

## MONDAY 22 FEBRUARY

1:10 PM - 1:50 PM

**WELCOME & SPECIAL ADDRESS** ..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **HE Enrique Peña Nieto**, President, Mexico
- **Daniel Yergin** (Chair), Vice Chairman, IHS, CERAWEEK Conference Chairman

Russian & Chinese  
Translation 

1:50 PM - 2:30 PM

**ENERGY MARKETS IN TURMOIL:  
SHAPE OF THINGS TO COME** ..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Fatih Birol**, Executive Director, International Energy Agency
- **HE Abdalla Salem El-Badri**, Secretary General, OPEC
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

2:30 PM - 3:00 PM

**ENERGY & TECHNOLOGY DIALOGUE** ... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Jeffrey Immelt**, Chairman & CEO, General Electric
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

3:00 PM - 3:10 PM

**BREAK** ..... LEVEL 2 FOYER

# PLENARIES

3:10 PM - 4:00 PM

## ENERGY STRATEGIES AFTER COP .....LEVEL 2 - BALLROOM OF THE AMERICAS

- **Theodore Craver**, Chairman & CEO, Edison International
- **HE Tord Lien**, Minister of Petroleum & Energy, Norway
- **Jean-Pascal Tricoire**, Chairman & CEO, Schneider Electric
- **Carlos Pascual** (Co-Chair), Senior Vice President, Global Energy, IHS
- **Daniel Yergin** (Co-Chair)

Russian & Chinese Translation 

4:00 PM - 4:50 PM

## FINANCING THE ENERGY FUTURE .....LEVEL 2 - BALLROOM OF THE AMERICAS

- **Luis Videgaray Caso**, Secretary of Finance & Public Credit, Ministry of Finance & Public Credit of Mexico
- **Stephen Chazen**, Chief Executive Officer, Occidental Petroleum Corporation
- **Bob Maguire**, Managing Director, Carlyle International Energy Partners
- **Carlos Pascual** (Chair)

Russian & Chinese Translation 

4:50 PM - 5:40 PM

## NAVIGATING THE STORM .....LEVEL 2 - BALLROOM OF THE AMERICAS

- **Miguel Matías Galuccio**, President & CEO, YPF
- **John Hess**, Chief Executive Officer, Hess Corporation
- **Narendra Verma**, Chief Executive Officer, ONGC Videsh
- **Daniel Yergin** (Chair)

Russian & Chinese Translation 

5:40 PM - 6:30 PM

## LEADING THROUGH THE CYCLE .....LEVEL 2 - BALLROOM OF THE AMERICAS

- **Hirobumi Kawano**, President, JOGMEC
- **Doug Oberhelman**, Chairman & CEO, Caterpillar
- **Ulrich Spiesshofer**, Chief Executive Officer, ABB Group
- **Daniel Yergin** (Chair)

Russian & Chinese Translation 

6:30 PM - 7:30 PM

## IHS CERAWEEK WELCOME RECEPTION .....LEVEL 2 FOYER

Hosted by **SIEMENS**

7:30 PM - 9:15 PM

**INSIGHT DINNERS** 

CERAWEEK Insight Dinner Conversations provide a relaxed and informal opportunity for discussion among industry peers and experts. Each dinner centers on a key theme and features thought provoking remarks by distinguished commentators, followed by moderated discussion and Q&A with dinner participants. CERAWEEK Insight Dinners are open to all CERAWEEK delegates, but seating at each is limited and on a first come first served basis. **These sessions are closed to the media.**

**1. STANDARDIZATION OPPORTUNITY & CHALLENGE** ..... THE GROVE - VISTA ROOM

The need to improve returns in the face of low oil prices has never been more urgent. A significant cost-savings opportunity, largely unexploited, lies in the area of engineering standards and standardization. During the days of rapid growth and expansion, operators developed thousands of internal proprietary standards. While originally intended to address complex or specialized requirements, they also created significant unnecessary costs through over-specification (i.e. 'gold-plating'), nonessential customization, and ultimately quality/compliance/supply chain issues. This expert panel discussion will address strategies to significantly reduce annual expenditures, through dramatic reductions in proprietary standards, broader adoption of industry standards, and improved industry collaboration on standardization in areas of significant industry spend.

