

IAEE ENERGY FORUM

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Editor: David L. Williams

PRESIDENT'S MESSAGE

Our diversity is our strength.

The 7th IAEE Latin American Conference has just ended. It brought together more than 200 participants in Buenos Aires under the theme "Decarbonization, Efficiency and Affordability: New Energy Markets in Latin America". It showed that Latin American countries have major energy policy challenges to solve. The debates will soon be available on the IAEE website and in the next Energy Forum.

These challenges are not specific to Latin America. Several countries are seeking to decarbonize their economies, make energy use more efficient and provide affordable energy for all. However, the diversity of starting situations must be taken into account.

Yes, the world is changing. Argentina, Latin America, the American continent, Europe, China, India, Africa, at all scales, in all geographies, in all directions, the world of energy is changing. IAEE, which is present in more than 100 countries, is observing this movement. Albert Einstein said, "Life is like riding a bicycle. To keep your balance, you must keep moving." Transformations in the energy sector are necessary.

The diversity of views of IAEE members is our strength. In all these countries where IAEE is present, we observe that energy is always a source of well-being, comfort and development. However it can be abundant or rare for residential or industrial consumers. This availability is due to natural resources but also to historical conditions and sometimes to the economic situation of both. For instance, Norway and the Gulf countries contain considerable hydraulic or fossil resources on their territories that are far greater than the needs of their populations. On the opposite, many EU Member States are forced to import massive amounts of energy, which distorts their trade balance. Alongside these natural resources, Man has also taken two ways: "manufacturing" his own energy by trapping diffuse and poorly concentrated natural resources, such as wind, through his engineering talent, or "enhancing" primary sources through technology, such as nuclear power. Finally, in some other cases, opportunities have mixed both paths by opportunely combining technology and a state of nature: haven't jet turbines offered high-efficiency turbines to gas-fired power generation. Similarly, the decrease in the cost of horizontal drilling has made it possible to develop competitive shale gas in the USA.

We can see that the different countries have to respond to very different situations in order to define their own energy policy. Whatever these configurations, governments have a common objective: to ensure the economic development of their countries by making energy accessible. The effort and methods are different in each case. However,



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President’s message (continued)

there are some successful experiences and others less so. IAAE’s role is precisely to share good practices through our conferences and publications. A new challenge is emerging under the term "energy transition". These words have different meanings in different governments precisely because of different starting situations and objectives. These disparities reinforce the cross-fertilization mission that I wish to strengthen within IAAE.

These contrasting situations and specific ambitions nevertheless make it possible to identify similarities between countries: market opening, intended or imposed depending on the country, does not resolve competitiveness issues. The market is not enough to create the utilities of the future. The market often creates innovations by opportunism: short-term technologies appear, market mechanisms favouring few stakeholders are in the spotlight. States, but also metropolises and some major visionary industries are becoming aware of the role of regulation and long-term planning in sending the economic signal to guarantee competitive access to energy in a context of sustainable development, respecting equity, solidarity

and the environment. Utilities of the future must act with the real needs of the consumer in mind in the long term. Economic growth no longer requires an increase in consumption. Utilities that think so will not survive.

And because we are different, it is up to IAAE to identify trends and seek long-term solutions adapted to each context. The business model of the utilities of the future will be diversified and will not be created without cross-fertilization and public interventions: let's think about it together!

Several opportunities will allow us in the coming weeks to continue discussions on the transformations of the energy sector, and in particular:

- Montreal, Canada,
- Ljubljana, Slovenia,
- Astana, Kazakhstan,
- Dhaka, Bangladesh,
- Riyadh, Saudi Arabia,

as well as several symposiums: Athens, Monaco, Bucharest or Abu Dhabi. See you soon at these events or in our publications.

Christophe Bonnery

IAEE Council Approves Membership Dues Increase

In December 2019 IAAE Council approved an increase of \$20 in member dues. The last increase in dues occurred seven years ago in 2012.

