### Renewable Energy and Storage

09:00 – 11:00 Keynote Speakers	Prof. Alexander Wokaun, Paul Scherrer Institut, CH: «Introduction»
	Christoph W. Frei, Secretary General, World Energy Council London, CH: «Transitioning towards a sustainable energy future»
	Prof. Michael Grätzel, Ecole Polytechnique Fédérale de Lausanne (EPFL), CH: «The future of the direct electricity or hydrogen production from solar energy»
	Dr. Peter Walther, Senior Vice President, BASF, CH: «New generation of batteries for mobility and stationary application»
	Dr. Thiemo Gropp, Direktor Desertec Foundation, DE: «The project Desertec»
Willy R. Gehrler, Senior Consultant Siemens Schweiz AG, Chairman Electrosuisse, CH: «Geothermal energy – The solution for a worldwide sustainable energy supply?»	

### Rational End Use

09:00 – 11:00 Keynote Speakers	Prof. Daniel Favrat, Ecole Polytechnique Fédérale de Lausanne (EPFL), Vice-chair of WFEO energy committee, CH: «Introduction»
	Hervé Suty, Head of research centres of Veolia Environment, FR: «Energy and water: Key challenges for the future»
	Jacques Bourgon, Holcim Group Support Ltd, CH: «The major energy and environmental challenges faced by the cement industry»
	Jefferson W. Tester, Croll Professor of Sustainable Energy Systems, Cornell University, US: «Meeting distributed electricity and heating and cooling loads using hybridized biomass and low enthalpy geothermal cogenerations systems»
	Ir Dr. Chan Fuk-Cheung, Senior Vice President, The Hong Kong Institution of Engineers, CN: «Optimize energy utilization in a modern world»

### Round Tables

9:00 – 11:00	Round Table Kuwait Society of Engineers
11:30 – 12:30	Round Table with Keynotes: Power plants and Networks, Renewable Energy and Storage, Rational End Use

### Parallel Sessions and Poster Session

13:30 – 16:00	Parallel Sessions about all topics, excluding Mobility and Transportation (details see backside)
13:00 – 17:00	Poster Session: Global Challenges, Power Plants and Networks, Renewable Energy and Storage, Rational End Use (break 14:00 – 16:00)

### The Future – Closing Ceremony

17:00 – 18:30	Moderation: Nicolas Henchoz, former Journalist at Television Suisse Romande, Director of EPFL-ECAL Lab
	Maria J. Prieto Laffargue, President of WFEO, ES: «Summary of WEC 2011»
	Eng. Adel M. M. J. Al-Kharafi, President elect of WFEO, KW: «The priority of WFEO in the next two years»
	Ruedi Noser (WEC 2011) / Jorge Spitalnik (WFEO) / Zainab S. Lari (WFEO-YE/FL): «Declaration of Geneva»
	Torben Thyregod Jensen, The VELUX Group: Award ceremony Young Engineers
	Representative of Japan: «WEC 2015 in Kyoto»
	Announcement of Executive Council and World Engineers' Forum 2012 – Slovenia
	Goodbye

# Special Sessions Wednesday Sept 7<sup>th</sup>

## Special Session Fukushima: Facts and Consequences

13:30 – 15:30	Dr. Okada Sohei, Executive Director Japan Atomic Energy Agency (JAEA), JP
	Prof. Hideki Nariai, Former President Japan Nuclear Energy Safety Organization (JNES), JP
	Leonard Bond, Pacific Northwest National Laboratory, Richland, Wa, USA
	François Billon, Technical Director ENET Technologies, FR
	Georges Servières, Senior Nuclear Advisor, EDF, FR
	Klaus Toepfer, Former German Federal Minister for the Environment, Nature Conservation and Nuclear Safety, DE (request running)

## Special Session

09:00 – 17:00	ENAAE-IFEES-IEA Educating Engineers for Sustainable Development: the Relavance of Accreditation
---------------	---