- **Ernesto Ríos Patrón**, General Director, Instituto Mexicano del Petroleo
- **Lisa Salley**, Vice President Global Industry Services, American Petroleum Institute
- **Steinar Vaage**, SVP, Operations & Projects Services, ConocoPhillips
- **Sandy Vasser**, Facilities I&E Manager, ExxonMobil Development
- **Jim Nyquist** (Welcome Remarks), President, Plant Web Solutions, Emerson Process Management
- **Chad Hawkinson** (Chair), Sr. Vice President, Engineering Solutions, IHS

Hosted  
by**2. CHINA'S "ONE BELT, ONE ROAD" INITIATIVE** ..... LEVEL 4 - ROOM L

In the autumn of 2013, China's top leadership unveiled the New Silk Road initiative (officially called "The Belt and Road" initiative), comprising a land-based Silk Road Economic Belt (SREB) and a Maritime Silk Road (MSR). The objective is to create increased commerce and infrastructure investment in many of China's neighboring countries, and beyond. Given the many energy-rich regions along the route, including Russia, Central Asia, the Middle East, and East Africa, as well as key energy consumers in emerging Asia, the New Silk Road has caught the attention of many in the energy sector as they assess future opportunities.

- What is the future of the New Silk Road initiative?
- How will this policy impact regional geopolitics and economics?
- What opportunities and risks does this pose for energy and technology companies?
- What are the strategic and policy responses?

- **Bijan Khajepour**, Managing Partner, Atieh International
- **Jianmin Wu**, Member of the Foreign Policy Advisory Group, Foreign Ministry of China
- **Thane Gustafson**, Senior Director & Advisor, Russian & Caspian Energy, IHS
- **Matthew Sagers**, Managing Director, Russian & Caspian Energy Advisory Service & Eurasian Transportation Forum, IHS
- **Xizhou Zhou** (Chair), Senior Director, Asia Gas & Power, IHS

**3. SUSTAINABILITY AFTER PARIS** ..... LEVEL 24 - SKYLINE ROOM

The Paris climate conference sets new and higher expectations for national climate policies. This will increase pressure on the energy sector to demonstrate environmental sustainability, in both operations and via the impact of its products. At the same time new policy uncertainties have emerged such as the US Supreme Court granting a stay of EPA's 111(d) Clean Power Plan rule imposing emissions limits on existing power plants. The panel will explore how companies and governments can respond:

- How much technological progress is required to meet the goals laid out in Paris?
- To what extent will politics, business, and finance drive sustainability trends?
- What are the most interesting opportunities to build a more "sustainable" energy future in developing countries?
- How will company investments and strategies change?

- **Sarah Ladislav**, Director & Senior Fellow, Energy & National Security Program, Center for Strategic & International Studies
- **Bjorn Otto Sverdrup**, SVP, Sustainability, Statoil
- **Sabrina Watkins**, Head of Sustainable Development, ConocoPhillips
- **Maria Zuber**, Vice President for Research, Massachusetts Institute of Technology
- **W.H. Shill** (Welcome Remarks), Global Manager & Partner, ERM
- **Antonia Bullard** (Chair), Vice President, Energy, IHS

Hosted  
by

**4. FUTURE OF ENERGY INNOVATION** ..... LEVEL 4 - ROOM D

The past decade has witnessed a great bubbling of energy innovation, driven by high prices, public policy decisions, availability of capital, and increased tolerance for risk. With these conditions reversing themselves over the past year, large technology organizations and individual entrepreneurs alike are having to recalibrate to a new set of realities and adjust to shifting industry priorities. The tenth anniversary of the IHS CERAWEEK Energy Innovation Pioneers program offers a unique opportunity to reflect on this changing world and to begin a discussion on how to ensure that innovation continues to prosper in today's turbulent environment and positions itself strongly for the future. During the dinner we will discuss:

- Who will fill the funding void as energy companies cut back R&D investments?
- Will we see a shift in where the energy industry sources critical new technology – energy company technology organizations, service companies, private capital, large industrials, government laboratories, universities – and what impact will this have on overall industry dynamics?
- How will the energy sector respond to the challenge of meeting emission goals agreed in COP21?.

- **Ashok Belani**, EVP, Technology, Schlumberger
- **Lorenzo Simonelli**, President & CEO, GE Oil & Gas
- **Terry Wood**, Technology VP of Strategy, Planning & Communications, BP
- **Atul Arya** (Chair), Senior Vice President, IHS Energy, IHS

Hosted  
by



**5. THE FUTURE OF THE ARCTIC** ..... LEVEL 4 - ROOM A

The coming year could prove decisive for Arctic development in several ways. IHS predicts an inflection point in the oil price, eventually leading to higher prices and renewed interest in Arctic oil and gas development. In addition, the warming climate is making infrastructure development an ever more critical issue as proposed projects – in the energy sector and elsewhere--seek funding. Meanwhile, regional governments are gearing up for increased activity in the Arctic, in some cases bolstering their military presence, in others enhancing their search and rescue capabilities in anticipation of greater commercial and research traffic through the region over the next decade.

