

IAEE ENERGY FORUM

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Editor: David L. Williams

PRESIDENT'S MESSAGE

My husband believes that Good times build confidence, Bad times build character, while somebody else said that Good and Bad times build resilience.

It has been two months since I began steering the International Association for Energy Economics as your President for 2020. I am now realizing how far away from the topics of energy and economics the job could be - those topics never even emerge during our Council meetings. My voyage in uncharted territory and open oceans had barely begun that the daily demands and the administration of a BIG SHIP such as IAEE could easily make me forget what I intended to accomplish and what IAEE represents. As I wrote earlier, I am not an academic but more like a student eager to assimilate information and formulate solutions. I am still hoping to introduce initiatives during my term: I am eager to hear from our young professionals and wishing to further engage with the business sector and governments. Those should be the good times and I am confident I can make a small difference.

It has also been two months since the Corona Virus first surfaced and began spreading at an alarming rate. The virus is keeping the world in a state of deep concern and global growth is weakening daily. The simple laws of economics are hard at work with energy demand going down while supplies remaining ample. So far, the \$65 per barrel WTI prices of only two months ago decreased steadily to reach \$45 by the end of February. The remarkable market gains of the last 6 months on the Dow, Nikkei and other markets have been "wiped out and vanished" in the course of the last week of February. Early indications and expectations are that the economic downward trend will continue for some time. The OPEC+ are busy considering reinforcing their quota while the positive announcements by authorities do not seem to stop the pessimistic trends. Those are the bad times that make all of us alter our plans including those of our prestigious organization. I believe we are facing "a call for collective wisdom" to participate in the debate and contribute to the repair.

In order to prevent the corona virus from spreading out of control, many companies in Japan are now encouraging their staff to practice "telework". After my rather very traditional and conservative office became fully supportive of the idea, we soon realized how easy it is to be connected at all times from home using smartphones, tablets and video conferencing software. We also realized how time consuming and tiring it had been to commute to and from the office. I strongly feel that this "near-pandemic" is one of those events which induces paradigm shifts.

People's way of thinking and lifestyles may change forever. With a push not by politicians but by citizens, the global agenda on climate change, free trade, national and energy security may need to be reassessed. The challenge we face calls for a creative



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President's Message (continued)

and innovative spirit of getting together and free exchange of views. IAEE's neutral stance can play an important role in facilitating the debate. We are 4000 members and it must be a force to reconed with. We can contribute to further build up resilience.

Now, on a much lighter note, I would like to report on our past and upcoming conferences. As you will see, IAEE has an impressive series of conferences and symposia taking place in Europe and around the world.

The Asia-Oceania conference took place in early February in Auckland, NZ. It was a true success and I must praise the organizers for an excellent program and their strong commitment. Despite a huge and sudden challenge including the loss of many participants and presenters (mainly from China), they successfully altered some of their plans and delivered an excellent program without any loss of quality. I gathered from participants that they enjoyed ample opportunities of networking and the hospitality of New Zealand. I also enjoyed the nature and a bit of healthy Kiwi lifestyle in the form of huge servings of salad with mixed nuts and grains.

I truly look forward to seeing you all in Paris, France, in June for our annual cornerstone conference. It will be the 43rd International Conference (June 21-24) with the theme of "Energy and Climate, Working Hand in Hand". It will be a unique platform for academics, policy-makers and business leaders to present and discuss the latest economic research on pressing energy issues in an open and nonpartisan setting. This conference, taking place five years after the historic Paris agreement, is very promising and will be enlightening to us all.

IAEE is also planning its 3rd South-east Europe Symposium, to be held in Tirana, Albania in 2020. The symposium topic will be "Delivering Responsible Infrastructure and Energy Solutions".

While I continue to work on organizing the Tokyo international conference for July 2021 (next year), the 5th Eurasian conference will take place in Baku, Azerbaijan on 17-19 September, 2020, and the 38th annual 2020 USAEE/ IAEE North American Conference will take place in Austin, TX, in November.

Please consider joining us!

Yukari Yamashita

IAEE MISSION STATEMENT

The International Association for Energy Economics is an independent, non-profit, global membership organisation for business, government, academic and other professionals concerned with energy and related issues in the international community. We advance the knowledge, understanding and application of economics across all aspects of energy and foster communication amongst energy concerned professionals.