Regular, direct member dues were increased from \$100 to \$120 a year effective immediately. Affiliate member dues will increase from \$90 to \$110 on January 1, 2020. Student dues were increased \$10 to \$60. Institutional Member dues were raised from \$2500 to \$3000 a year.

In commenting on the increase, IAAE Executive Director David Williams noted that it is extremely unusual for an association to be able to go seven years without a raise in dues; eventually operational costs overtake income and a change has to be made.

IAEE President Christophe Bonnery notes that the Council as a whole embraces the concept that the cost of membership is to be kept as low as possible while providing the greatest value to members through the excellent quality of IAAE publications, events and services.

NEWSLETTER DISCLAIMER

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. IAAE officers, staff, and members may not represent that any policy position is supported by the IAAE nor claim to represent the IAAE 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. IAAE encourages its members to consider and explore the policy implications of their work as a means of maximizing the value of their work. IAAE 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 IAAE’s need to maintain its own strict political neutrality. Any policy endorsed or advocated in any IAAE 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 IAAE 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 IAAE or any other members. Any member who willfully violates IAAE’s political neutrality may be censured or removed from membership.

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

Editor's Notes

We have a potpourri of energy related articles in this issue. Geographically we move from Australia to the U.S., to China, to Nigeria. We look at peak oil, at the possibility of zero marginal cost electricity and what its impact might be. We hear an argument for considering corporate social responsibility in future governance of energy systems and how that same CSR is having a most unwelcome impact on the health of some of our fellow humans. We see how the U.S. energy doctrine has changed over the post world war II period and what the future impact may be. All in all a quite varied issue. We hope you'll enjoy reading it as much as we did editing it.

Douglas Reynolds gives a peak-oil analysis for China and the U.S. in "A Tale of Two Peaks," where he separates unconventional oil from conventional oil in order to better understand the overall trend for each type of oil. He suggests the XL pipeline may soon be exceedingly advantageous

Dong Wang illustrates his findings on the relationship between energy transition and capital deepening in China. Energy transition policy design would take the capital intensity increase into account. He argues that greening capital while greening energy would be a feasible option for many developing countries.

Adewale Mould notes that electricity and tele-communications in Nigeria started within ten years of each other. Both have had extensive reforms in recent times. However, reforms in telecoms have been more visible. Using a discourse approach, he makes an examination of relevant lessons from the telecom success story applicable to the electricity sector.

Amro Zakaria traces the U.S. role in world energy from the era of whale oil to the modern day. He notes that the post-World War II doctrine of the U.S. was focused on Energy Independence and Security. The new doctrine of Energy Dominance, begun during the Obama Administration and fueled by development of the shale oil industry, has been fully embraced by the Trump Administration. Zakaria looks at some of the implications of what this new dominance may mean.

Tilak Doshi asks what Adam Smith would say about the rush by banks to stop funding coal power plants. The rush to "save the climate" at the expense of the millions of vulnerable human beings in Southeast Asia and elsewhere in the developing world who depend on these coal power plants is having an appalling impact on human health. The time-honored path followed by all developed countries to raise standards of living and achieve rapid growth has now been blocked to the developing countries by these developed countries. What would Adam Smith say about the "haves" blocking the "have-nots"?

Werner Hediger writes that corporate social responsibility is key in designing future governance of energy systems. It calls for an assessment of investments in energy systems and corporate contributions from a sustainable development perspective, and involves further issues related to market structure, property rights and the distribution of resource rents.

Tom Walker, Suzanne Falvi and Tim Nelson explore a possible option to improve the efficiency by which supply and demand are matched in the Australian National Energy Market (NEM): a mechanism by which consumers are compensated by their retailers if they are load shed as a result of insufficient supply of electricity to meet demand.

Phil Thompson notes that a combination of batteries and intermittent renewables may become the dominant source of electricity generation in the future. Zero marginal cost electrical energy would have important implications for current regulatory approaches. Three important policy areas will be pricing and rate design, wholesale market design, and the evaluation of energy efficiency.