- **Ambassador Mark Brzezinski**, Executive Director, US Government's Arctic Executive Steering Committee
- **Charles Ebinger**, Senior Fellow, Energy Security & Climate Initiative, Brookings Institution
- **Ólafur Ragnar Grímsson**, President, Republic of Iceland
- **HE Tord Lien**, Minister of Petroleum & Energy, Norway
- **Katherine Hardin** (Chair), Senior Director, Energy, IHS

**6. THE GREAT CONVERGENCE: ROBOTS, DRONES & CONNECTED TECHNOLOGY** ..... LEVEL 4 - ROOM G

A set of advanced technologies entering the energy industry from other sectors are beginning to revolutionize how work gets done. Robots, drones, mobility devices, the Internet of Things, and artificial intelligence are already demonstrating great value on their own. But, it's as these technologies begin to converge to create the inter-connected and predictive energy organizations that their full potential is being revealed. The Big Thinkers who are leading the development and deployment of these solutions across the energy industry will share their perspectives on current trends and lead a discussion on what the future holds.

- **James Bellingham**, Director, Center for Marine Robotics, Woods Hole Oceanographic Institution
- **Helen Greiner**, Chief Executive Officer, CyPhy; Co-founder, iRobot
- **Bazmi Husain**, Chief Technology Officer, ABB Group
- **Judson Jacobs**, Senior Director, Upstream, IHS
- **Mike Banville**, Vice President, Technology, IHS

Hosted  
by



**7. WHAT'S AHEAD FOR THE GLOBAL ECONOMY?** ..... LEVEL 4 - ROOM K

Recent market turmoil has highlighted the uncertainties surrounding the global economy. This dinner dialogue will address the key drivers impacting the medium and long term prospects for economic growth.

- Will global growth disappoint again in 2016, as it has since 2012?
- Will the convulsions in global financial markets trigger a recession?
- Is the plunge in oil prices doing more economic harm than good?
- Has global monetary policy lost all potency – and credibility?

Hosted  
by



- **Michael Klein**, Managing Partner, M. Klein and Company
- **Doug Oberhelman**, Chairman & CEO, Caterpillar
- **Christof Rühl**, Global Head of Research, Abu Dhabi Investment Authority
- **Nariman Behraves**, Chief Economist, IHS
- **Zbyszko Tabernacki**, Vice President, Economics & Country Risk, IHS
- **Jerre Stead** (Chair), Chairman & CEO, IHS

## TUESDAY, 23 FEBRUARY

7:30 AM - 8:40 AM

**BREAKFAST & STRATEGIC DIALOGUES**

Strategic Dialogues provide insights and presentations on key strategic topics, followed by interactive discussion among presenters and session participants.

**MIDSTREAM: LEADING THROUGH THE CYCLE** ..... LEVEL 4 - ROOM G


The midstream industry is experiencing more pressure than ever before with rising costs, missed estimates, and the threat of declining volumes. This session will discuss how need for midstream companies to be innovative, tactical, and strategic in order to survive and emerge from the downturn in upstream activity.

- **Douglas Bland**, (Welcome Remarks), Partner, Energy Transactions & Projects, Vinson & Elkins
- **Clay Bretches**, President & CEO, Sendero Midstream
- **Walter Hart**, Senior Director, Natural Gas Liquids Research & Consulting, IHS
- **Darryl Rogers** (Chair), Senior Director, Oil Markets & Downstream, IHS

Hosted by **Vinson&Elkins LLP****ASIA & GLOBAL OIL DEMAND: A PAUSE OR LASTING DOWNSHIFT TO LOWER GROWTH?**..... LEVEL 4 - ROOM C

Satisfying global demand has underpinned many investment plans. But will the future be like the past? Is China downshifting to a lower pace of long-term energy demand growth—and what about other key Asian markets? Should assumptions about the future reflect a change from the past?