# Thursday, September 8<sup>th</sup> 2011

## Specials for the Day

08:00 - 18:00	Registration
---------------	--------------

## WFEO

10:00 - 18:00	General Assembly
---------------	------------------

## FEANI

19:00 - 21:00	Welcome-Apéro
---------------	---------------

## Social Program

tbd	Services Industriels Geneva
tbd	EYE-Party

## Excursions

tbd	Alptransit / Grand Dixence (first day)
tbd	Project ITER Cadarache (first day)
08:00 - 20:00	Visit ETH Zürich
10:00 - 18:00	Visit CERN
10:00 - 18:00	Ecological Buildings 1-4

# Friday, September 9<sup>th</sup> 2011

## WFEO

09:00 - 12:00	General Assembly
19:00 - 23:00	Gala Dinner with FEANI

## FEANI

09:30 - 13:00	General Assembly
19:00 - 23:00	Gala Dinner with WFEO

## Excursions

08:00 - 18:00	Project ITER Cadarache (second day)
08:00 - 18:00	Alptransit / Grand Dixence (second day)
10:00 - 18:00	Visit CERN
10:00 - 18:00	Ecological Buildings 1-4

# Parallel Sessions Tuesday Sept 6<sup>th</sup>

## Global Challenges

Parallel Sessions  
Tuesday, 6<sup>th</sup>  
14:00 – 18:00

Jean-Claude Keller, CH: «The consequences on our environment of the increase of the rate of atmospheric CO<sub>2</sub>»  
Shalini Sharma, IN: «Energy Security: Renewable Energy Challenges in India»  
Kamel Bennaceur, FR/US: «Engineering Solutions for Sustainability: Materials and Resources – Lessons Learned from the 2009 Lausanne Workshop»  
Francis Luck, FR: «Four strategic priorities to shape tomorrow's energy landscape»  
Arif Malik, OM: «Discounting procedures in large engineering projects»  
C Mariottoni, BR: «The Brazilian energy efficiency programs and the economic aspects»  
Paul Amyotte, CA: «A sustainable energy future is not possible without inherently safer design»  
Emmanuel Onugu, NG: «Engineering challenges in the 21<sup>st</sup> century: The west African perspective»  
Adriana Marcucci, CH: «Implications of global challenges and uncertainties for regional strategies»  
Morgan Thomas, CA: «Frontiers in energy science and engineering: a Canadian perspective»  
Yvette Ramos, CH: «Socio-economic impacts and adaptation to global environment: case of oriental Morocco»  
Janusz Kozinski, CA: «Utilisation of waste wood for bioenergy using supercritical water technology»  
Loira Ferrari, CO: «Transition and permanence between states of poverty in a city»  
Alicia Maza, CO: «Poverty states transition research»

## Education

Parallel Sessions  
Tuesday, 6<sup>th</sup>  
14:00 – 18:00

NilanjanaRao, IN: «Engineering Education To Attract And Retain Women To Engineering Careers In India»  
Nadia Ghazzali, CA: «Why are women less interested in Science and Engineering?»  
Roberto Trejos, CR: «International Cooperation in the Promotion of Engineering Accreditation in Central America»  
Lluís Jofre, ES: «Promoting engineering studies in Catalonia. Results from two years of the EnginyCAT program»  
Alex Nogueira, BR: «Biodiesel didactic plant and industrial simulation»  
Jochen Ganz, CH: «Innovation yes please! But without change!»  
Anderson Liew, AU: «Paths to Progress – Space and the Southern Hemisphere»  
Ian Smith, CH: «Improving Computing Education for Engineers»  
Victor Gómez Frias, FR: «Research internships in engineering education»  
Jesus Franklin Andrade Romero, BR: «Unified Engineering: A practical Contact of Students with Engineering Methods and Interdisciplinary Problems»  
Bao-lan Xiao, CN: «Practice and thinking on the perfect design of philosophy courses in the process of training excellent engineers»  
Elena Trotskovsky, IL: «Classification of errors, misunderstandings and misconceptions of students according to engineering thinking categorization»  
Mark Capellaro, DE: «Education, Engineers and Wind Energy»

