



First Pan-Arab Energy Trade Conference

Day Two • Thursday, November 7, 2019

Session 1 | Key Principles for Regional Electricity Trade Institutions and Regulations

There is no unique regional power market design, institutions, or processes, and no hard-and-fast rules about issues such as ownership, financing, and pricing that will ensure the success of regional integration efforts. The approach to regional market development must be tailor-made to suit the circumstances. Particularly essential is addressing the need to establish the required regional institutions as well as a common regulatory framework at the regional level.

This session will present the role of a robust regulatory framework for dealing with the costs and revenues associated with international trade as well as incentive structure at the national level necessary for conducting international trade. The role of regional as well as national institutions with a clear mandate to engage and pursue commercial trade will also be discussed.

SIEPAC Experience

H. E. Eng. Luis Alfonso Chang, Minister of Energy and Mines, Guatemala

The Envisaged Institutional and Regulatory Framework of the PAEM

Dr. Dalal Helmi, Head PAEM Steering Committee

The US and EU Experience

Dr. José Ignacio Pérez Arriaga, Visiting Professor, MIT

Impact of Scaling Up Renewables on Regional Trade

Dr. Samir AlKotob, Arab Fund for Economic and Social Development

Mr. Bruno Cova, Systems Planning Director, CESI

Moderator: Mr. Erik Fernstrom, Energy Practice Manager, World Bank Group

Panelists



Mr. Erik Fernstrom,
Energy Practice Manager, World
Bank Group

Mr. Erik Fernstrom is the Practice Manager for the World Bank's Middle East and North Africa Energy department. He oversees a regional portfolio of USD 2.5 Billion of lending projects under implementation.

His background spans more than 20 years in the Energy Industry, starting with engineering and management positions in Asea Brown Boveri (ABB) working on a broad range of projects in Africa, Middle East, South Asia and East Asia.

After joining the World Bank in 2003 he spent 7 years based in Africa, leading the World Bank energy lending with special emphasis on Sector Reform, Access to Electricity and development of IPPs.



H. E. Eng. Luis Alfonso Chang,
Minister of Energy and Mines,
Guatemala

The highest authority of the Ministry of Energy and Mines is an Electrical Engineer graduated in the Faculty of Engineering of the University of San Carlos of Guatemala (USAC) in the year 2008.

He has been Minister of Energy and Mines since March 2016. He has previously served as Vice-Minister of the Energy Area from January to March 2016 and as Chief of the Mining Energy Planning Unit from 2014 to 2016.

The top representative of the portfolio has a Diploma in Efficiency Energetics in Thermal Systems by the Galileo University in 2011, a pending Master in Business Administration diploma by the International Higher School, endorsed by York University, and a Diploma in Directorate of Hydroelectric Projects by the Colegio de Ingenieros de Guatemala endorsed by the USAC in 2013.

He has broad knowledge of the General Electricity Law and its regulation, as well as the Commercial and Operational Coordination Rules of the Wholesale Market, having served as a Professional Electrician Market Analyst From 2012 to 2014.

Luis Chang has Coordinated the Efficiency Unit Energy of the National Electric Energy Commission (CNEE) from 2009 to 2012. He has also implemented 9 energy efficiency pilot projects, trainings, workshops and the analysis of the regulations for the proposal of the National Energy Efficiency Law.

He served as Head of the Quality Department of Product and Service from 2006 to 2009, evaluating and controlling the quality of energy provided by the country's distributors and transporters based on the technical standards of the sector (NTSD, NTCSTS, NTDOID and NTDOST).



Dr. Dalal Helmi,
Head PAEM Steering
Committee

Dr. Dalal has graduated from Faculty of Engineering, Ain-Shams University, Cairo, Egypt, in 1993, and got her M.Sc. and Ph.D. degrees in Electrical Engineering in the field of Power System Protection from the same university in 1997, 2001 respectively.

