President’s Message

Having started to write my Presidential Message, I received the news of another terrorist attack in the center of Ankara with several dozen innocent people waiting for a bus being killed and several dozen injured. An attack not of a much different nature than the strikes in recent months in Paris, Istanbul, Beirut, Bamako, Baghdad and Jakarta. I would like to convey my deepest condolences to the victims of the terror tragedies worldwide, and full solidarity to the families of the victims.

I do see a potential role for IAEE as a policy-neutral organization to make this world a better place. Let me explain. We make use of economic theory and principles to enhance the understanding of all aspects of energy production, transport and use. But economic alternatives often do not get implemented because of political reasons. In other words, our expectation from energy policy to be driven by energy economics is often not realized because of political interference. I therefore see the depolitization of energy as an essential element for world peace and welfare. Hence I would like to urge you to particularly question and elaborate on energy policies that are not in line with energy economics. We need to highlight these issues, discuss the problems with experts from all related disciplines to bring the depolitization of energy ahead. Energy sources, which have often been a trigger of international conflict, can serve as a means for international peace if energy policy decisions are depoliticized and based on economic grounds.

With this motivation I have been working to make IAEE grow in countries and regions with significant energy reserves where we don’t have a member base. My trips to Pakistan, Egypt and Azerbaijan last year were part of this mission. Of these, Azerbaijan has materialized as a venue for the First IAEE Eurasian Conference to be held in Baku on August 28-31 this year. I would like to assure you that Baku is one of the safest places to which you could go and invite you to attend this new regional conference on the shore of the Caspian Sea with vast oil & gas reserves.

Before the Baku conference, we have Bergen expecting you for the 39th IAEE International Conference on June 19-22. I have the pleasure to announce that 723 abstracts were received for our Bergen conference, of which 65% have been accepted. Right before the Bergen conference, on 16-18 June, there will be an IAEE Summer School in Bergen on the topic of Financial Management of Energy Price Risk.

Before the Bergen summer school, we have a summer school on Electricity Markets and Regulation taking place on 25-28 May in Istanbul.

Our first conference this year was the 5th IAEE Asian Conference held on 14-17 February in Perth. With over 182 registered delegates Asia’s energy challenges have been addressed. I would like to thank IAEE Past President and Conference Chair Peter Hartley for a very successful conference organization.
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Finally, I would like to congratulate Christian von Hirschhausen on his appointment as the new Editor-in-Chief of our journal, *Economics of Energy & Environmental Policy*. He will move into this position later this year.

Gurkan Kumbaroğlu
Editor’s Notes

As we noted last quarter the response to our call for articles on the electricity market was very gratifying. We conclude our coverage of that subject in this issue and hope you will enjoy reading it as much as we have putting it together.

Wilko Rohlfs and Reinhard Madlener discuss decision-making when irreversible investments under uncertainty in long-lived assets such as large-scale power generation units are in the focus. Multi-dimensional price uncertainty complicates modeling significantly, e.g., regarding state-dependent (endogenous) discounting and the consideration of technological progress. We show how real options modeling and portfolio optimization can guide decision-makers much better than standard discounted cash flow calculations.

Stanton W. Hadley and Shutang You study the generation and transmission expansion with a high wind power penetration rate in the U.S. Eastern Interconnection system. Results show that modeling more detailed information of wind variation among regions can improve the expansion result significantly.

Frédéric Babonneau, Michael Caramanis and Alain Haurie provide an introduction to ETEM-SG, a robust linear programming approach specifically designed for regional energy systems analysis. This model can be used to provide prospective analyses of the long-term (30 years and more) evolution of multi-energy regional energy systems in their transition to sustainability. The model assumes that this transition will occur in a smart city environment. It takes into consideration the constraints associated with intermittent and volatile renewable energy sources connected at the transmission and distribution networks.

Michael Toman and Govinda Timilsina posit that improved cross-border electricity cooperation and trade among South Asian countries could contribute to reducing many challenges the sector faces. Experience elsewhere indicates that cooperation can start with limited bilateral arrangements and then expand. Larger gains come from markets for cross-border power trade and effective regional institutions for managing transmission.

Silvia Pariente-David notes that the rapid penetration of renewable energy, driven by cost declines and climate policy, is creating stress on power systems, inducing costs not captured in the LCOE concept. The article reviews the different metrics to compare intermittent and dispatchable power generation technologies, and concludes that only a holistic approach can account for all effects of renewable penetration on the power system, therefore appropriately measuring renewable cost and value.

Nadejda Victor and Christopher Nichols discuss the dependence of the U.S. power sector on water makes electricity generation exposed to weather variability in some regions. Changes in the future electricity generation mix will have important implications for water use. We analyze how shale gas availability affects water usage in the U.S. power sector, investigate whether CO2 mitigation policies would improve or magnify electric sector water reliance and what generation technologies will likely to be deployed under water constraints.

Raul Bajo-Buenstado and Marin Garcia study the impact of the policies that promote wind generation on the power market. In particular, they focus on the effect on both the generation capacity mix and electricity market prices and provide some policy recommendations that should be taken into account to allow a smooth transition from a fossil-fuel based grid to a sustainable and reliable one.

Kuang-Chung Hsu and Zhen Zhu look at how the M&A activities in the U.S. oil and gas E&P sector responded to the low oil price environment during the last year. Their results suggest that lower M&A activity was correlated with lower oil price and provide some conjectures regarding motivations for M&A and suggest M&A activity may pick up as the low price environment stabilizes.

Nigar Muradkhanli analyses the role of natural gas in the energy infrastructure of Germany. With the Energiewende, Germany has made a substantial decision to move towards a sustainable energy supply over the long term, determining renewable energy as the main source of the future energy supply. He proposes an answer to the question – how the role of natural gas would be changed in the energy mix of Germany following Energiewende?