## Mobility and Transport

Parallel Sessions  
Tuesday, 6<sup>th</sup>  
14:00 – 18:00

Kefei Yan, CN: «Thoughts on Planning and Construction of «Smart» Metropolitan Transportation System»  
Vikram Garaniya, AU: «Chemical characterization of heavy fuel oil for combustion modeling»  
Lidia Zakowska, PL: «The effect of mobility and transport habits of senior citizens in Europe on life quality and energy consumption»  
Qinghuai Liang, CN: «Planning of China's Urban Rail Transit during Rapid Urbanization»  
Roberto Capata, IT: «The turbo-hybrid vehicle concept: entering the prototypal phase?»  
François Lacôte, FR: «Le TGV, un succès commercial, un projet d'ingénieur»  
Henning Schwarz, FR: «Energy metering and billing for energy efficient electric train operation»  
Chhavi Dhingra, IN: «Benchmarking public transport services in Indian cities»  
Mauricio Moreira, BR: «The urban mobility as a requisition for the improvement of life quality in the cities and reduction of energy consumption»  
Marc Uffer, CH: «Terrestrial and airborne based sensor technology – essentials for civil engineers»  
Olivier Paul-Dubois-Taine, FR: «What future outlook of the automobile mobility system?»  
Magnus Lincoln Quarshie, GH: «Rationalising energy use: the urban transport sector view»  
Alfred Rufer, CH: «Driving and filling personal vehicles: The questions of energy- and power-density»

## Buildings and Megacities

Parallel Sessions  
Tuesday, 6<sup>th</sup>  
14:00 – 18:00

Yoshiharu Amano, JP: «Comparative evaluation of residential energy systems to reduce CO<sub>2</sub> emissions»  
Céline Weber, CH: «Optimal building energy efficiency for the new headquarters of the IUCN (International Union for Conservation of Nature)»  
Pascal Piguet, CH: «Energy design for the SOVALP urban district in Geneva»  
Magister Ales Kralj, SI: «Gas filled panels as high insulation alternative for 21<sup>st</sup> century building envelopes»  
Arvind Poothia, IN: «Green construction in India: technology & socio political issues»  
Nilanjana Rao, IN: «Environmentally sustainable buildings – a case study from India»  
Guiyou He, CN: «Sustainable projet life-cycle management based on building information modeling»  
Francois Gervaix, CH: «Rapid, rich and reliable photogrammetry on demand (R-Pod)»  
Gilles Desthieux, CH: «Methodological framework and guidelines to support the integration of energy in urban planning in Geneva, Switzerland.»  
Jakob Rager, CH: «From science to application in Geneva: Best Practice example: from the theoretical concept of exergy in a Law on Energy»  
Mark Jennings, UK: «Optimal investment planning for low carbon domestic heating options in London: 2010-2050»  
Jiaqi Zhang, CN: «Analysis of the Relationship between Urban Development and Urban Planning & Construction – A Case Study of Tianjin Binhai New Area»  
Lluís Jofre, ES: «Monitoring and Promoting ICT-based Energy Efficiency in Spain through the E2-ICT Cluster»

## Power Plants and Networks

<b>Parallel Sessions</b> <b>Tuesday, 6<sup>th</sup></b> <b>14:00 – 18:00</b>	Xiangping Chen, UK: «Hybrid electrical storage and power system for household trigeneration application»
	Hans E. Wettstein, CH: «Natural gas fired gas turbine combined cycles for the energy supply within an economy with growing renewable energy sources»
	Yang Xu, CN: «Low-carbon Power Plant Construction in its Whole Life Circle»
	J. M. Burgos Meneses, CO: «Design, validation and implementation of a heuristic that allows to balance assembly lines to maximize efficiency»
	José Ramirez, PE: «Model to optimize the operation of the units of a thermoelectric power station «ILO I»»
	Dexiang Jia, CN: «Research on large-scale solar power exploitation and long distance transmission planning method»
	Yongfeng Hu, CN: «Development and application of denitrification technology in China»
	Gilles David, FR: «Waste heat recovery projects through Organic Rankine Cycle technology – Examples of biogas engines and steel mills applications»
	Hervé Mignon, FR: «Generation adequacy report: a mission of RTE»
	Rosaline Ganendra, MY: «Blueprint for Sustainable World-Class Electricity Supply For Iskandar Malaysia Regional Development»
	Jean-Maxime Saugrain, FR: «Long-length, high-voltage superconducting power cables»
Hassan Harajli, LB: «Integrating wind energy into the Lebanese electricity system»	