WE FACILITATE:

- Worldwide information flow and exchange of ideas on energy issues
- High quality research
- Development and education of students and energy professionals

WE ACCOMPLISH THIS THROUGH:

- Providing leading edge publications and electronic media
- Organizing international and regional conferences
- Building networks of energy concerned professionals

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IAEE is a 501(c)(6) corporation and neither takes any position on any political issue nor endorses any candidates, parties, or public policy proposals. IAEE officers, staff, and members may not represent that any policy position is supported by the IAEE nor claim to represent the IAEE in advocating any political objective. However, issues involving energy policy inherently involve questions of energy economics. Economic analysis of energy topics provides critical input to energy policy decisions. IAEE encourages its members to consider and explore the policy implications of their work as a means of maximizing the value of their work. IAEE is therefore pleased to offer its members a neutral and wholly non-partisan forum in its conferences and web-sites for its members to analyze such policy implications and to engage in dialogue about them, including advocacy by members of certain policies or positions, provided that such members do so with full respect of IAEE's need to maintain its own strict political neutrality. Any policy endorsed or advocated in any IAEE conference, document, publication, or web-site posting should therefore be understood to be the position of its individual author or authors, and not that of the IAEE nor its members as a group. Authors are requested to include in a speech or writing advocating a policy position a statement that it represents the author's own views and not necessarily those of the IAEE or any other members. Any member who willfully violates IAEE's political neutrality may be censured or removed from membership.

Editor's Notes

Our request for articles on energy transition was most gratifying. We devote not only this issue to the topic, but will do the same for the third quarter issue and perhaps have something left over for the final 2020 *Energy Forum* issue. We thank those who have responded so fully.

Ben Schlesinger describes the design and construction of a 5100 sq. ft., zero net energy, carbon neutral home in Maryland on the shores of the Chesapeake Bay. Though the home includes state of the art, commercially available equipment, it is designed to optimized beauty, comfort, ease of operation, style, and resort living – in other words, not really for carbon or energy conservation.

James Dorian, Dale Simbeck and **Malcolm Shealy** write that the world is in an unprecedented period right now as renewable energy prices have dropped significantly in recent years and the use of wind and solar power has skyrocketed. Prompted by energy diversification strategies and the 2015 Paris Climate Accord, numerous countries are actively seeking ways to slow down or scale back use of fossil fuels, raise energy efficiencies, and promote the electrification of their economies. But where do we go from here? How much further can renewables be pushed? What economic, technical, political, and environmental challenges lie ahead? Are there applications in industry and transportation that are best served by fossil fuels? This article explores some of the key questions and key realities surrounding the global energy transition and the big uncertainties that lie ahead.

Mamdouh Salameh argues that there will neither be a post-oil era nor an imminent energy transition or a peak oil demand throughout the 21st century and far beyond. That is why oil, natural gas and LNG will keep renewables stranded throughout the 21st century.

Michelle Foss and **Katherine Zoellmer** consider the specific case of electric vehicle impact on distribution networks. They review the state of EV technology and production, battery science and supply chains, and policy/regulatory “push”.

Inês Carrilho Nunes and **Margarida Catalão-Lopes** write that the electric grid must transition from a centralized fossil-fuel system to a clean, decentralized and interconnected system. The most common approach for socio-technical system transitions is the multi-level perspective (MLP). They provides insights on how the MLP can facilitate a transition path in electricity distribution systems.

Kakali Mukhopadhyay and **Vishnu Prabhu** report that India's electricity demand is expected to grow abnormally during 2018-2040 and requires enough power system flexibility in order to adapt itself to dynamic and changing conditions. Further, the ambiguous and complex public-private role in the electricity sector raises concerns in regulation of the sector resulting in technical, economic and operational inefficiencies in India. Restructuring of the existing public private framework of the sector is required to meet needs of rising demand, through digital and physical infrastructure

A report from the **Abu Dhabi Symposium** held in early December details the results of that meeting.

ARE YOU INTERESTED IN SUBMITTING AN ARTICLE TO *THE ENERGY FORUM*?

The *IAEE Energy Forum* is our members' open publication for submissions. If you have an article you would like to have considered for publication, please email us at iaee@iaee.org

Here's what to do:

- Submit a non-technical article, short in nature (750 - 3000 words) in MS Word format.
- Submit any tables/charts/graphics, etc. in four color, following the following specifications:
 - o Greyscale/Color: 266ppi
 - o Combination (tone and text): 500ppi-900ppi
 - o Monochrome: 900ppi+
- Provide a short (30 word) capsule/abstract that overviews your article.
- Include your full name and professional Affiliation.
- Authors are to submit a description of their work for use on the Association's social media accounts (Twitter account @IA4EE / @USA4EE and LinkedIn

<https://www.linkedin.com/groups/3047782/> and

<https://www.linkedin.com/company/usae>) Please submit 2-3 sentences summarizing your research to iaee@iaee.org.

We hope to receive your submission!