- **Denie Tampubolon**, SVP Upstream Business Development, Pertamina
- **Nishi Vasudeva**, Chairman & Managing Director, Hindustan Petroleum
- **Qian Xingkun**, Vice President, CNPC Economics & Technology Research Institute
- **Ravi Narayanaswamy**, Vice President, Oil Markets & Downstream, Asia Pacific/ME, IHS
- **Stephen Jones** (Chair), Vice President, Oil Markets & Downstream, IHS

Chinese Translation **FUTURE OF OIL SERVICES** ..... LEVEL 4 - ROOM J

The decline in oil prices has had a tremendous impact on the oil services sector. Since the decline began we have seen significant pricing concessions, reduction in cost structures across the service and equipment value chain and material changes to operational practices to help mitigate the market pressures. Some oilfield services companies also continue to drive innovation and technology improvement while other companies are struggling to stay in business. This session will provide outlooks for the future of key oil service markets, and discuss how operators and service providers might respond to the new future. In addition, we will discuss how financial players think about the current oil service market and what type of investments they are considering.

- **Osmar Abib**, Managing Director; Global Head of Oil & Gas, Credit Suisse
- **Mark Berg**, Executive Vice President, Corporate & Operations, Pioneer Natural Resources
- **Charles Leykum**, Chief Executive Officer, CSL Capital Management
- **Mark Richard**, Senior Vice President, Global Business Development & Marketing, Halliburton
- **Nilesh Dayal** (Chair), Vice President, Upstream Costs & Operating Performances, IHS

**TAKING THE MEASURE OF LATIN AMERICA'S UPSTREAM INDUSTRY**..... LEVEL 24 - SKYLINE ROOM

Latin America illustrates the extent of opportunities and challenges that face the upstream industry. Brazil's massive discoveries, Colombia's revival, and the Mexican liberalization exemplify opportunity. But high costs, insecurity, and policy uncertainty are among the challenges. Which way forward?

- **Carlos Alberto Pereira de Oliveira**, Executive Manager, Upstream, Petrobras
- **Gustavo Hernandez-García**, Director of Prospective Resources, Reserves & Associations, Pemex
- **Max Torres**, Exploration Vice President, Ecopetrol S.A.
- **Bob Fryklund** (Chair), Chief Upstream Strategist, IHS

Hosted by



**CANADIAN OIL SUPPLY: WHAT DO MARKET & POLITICAL CHANGES MEAN? .....** LEVEL 4 - ROOM D

The political environment has changed for Canada's oil and gas industry. Questions abound—some new, others not—concerning the future of Canada's oil industry—from impact of low oil prices, ability of industry to cut cost, and ongoing challenges accessing new markets. And what are the implications from the royalty and climate policy reviews that occurred over the past year in Alberta, which produces most of Canada's oil?

- **Hon. Margaret McCuaig-Boyd**, Minister of Energy, Alberta
- **Brian Ferguson**, President & CEO, Cenovus Energy
- **Andrew Leach**, Associate Professor, University of Alberta
- **Jürgen Brandes** (Welcome Remarks), CEO, Process Industries & Drives Division, Siemens
- **Kevin Birn** (Chair), Director, Global Oil Markets, IHS

Hosted  
by**SIEMENS****AFRICA'S UPSTREAM: WHAT'S NEXT? .....** LEVEL 4 - ROOM L

Sub-Saharan Africa has been a prolific region for industry-leading hydrocarbon discoveries, but with few projects being developed and low prices, exploration activity has decreased sharply. What strategies are upstream explorers pursuing in response to the challenges they face? How are regional governments adjusting to today's reality in order to compete for tomorrow's investment?

- **Ambrosie Bryant Chukwueloka Orjiako**, Chairman, Seplat Petroleum Development Company Plc
- **Ding Feng**, Chief Expert & Senior Geologist, Sinopec
- **Christopher Smith**, Assistant Secretary for Fossil Energy, US Department of Energy
- **Daniel Berkove** (Chair), Senior Associate, Energy, IHS

**SQUEEZING MORE FROM BROWNFIELDS IN A LOW OIL PRICE ENVIRONMENT .....** LEVEL 4 - ROOM K


One of the greatest sources of oil and gas reserve replacement is to grow existing fields ("brownfields") through efficient investments and by the application of new technologies. As brownfield investments are constrained by the low price environment, the risk is that field decline rates increase and global oil supply gets reduced. How acute is this risk? Which innovations and technologies can most effectively ensure that brownfield reserves and production can be preserved?