## Renewable Energies and Storage

<b>Parallel Sessions</b> <b>Tuesday, 6<sup>th</sup></b> <b>14:00 – 18:00</b>	James Akanmu, NG: «Sustainable Clean Energy Production from Food Waste and Cow Dung»
	Bangjie Yang, CN: «The Development Strategy of Bio-mass Energy in China: Technology Development, Industrialization Mode and Policy»
	Emerson Henrique de Sousa Bezerra, BR: «Ecosustainable bases for the urban and rural development: energetic potential from solid waste»
	Cassiano Agapito, BR: «Brazilian competitiveness in world's biomass supply»
	Binayak Bhandari, KR: «Study of process parameters of nano particle deposition system (NPDS) by computational fluid dynamics for the fabrication of dye-sensitized solar cells (DSSC)»
	Matteo Morandin, CH: «Thermo-electrical energy storage: a new type of large scale energy storage based on thermodynamic cycles»
	Christian Wiecek, CH: «Solar reactor prototype testing for solar steam-gasification of carbonaceous feedstocks to syngas»
	Giw Zanganeh, CH: «High temperature thermal storage for concentrating solar power»
	Bin Wang, CN: «Optimization design of a new solar-electric dish stirling system»
	Sophia Haussener, CH: «Tomography-based heat and mass transport characterization of complex porous materials and their application in solar fuel processing»
	Nils Breidenbach, DE: «Assessment and development of molten salt storage and heat transfer fluids for solar thermal power plants and industrial processes»
	Jorge Lopez Moreno, ES/CH: «Thermo-economic optimization of a thermal tower-trough combination solar power plant»

## Rational End Use

<b>Parallel Sessions</b> <b>Tuesday, 6<sup>th</sup></b> <b>14:00 – 18:00</b>	Marc Rosen, CA: «Efficiency analysis of the global industrial sector using energy and exergy»
	Aurelie Vuillermoz, FR: «Systematic methodology for energy efficiency in industry: Application in a papermaking process»
	Don Olsen, CH: «Practical Heat Integration Analysis in the Process Industries»
	Nicolas Descoins, CH: «Energy efficiency in waste water treatment plants»
	Peter Spiteri, MT: «Investigation of Electric Motors Energy Saving Potential in Industrial Applications»
	Sergio Lucke, BR: «Potential and reality of MSW-based power plants in Brazil»
	Jin Hu, CH: «CO <sub>2</sub> gas hydrate for cold storage»
	Barbaro Medina, CU: «Numerical simulations of clays flash calcinations in tubular furnace»
	Karen Scrivener, CH: «Calcined Clays, An Alternative To Obtain Supplementary Cementing Material In Developing Countries»
	Antonio Bula, CO: «Energetic, environmental and economical optimization of coal-natural gas co-combustion process in a cement rotary kiln based on CFD modeling»
	Andrea Barbieri, CH: «Generating electrical energy using waste gas exhaust heat from high efficient cement kiln systems»
	Kenta Matsushima, JP: «Study on a zero emission model for «local production for local consumption» of energy in a cold district with heavy snow – a case of Tokachi area in Hokkaido»
	Seok Hun Kang, KR: «Design and experimental study of organic Rankine cycle (ORC)...»

# Parallel Sessions Wednesday Sept 7<sup>th</sup>

## Global Challenges

Parallel Sessions Wednesday, 7th 14:00 – 16:00	Richard Phillips, CH: «The global energy challenges for Switzerland»
	Doug Hargreaves, AU: «Population and Energy Policies in Australia»
	Magister Rita Paleta, PT: «RAES Project: Towards sustainability in developing countries»
	Pascal Piguet, CH: «Study of the thermal sea power potential of the Provence-Alpes-Côte d'Azur Region, France»
	Kevin Wall, ZA: «WFEO Guidebook and compendium initiative on Engineering Capacity Building»
	Koichi Yamada, JP: «Future prospects of photovoltaic systems for mitigating global warming»

