IHS ENERGY CERAWEEK

Reflections on IHS CERAWeek 2016

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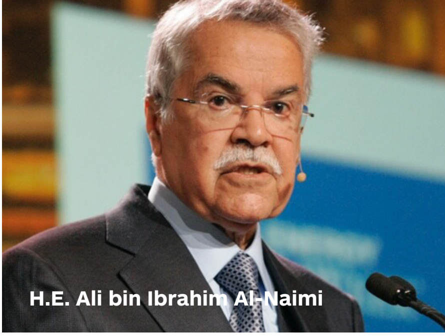
H.E. Ali bin Ibrahim Al-Naimi


Carlos Pascual

The energy industry is transitioning from the pain and contraction rooted in collapsed oil prices, to a more fundamental reshaping of the way the world produces and uses energy in the next 20-30 years. In 2015 and 2016, IHS CERAWeek gave the energy world its most penetrating opportunity to understand, manage and benefit from this transformation.

Oil traded at $60/barrel when IHS CERAWeek 2015 convened last April. OPEC had relinquished its decade-long role of balancing oil supply and demand, leaving the market to push out the highest marginal cost producer. Every oil and gas company looked to cut costs. Efficiency and standardization – to avoid duplication, simplify procurement, and eliminate expensive tailored technologies – took center stage.

For public companies, protecting share prices and dividends, became the imperative. Companies slashed operating and capital expenditures. Few predicted, however, the resilience in the US unconventional sectional sector, where slashed drilling costs, on top of high-grading field efficiency, increased capital efficiency by 65% in one year. Rig counts dwindled, but through June 2015 production still rose – prolonging further an oversupplied market.

By 2016, the trauma associated with the price collapse became more acute as oil dipped below $30/barrel, but the back story had not changed. Oil prices below marginal costs are driving down US investment and production, from a 2015 peak of 9.6 million bpd, likely to under 8.5 million bpd in 2016. Mexico, Venezuela, Colombia, Brazil, and Nigeria will follow suit.

When **Saudi Oil Minister H.E. Ali bin Ibrahim Al-Naimi** declared on February 23 at IHS CERAWeek 2016 that high-cost drillers must become more efficient, borrow cash, or "get out," much of the remaining mystery in this oil drama evaporated. Supply will dwindle, but not from OPEC. Markets have fixated on how fast producers can cut, how much oversupply can be stored, and how soon supply and demand can rebalance.

As monumental as these issues loom for oil economies, IHS CERAWeek 2016 underscored continuity. Panels on "navigating the storm," "leading through the cycle," and "energy markets in turmoil" reinforced how trends discussed a year ago – to adapt, streamline, and standardize – had been reinforced. **Mexican President Enrique Peña Nieto** put it another way: the challenges in the market make it necessary to be commercially savvy to drive investment and deliver on the promise of a country's natural resources.

IHS CERAWeek 2016 also tested a new proposition: how will politics, technology, data, and innovation reshape the energy sector over the coming decades?

The climate change panel exploring "what's ahead" underscored that the Paris Climate accords reached in December 2015 cemented a change in policy discourse. For two decades, emerging and developed economies battled over the path to arrest CO_2 emissions. In Paris, 195 signatories to the UN Framework Convention on Climate Change agreed unanimously that all must share the burden.


Enrique Peña Nieto

Ministers at IHS CERAWeek – from the United States, Norway, Mexico, Canada, Australia, and Israel – stressed that this new political impetus will hasten the dynamics of change, even if countries cannot fulfill their initial pledges. More than 185 countries have set emissions targets. They agreed to consider deeper cuts in 5 years to keep the temperature increase in the 21st Century "well below" 2 degrees C.


Jeffrey Immelt

2015 also witnessed a rush toward digitalization that is transforming industrial costs structures and relative profitability. Some old infrastructure will live longer. New renewable technologies will become cheaper. **GE CEO Jeff Immelt** told IHS CERAWeek on February 22 that "this revolution in information has made managing information as important as material science."

When data and technology combine, suggested Schneider Electric CEO Jean-Pascal Tricoire, not only are new choices possible, but the imperative to compete makes transformation and innovation indispensable. Add possible policy incentives such as pricing carbon, and potentially a self-generating cycle emerges that drives investment to a lower carbon future.

Discussions with power companies and utilities underscored that innovation extends to business models and not just technology. Once distributed generation threatened to rob utilities of their customer base. Ted Craver of Edison International made clear that new forms of distributed generation from households and businesses are a reality – a dynamic to be optimized, not fought.

By the time that this energy revolution gets to the household, Centrica CEO, Iain Conn, stressed that the result will be an empowered customer. Technology will let customers control how and what energy they use. Some predict users will drive the shape of our energy future, and not just react to the supply patterns that markets impose on them.

Daniel Yergin's conversation with **Tesla's JB Straubel** tested the pace of change. In a 2015 article, Dr. Yergin wrote that when a "breakthrough occurs, the chances are that it will have been 20, 30 or even 40 years in the making." Might the 40-year history of the lithium ion battery, invented in an Exxon laboratory in the 1970s, suggest that we have reached a critical gestation period for electric vehicles?

JB Straubel

IHS CERAWeek 2016 suggested that the "old equilibrium" that dominated the energy world for several decades has been freed to reshape itself. If **IHS** can guide its customers in understanding these changing dynamics, we will generate value for them and ourselves, as well as contribute to a new paradigm that embraces commercial and environmental sustainability.

Carlos Pascual, Senior Vice President, IHS, is a recognized authority on issues of national security, energy geopolitics, and economic and commercial development. From 2011 to 2014, Ambassador Pascual was the US State Department's Special Envoy for Energy and Coordinator for International Energy Affairs and was chief advisor to the Secretary of State on energy issues, establishing and directing the State Department's Energy Resources Bureau. In that capacity, he led the State Department's work on Ukraine's natural gas needs; energy diplomacy across Asia, the Middle East, Europe and the Americas; the geopolitical impacts of the shale gas revolution; power sector initiatives to create market incentives for clean and renewable energy; and the development of commercial strategies to bring energy access to those without it. Prior to this position, he served as US Ambassador in Mexico from 2009 to 2011 and Ukraine from 2000 to 2003. At the Brookings Institution from 2006 to 2009, Ambassador Pascual was both Vice President and Director of Foreign Policy Studies with oversight for international research and publications. He also launched the Brookings Energy Security Initiative on domestic and international policy research. From 2004 to 2005, he served as Coordinator for Reconstruction and Stabilization, and from 2003 to 2004, he was Coordinator for US Assistance to Europe and Eurasia. Prior to that, he served as Special Assistant to the US President for Russia, Ukraine, and Eurasia from 1998 to 2000. In 2009, his book, "Power and Responsibility: Building International Order in a World of Transnational Threats", won an award for best political science book published by an independent publisher. Ambassador Pascual holds a BA from Stanford University and an MPP from the Kennedy School of Government, Harvard University.