- **Ashok Belani**, Executive Vice President, Technology, Schlumberger
- **Steven Benn**, Manager, Exploration & Production Technologies, Santos
- **Ahmed Hashmi**, Head of Upstream Technology, BP
- **David Tredinnick** (Welcome Remarks), President, Middle East & Africa, Emerson Process Management
- **Paul Markwell** (Chair), Vice President, Upstream Consulting, IHS

Hosted  
by  
**EMERSON****STATE OF THE INDUSTRY: RUSSIAN OIL'S PRESENT & FUTURE .....** LEVEL 4 - ROOM B

Russian oil production in 2015 was resilient in the face of sanctions and low oil prices. Output was steady to slightly higher, which kept Russia at the top of the crude oil producing league. Will this continue or are changes in store for the Russian oil industry?

- **Vadim Makhov**, Chairman & CEO, OMZ
- **Mikhail Margelov**, Vice President, Transeft
- **Maxim Nechaev**, Director, Consulting, Russian and Caspian Energy, IHS
- **Tom Reed**, Chief Executive Officer, JKX
- **Thane Gustafson**, Senior Director & Advisor, Russian and Caspian Energy, IHS
- **Matthew Sagers** (Chair), Managing Director, Russian and Caspian Energy & Eurasian Transportation Forum, IHS

Russian & Chinese  
Translation **NORTH AMERICAN REFINING: IS THE BEST BEHIND—OR AHEAD? .....** LEVEL 4 - ROOM A

The North American refining industry is a global powerhouse. The United States is among the largest product exporters in the world. Margins have been volatile, but also exceptionally high at times. Will the strong performance of North American refining endure—or are the best times now in the past?

- **Horace Hobbs**, Chief Economist, Phillips 66
- **Philip Rinaldi**, Chairman & CEO, Philadelphia Energy Solutions
- **Cynthia Warner**, Executive Vice President, Strategy & Business Development, Tesoro
- **Blake Eskew**, Vice President, Downstream Consulting, IHS
- **Meeyoung Toh** (Chair), Vice President, Oil Markets & Downstream, IHS

8:50 AM - 9:30 AM

**WELCOME & MINISTERIAL ADDRESS**..... LEVEL 2 - BALLROOM OF THE AMERICAS


- **HE Ali Al-Naimi**, Minister of Petroleum & Mineral Resources, Saudi Arabia
- **Daniel Yergin** (Chair), Vice Chairman, IHS, CERAWEEK Conference Chairman

Russian & Chinese  
Translation 

9:30 AM - 10:00 AM

**OPENING OIL ADDRESS**..... LEVEL 2 - BALLROOM OF THE AMERICAS


- **Ben van Beurden**, Chief Executive Officer, Royal Dutch Shell
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

10:00 AM - 10:30 AM

**OIL KEYNOTE**..... LEVEL 2 - BALLROOM OF THE AMERICAS


- **Yilin Wang**, Chairman, CNPC
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

10:30 AM - 11:15 AM

**CEO PLENARY**..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Joe Kaeser**, President & CEO, Siemens
- **Ryan Lance**, Chairman & CEO, ConocoPhillips
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation **ENERGY INNOVATION PIONEER SHOWCASE**

LOCATED NEXT TO THE LEVEL 2 ESCALATORS ON THE WEST SIDE OF THE HOTEL  
Current and past pioneers will present their company, technology, and recent milestones during the breaks in the main agenda.



11:15 AM - 11:30 AM

**BREAK** ..... LEVEL 4 - FOYER

11:30 AM - 12:40 PM

## STRATEGIC DIALOGUES

Strategic Dialogues provide insights and presentations on key strategic topics; followed by interactive discussion among the presenters and between session participants and panelists.

---

**NOC STRATEGIES FOR A NEW WORLD** ..... LEVEL 4 - ROOM G

There has not been a uniform response from national oil companies (NOCs) to low oil and gas prices. For some it is a signal to expand, for some a need to pull back to address growing domestic energy sector challenges, and for others a challenge to survival. How do NOCs view the challenges of today and tomorrow?

- **Hosnia Hashim**, Vice President, Operations, Kuwait Foreign Petroleum Exploration Company
- **Besim Sisman**, President & CEO, Turkish Petroleum
- **Narendra K. Verma**, Chief Executive Officer, ONGC Videsh
- **Juan Carlos Echeverry**, Chief Executive Officer, Ecopetrol
- **Atul Arya** (Chair), Senior Vice President, IHS Energy, IHS

---

**HSE & OPERATIONAL STRATEGIES: DRIVING VALUE & SAFETY IN****A WORLD OF UNCERTAINTY** ..... GEORGE R. BROWN - ROOM 370B

The global energy industry has an imperative to deliver health, safety, and environmental (HSE) performance while maintaining operational integrity. Today, all companies face a common challenge. How will they maintain adequate resource levels to ensure that their operations run safely and productively while managing the implications of a cost-constrained world? And what role will technology play in supporting ever-tightening resource availability? This session will explore strategies that integrated energy companies and their suppliers are using to achieve asset reliability, greater productivity, and reduced risk of HSE incidents.