## Education

Parallel Sessions Wednesday, 7th 14:00 – 16:00	François Xavier Martin, FR: «In what country will scientists and engineers need to face the global energy challenge study and get their degrees?»
	Ozer Arnas, US: «Teaching energy conversion in the context of geopolitical issues»
	Tom Siller, US: «Engineering on the boundaries»
	Eva Schuepbach, CH: «Research and education in sustainability at the University of Applied Science (UAS) in Berne, Switzerland – a competitive advantage for future engineers»
	Teresa Sanchez, FR: «Training engineers to face global challenges: the role of accreditation agencies»
Anne-Marie Jolly, FR: ««Smart building» a new concept of engineering education curriculum»	

## Buildings and Megacities

Parallel Sessions Wednesday, 7th 14:00 – 16:00	Edmond Colloot, FR: «Cerib's tools for energy performance buildings»
	Luca Baldini, CH: «Improving the way we improve buildings»
	Samuel Henchoz, CH: «Modeling of a Multi-service CO <sub>2</sub> Based District Energy System»
	Zhanguo Mao, CN: «Prefabricated Building Energy-Saving Reform Research»
	Pascal Piguet, CH: «Seasonal Storage: Using the Summer Sun to Warm a Neighborhood in Winter»
	Daniel Gstoehl, LI: «Fluidized glass façade elements for an active energy transmission control»
Claudia Toro, IT: «A general procedure for the optimal integration of buildings and their energy plants»	

## Power Plants and Networks

Parallel Sessions Wednesday, 7th 14:00 – 16:00	Cynthia Colmellere, FR: «Towards enhanced sustainability of nuclear power plants: social, organizational and technological challenges»
	Jackson Marcinichen, CH: «Efficiency improvements of a thermal power plant by making use of the waste heat of large datacenters using two-phase on-chip cooling.»
	Bao Jingling, CN: «To establish Circular Economy Production Mode in Coastal Area Thermal Power Plant – A Case Study of one Proposed Power Plant in Tianjin»
	Kwaku Kunadu Jnr, GH: «Power Generation, The Volta River Authority Experience (V.R.A)»
	Wang Jingrui, CN: «Preliminary Discussion On The Micro Grid Technique»
	Jianling Deng, CN: «A New Technology of Recycling Condensation Heat of Exhaust from Turbine for Cogenerating Heat and Electricity»

## Renewable Energies and Storage

Parallel Sessions Wednesday, 7th 14:00 – 16:00	Gilles Desthieux, CH: «GIS tool to estimate the solar radiation on territory and building roofs in the Canton of Geneva»
	Kumiko Miyazaki, JP: «Technological diffusion of renewable energy in Japan – the case of residential photovoltaic»
	Zong Hua, CN: «Discussion About Electricity Generation Of Thin Film Amorphous Silicon Solar Cell»
	Zheng Chong-Wei, CN: «Wave Energy Resources Reevaluation In The Global Ocean During The Last 45 Years»
	Young Min Kim, KR: «Potential and Evolution of Compressed Air Energy Storage for Future Power Networks»
	Aline Choulot, CH: «Small hydropower diversity & turbines especially designed for the site to equip: a key for the future of this renewable energy»
	Asfaw Beyene, US: «The impact of morphing wind turbine blade to delay stall»
	Chang Huiying, CN: «Research On Evaluation Of Wind Turbine Drive Train System»
	Gabriel Laryea, GH: «Measurements and prediction of the wind energy potential at selected locations in Ghana»
	Dai Haitao, CN: «Aerodynamic Design And Optimization Of Horizontal Axis Wind Turbine Blades»
	Ladislav Rybach, CH: «Global geothermal development growth rates – in relation to other renewables»
Phil Hemmingway, IE: «Geothermal energy in small countries – laying the foundations for innovative development»	

## Rational End Use

Parallel Sessions Wednesday, 7th 14:00 – 16:00	Xin Lin, JP: «LED Lighting Equipment with Optical Wireless Communication Functions»
	Zhuohua Zhang, CN: «China should establish heat metering system as soon as possible Orient residential community of Changzhi city as an empirical study»
	Heidi Echeverri Florez, CO: «Application of TOC in the integrated waste management»
	Magister Saliha Bouzenada, DZ: «Liquid Desiccant Evaporative Cooling System»
	Ivan Wyssen, CH: «An improved control strategy for air/water heat pump systems»
	Anne Favatier, CH: «How to drive customer involvement»
	Heidi Echeverri, CO: «Cleaner production in the development and marketing of freeze-dried aloe vera gel»