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Editor: David L. Williams

PRESIDENT'S MESSAGE

Happy Fourth Quarter. This quarter we continue the topic raised in the last *Energy Forum* related to the role of renewables in the evolving energy mix. As one who comes from a multi-decade background of observing and analyzing fossil fuel markets and their related geopolitics and escalating environmental attention, this is new territory for me. Through it all, government energy policies related to security, trade, infrastructure, research and development have always been an important factor. The rise of renewables as alternatives to fossil fuel use has been a consequence of the policy but the policy is now becoming beneficiary of the improving market economics. Its easier to sell a policy when the consequences bring economic benefit, but it also sets up an endgame for removing unneeded help or at least reallocating it to new areas caused by growing shares of intermittent renewables.



As a microcosm of the shifting direction of energy economics within the IAEE, my company, Energy Intelligence, started a publication several years ago called *New Energy* as a companion for our dozen or so other publications, since it was critical to watch developments in the renewables sector in setting your outlook for competing fuels markets and the politics and economics surrounding energy markets in general. *New Energy* has now become a full partner with PIW, OMI, Energy Compass and our other more traditional energy publications, just as IAEE conference programs and journal articles have become more inclusive of renewables related issues.

Be aware that is by no means a zero-sum game and what has become clear to me traveling to developing energy economies in Africa and elsewhere and have commented here and in various presentations to IAEE and other audiences, "energy transition" should not be synonymous with "decarbonization." Energy Access and Energy Poverty must be included in the energy transition equation for many if not most of the developing economies, just as renewables need to be included.

IAEE's increasing understanding of conditions in our new member affiliates outside the traditional membership areas will go a long way in functionalizing the organization's role in helping set feasible, flexible and effective priorities with positive feedback for addressing generic energy issues to all economies. As I have also said many times before this is what we have been trained to do.

David Knapp

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EDITOR'S NOTES

Articles in this issue look primarily at renewables. This was a popular topic and one which we'll continue in the next issue.

Tom Russo notes that environmental improvements from U.S. liquefied natural gas exports are often overlooked. But trade wars with China, Turkey, Mexico and other countries may increase LNG prices even further. This may force them to turn to other LNG suppliers or to fast track development of their own shale gas reserves instead.

Doug Reynolds looks at how the use of renewables requires natural gas as a backup source of power and heat and where natural gas politics strains international relations. Instead of renewables causing world harmony, they could instead induce tensions and conflict due to the security concerns over natural gas.

Julian Silk analyzes how natural gas and renewable energy affect other fossil-fuel electricity suppliers. He discusses the value of natural gas flexibility and the impact on retail electricity supply.

Anthony Owen considers three examples from around the world of where drought has caused nations to reconsider the vulnerability of their electricity supply to an over-reliance on hydropower. He also outlines two examples of how supply-security can be enhanced through regulation and, where possible, pump storage.

Mamdouh Salameh argues that while a wider use of electric vehicles (EVs) could decelerate oil demand growth; there will be an urgent need to expand global

electricity generation to accommodate the extra electricity needed to recharge the millions of EVs on the roads. One innovative way to do exactly that is solar highways.

Perry Sioshansi posits that though big oil is still big it may have seen its best years. He notes the continuing pressure to move to a low carbon society, the investment by many of the oil majors into renewables, the rise in natural gas relative to oil and the continuing push into electric vehicles. Finally he notes the move by some investment funds to divestiture of fossil fuel entities.

Lynne Chester, Amanda Elliot and **Penny Crossley** discuss the current Australian energy landscape for households and propose new research directions to improve energy affordability—through access to solar PV—for low-income renters.

Farhad Billimoria and **Rahmatallah Poudineh** propose a new model for electricity market design – the insurer of last-resort model that creates commercial incentives for centralised decision-making and allows revealed consumer preferences to guide new capacity deployment and meet resource adequacy objectives.

Simon Risanger notes that intermittent renewable production is important to reach climate targets. In a day-ahead based market environment, imbalances from forecast errors occur. Intraday markets, which experience increased activity, can become an important tool to cancel imbalances and thus support efficient integration of renewables. He especially notes the recently established cross-border intraday project, XBID.

David Williams

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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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