- **Wesley Lohec**, Vice President, Health, Environment & Safety, Chevron
- **Don Lloyd**, Global Managing Partner, ERM
- **Ed Monser**, President, Emerson
- **Nilesh Dayal** (Chair), Vice President, Upstream Costs & Operating Performances, IHS

---

**MEXICO'S STRATEGIES TO ATTRACT UPSTREAM INVESTMENT & TECHNOLOGY:****UNLEASHING THE POTENTIAL** ..... LEVEL 4 - ROOM A

Mexico's landmark changes to its upstream industry are an important and ongoing development for the world oil industry.

- How has it unfolded so far and what does the future hold?
- How do Mexico's resources compete with other international prospects?
- What fiscal terms will make Mexico competitive in a low price environment?
- Will Mexico's contract terms give investors confidence in legal stability and the rule of law?
- How will environmental and safety standards be implemented, and can companies keep their implementation schedules on track?
- Can the Mexican supply chain and potential private partners help bring down costs and increase efficiency.
- **Lourdes Melgar**, Deputy Secretary of Energy for Hydrocarbons, Ministry of Energy of Mexico
- **Miguel Messmacher**, Undersecretary of Revenue, Ministry of Finance & Public Credit of Mexico
- **Carlos de Regules Ruiz-Funes**, Executive Director, Agency for Safety, Energy & Environment of Mexico
- **Juan Carlos Zepeda**, President, National Hydrocarbons Commission of Mexico
- **Carlos Pascual** (Chair), Senior Vice President, Global Energy, IHS



**NORTH AMERICAN UPSTREAM: THE LANDSCAPE TO 2020** ..... LEVEL 4 - ROOM J

The dynamism of the North American upstream oil altered the course of the global oil market. Upstream market dynamics in 2016 are much more challenging. But market and competitive conditions never stand still. What does the future hold for the North American upstream industry to 2020 in terms of investment, industry structure, and growth?

- **Matt Fox**, Executive Vice President, Exploration & Production, ConocoPhillips
- **David Lawler**, Chief Executive Officer, BP US Lower 48 Onshore
- **Torggrim Reitan**, Executive Vice President, Development & Production, USA, Statoil
- **William Stevens**, Global Co-Head, Strategic Energy Solutions, HSBC
- **Raoul LeBlanc** (Chair), Vice President, North America Upstream & Finance, IHS

**IOC STRATEGIES FOR DIFFERENTIATION & GROWTH** ..... LEVEL 4 - ROOM L

Over the past several years, the previously differentiated business models of larger international oil companies (IOCs), independents and North American pure players have been on a convergent path. While all companies are cutting costs and reviewing organizational processes, the issue of competitive differentiation in the future remains. This panel will discuss how various IOCs are positioning for future success.

- **Luca Bertelli**, Chief Exploration Officer, Eni
- **Arnaud Breuillac**, President, Exploration & Production, TOTAL
- **Edward Daniels**, Executive Vice President, Commercial & New Business Development, Shell International Exploration & Production
- **John Knight**, Executive Vice President, Global Strategy & Business Development, Statoil
- **Susan Farrell** (Chair), Vice President, Upstream Research, IHS

**FUTURE OF GLOBAL REFINING: CHANGING ROLE OF REFINING CENTERS** ..... LEVEL 4 - ROOM C

The Middle East, North America, and parts of Asia are home to increasingly vital refining centers for the global oil industry. New, large-scale refineries combined with well-established sophisticated refinery capacity are turning regional downstream competition into a global race. Will refining centers increasingly dominate global trade—or are there opportunities for refineries outside of these clusters?