Currently she is the Sector Head of Electricity Market and Cross-Border Interconnection in the Egyptian Electricity Holding Company. Also, she is the Head of Steering Committee for Arab Interconnection and the Egyptian side Project Manager for JCEE; Joint committee between Egypt and Germany for Renewable Energy, Energy Efficiency and Environmental Protection during Oct. 2014 till Dec. 2018

Dr. Dalal HELMI has successfully played many roles in her previous post as a General Manager for Grid and Energy Efficiency in the Egyptian Electricity Transmission Company; EETC, related to Power System Operational Studies, WAMS Studies, Substation Component' Specifications according to IEC requirement and certification process according to National and International Standards. Through being involved in BOO and IPP RE Projects and being expert in RE Integration issues, she played a key role in the 1st Wind Integration Grid Code that sets the technical requirements to connect Wind Farms to EETC network.

Dr. Dalal participates in local and international conferences with papers, workshops, session chair and co-chair and as Invited Lecturer. She is the author and co-author of more than 75 technical papers published in local

and international proceedings. She Supervise Master and Ph. D degrees with Cairo University, Ain Shams University, Benha University, Al-Azhar University, and joint research with Texas University She has been awarded many international Certificates of Appreciation, Best Paper Award and Best Applied Research Award in Worldwide Conferences. Also, she is a member of the Egyptian National Committees of WEC, CIRED, CIGRE and IEC. She is also a member of the Egyptian Electrical Engineers Society and Member of the Egyptian Engineers Syndicate.



Dr. José Ignacio Pérez Arriaga,
MIT Energy Initiative and Center for
Energy and Environmental Policy
Research, USA

Dr. José Ignacio holds MS and PhD in Electrical Engineering from MIT, and Electrical Engineer from Comillas University in Madrid, Spain. Since 2008 visiting professor at the Center for Energy and Environmental Policy Research (MIT, Boston, USA).

Professor and Director of the BP Chair on Sustainable Development at Comillas University, Madrid, Spain, and founder and director for 11 years of its Institute for Research in Technology (IIT). Commissioner at the Spanish Electricity Regulatory Commission (1995-2000). Independent Member of the Single Electricity Market Committee of Ireland (2007-2012). Life member of the Spanish Royal Academy of Engineering and Fellow and Life Member of IEEE. Member of the Board of Appeal of the Agency for the Coordination of Energy Regulators (ACER) in the EU.

Director of Training at the Florence School of Regulation in the European University Institute (Florence, Italy). Review editor of the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Consultant and lecturer in more than 30 countries. Author and editor of several books, more than 200 papers, principal investigator in more than 90 projects and supervisor of 35 doctoral theses and more than 100 master theses. His current areas of research are future trends in energy regulation, regulation and planning of electricity access, regional markets and operation and planning of power systems with a strong presence of renewable generation and other decentralized resources.



Dr. Samir AlKotob,
Arab Fund for Economic and Social
Development

Dr. Samir AlKotob is an engineering advisor at the Arab Fund for Economic and Social Development. He joined the Fund in 1999 and he works on appraisal and loan management of energy projects, primarily for electric power generation plants, power transmission, and renewable energy projects.

He participated in numerous studies on the Arab electric power interconnections. From 1978 to 1999, he held several research and management posts at the Kuwait Institute for Scientific Research where he led research projects in power, control and industrial systems.

He graduated from the American University of Beirut in Electrical Engineering in 1971. He earned the M.E. and Ph.D. degrees in Electrical Engineering from Rensselaer Polytechnic Institute in Troy, New York in 1973 and 1976 respectively.



Mr. Bruno Cova,
Systems Planning Director, CESI

Bruno Cova has a MSc in Electrical Engineering. Since 1986 he has been working in Milan for CESI, a consultancy company focused on electrical system design, testing and certification.

At present, he's the director of Systems Planning Unit. He has extensive experience of transmission planning and feasibility studies relevant to power system interconnections and generation from renewable sources, notably in Europe, the southern and eastern Mediterranean region and some countries of Latin America and sub-Saharan Africa.

Bruno Cova has been engaged for years in international associations such as CIGRE and WEC (World Energy Council). At present, he's CIGRE distinguished member and the Italian officer at CIGRE Study Committee C1 "Power System Development and Economics."