- **Gary Freburger**, President, Process Automation, Schneider Electric
- **Lingli Liu**, Deputy Chief Engineer, Sinopec
- **Savvas Manousos**, President of Group Supply & Trading, Reliance Industries
- **Colin Birch**, Vice President, Oil Markets, Midstream & Downstream Consulting, IHS
- **Kurt Barrow** (Chair), Vice President, Downstream Research & Consulting, IHS

**FINANCING UPSTREAM INVESTMENT: WHO, WHAT, & HOW MUCH?** ..... LEVEL 4 - ROOM D

Access to capital was an essential driver of the great revival of US oil production. In today's market, is access to capital changing? And who will provide the capital for upstream investment in the years ahead?

- **John B. Connally**, Partner, Energy Transactions, Vinson & Elkins
- **Geoffrey Davis**, Managing Director, Morgan Stanley
- **Adam Pierce**, Managing Director, Oaktree Capital Management
- **Bobby Tudor**, Chairman & CEO, Tudor, Pickering, Holt & Co.
- **Nate Walton**, Partner, Ares Management
- **Roger Diwan** (Chair), Vice President, Global Energy & Finance, IHS

**THE DISRUPTORS: THE FUTURE OF MOBILITY & WHAT IT MEANS** ..... LEVEL 24 - SKYLINE ROOM

Information technology companies are seeking new roles in the transport industry that could disrupt the nature of personal mobility—changing consumer preferences for when to drive, what to drive, and how to drive. At the same time, automotive incumbents are aggressively working to stay competitive and meet consumers' high expectations. Battery advances, autonomous vehicles, and mobile software also point to the possibility of a transport future very different from the past. With big changes ahead, this session will explore what implications this may have for both the automotive and energy industries.

- **Alexander Edwards**, President, Strategic Vision
- **Jason Miller**, Deputy Director, US National Economic Council
- **Jim Misener**, Technical Standards, Qualcomm Technologies
- **Anders Tylman-Mikiewicz**, General Manager & VP, Volvo Monitoring & Concept Center
- **Tom De Vleeschauwer**, Director of Long-Term Planning & Sustainability, IHS
- **Tiffany Groode** (Chair), Senior Director, Automotive Scenarios, IHS

**THE MIDDLE EAST: A TRANSITION TO WHAT? ..... LEVEL 4 - ROOM K**

Many of the relationships that defined the Middle East for the past several decades are in transition—or do not even exist anymore. The bloody war in Syria, the Iranian nuclear deal, the fight against ISIS, and the impact of lower oil revenue are shifting the playing field but clouding outcomes. What lies ahead for the Middle East?

- **Amos Hochstein**, Special Envoy & Coordinator for International Energy Affairs, Bureau of Energy Resources (ENR)
- **Bijan Khajepour**, Managing Partner, Atieh International
- **David Scott**, President, IDG
- **Raad Alkadiri**, Managing Director, Petroleum Risk, IHS
- **Vera de Ladoucette**, Senior Associate, IHS
- **Bhushan Bahree** (Chair), Senior Director & Advisor, Global Oil Markets, IHS

**GLOBAL OIL MARKET OUTLOOK ..... LEVEL 4 - ROOM B**

Should we expect oil prices to remain low for many years—or is a lasting move to higher prices in the offing? OPEC policy, world oil demand, and the impact of lower upstream spending on supply are among the major question marks.

- **Dave Pursell**, Managing Director & Head of Macro Research, Tudor, Pickering, Holt & Co.
- **Christof Rühl**, Director, Global Head of Research, Abu Dhabi Investment Authority
- **Keisuke Sadamori**, Director, International Energy Agency
- **Adam Sieminski**, Administrator, US Energy Information Administration
- **Jamie Webster**, Senior Director, Global Oil Markets, IHS
- **Aaron Brady** (Chair), Senior Director, Global Oil Markets, IHS

**TECHNOLOGY, MAJOR PROJECTS, & RAISING CAPITAL EFFICIENCY ..... GEORGE R. BROWN - ROOM 370A**


Upstream projects struggling to meet economic hurdles in today's low price environment are in many cases turning to lower supply chain costs, leaner designs, and new development approaches to improve their viability. What role can technology play in enabling these new design concepts and business models, and what impact are they having on industry capital efficiency?

- **Jim Nyquist**, President, PlantWeb Solutions, Emerson Process Management
- **Margareth Øvrum**, Executive Vice President, Technology, Projects & Drilling, Statoil
- **Steinar Vaage**, SVP, Operations & Projects Services, ConocoPhillips
- **Pritesh Patel**, Senior Director, Upstream Cost & Procurement, IHS
- **Judson Jacobs** (Chair), Senior Director, Upstream, IHS

12:50 PM - 2:00 PM

**LUNCHEON & KEYNOTE ..... LEVEL 2 - BALLROOM OF THE AMERICAS****WHAT'S DIFFERENT THIS TIME?**


- **Lord Browne**, Chairman, L1 Energy
- **Mark Papa**, Partner, Riverstone Holdings
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

2:15 PM - 3:15 PM

**MINISTERIAL PLENARY ..... LEVEL 4 - ROOM EFHI**

- **HE Mohammed Hamed Saif Al-Rumhy**, Minister of Oil & Gas, Oman
- **HE Tomás González Estrada**, Minister of Mines & Energy, Colombia
- **HE Dharmendra Pradhan**, Minister of Petroleum & Natural Gas, India
- **Carlos Pascual** (Chair)

Russian & Chinese  
Translation 

3:15 PM - 3:40 PM

**CEO DIALOGUE** ..... LEVEL 4 - ROOM EFHI

- **José Antonio González Anaya**, Chief Executive Officer, Pemex
- **Carlos Pascual** (Co-Chair), Senior Vice President, Global Energy, IHS
- **Daniel Yergin** (Co-Chair)

Russian & Chinese  
Translation 

3:40 PM - 4:05 PM

**IHS OIL WATCH: HOW RESILIENT IS SUPPLY?** ..... LEVEL 4 - ROOM EFHI

- **Bhushan Bahree**, Senior Director & Advisor, Global Oil Markets, IHS
- **Roger Diwan**, Vice President, Global Energy & Finance, IHS
- **Raoul LeBlanc**, Vice President, North America Upstream & Finance, IHS
- **Jim Burkhard** (Chair), Chief Researcher, Global Oil Markets & Energy Scenarios, CERAWEEK Vice Chairman, IHS

Russian & Chinese  
Translation 


4:05 PM - 4:20 PM

**BREAK** ..... LEVEL 4 - FOYER

4:20 PM - 5:30 PM

**UPSTREAM PLENARY** ..... LEVEL 4 - ROOM EFHI

- **Mohammed Al-Qahtani**, Senior Vice President, Upstream, Saudi Aramco
- **Lamar McKay**, Deputy Group Chief Executive, BP
- **Steve Williams**, President & CEO, Suncor Energy
- **Atul Arya** (Chair), Senior Vice President, IHS Energy, IHS

Russian & Chinese  
Translation **DOWNSTREAM PLENARY** ..... LEVEL 4 - ROOM BC

- **B. Ashok**, Chairman, Indian Oil
- **Tufan Erginbilgic**, Chief Executive, Downstream, BP
- **Greg Garland**, Chairman & CEO, Phillips 66
- **Philippe Sauquet**, President, TOTAL Refining & Chemicals
- **Jim Burkhard** (Chair), Chief Researcher, Global Oil Markets & Energy Scenarios, CERAWEEK Vice Chairman, IHS

5:40 PM - 6:20 PM

## IHS EXPERT DISCUSSIONS

IHS Expert Discussions provide presentations and outlooks by IHS analysts, followed by interactive discussion in an informal setting. Each session provides insight on strategies, risk, and opportunities in a key energy area. Sessions follow Chatham House rules. **These sessions are closed to the media.**

---

### **LOW OIL PRICES: IMPACT US FUEL ECONOMY POLICY & DEMAND**..... GEORGE R. BROWN - ROOM 370E

US fuel economy standards are pushing automakers to achieve a 50 mpg new vehicle fuel economy target by 2025. With low oil prices on the horizon, will US consumers value fuel economy and alternative vehicles enough to enable OEMs to achieve this target? This discussion will look at consumer feedback from Strategic Vision and discuss the likelihood of the 2025 CAFE targets being met in a low oil price world.

- **Alexander Edwards**, President, Strategic Vision
- **Tiffany Groode** (Chair), Senior Director, Automotive Scenarios, IHS

---

### **UPSTREAM COSTS & THE PRICE OF OIL** ..... LEVEL 4 - ROOM B

The price of oil is a fraction of what it was less than two years ago, and possible future price paths are many. In this environment, assessing the outlook for the cost of developing new supply to meet demand growth and offset production declines can shed light on how oil prices may evolve over the longer term. What factors will help shape upstream costs—and oil prices—in the coming years?

- **Jeff Meyer**, Associate Director, Crude Oil Markets, IHS
- **Pritesh Patel** (Chair), Senior Director, Upstream Cost & Procurement, IHS

---

### **INNOVATION PIONEER EXPERT BRIEFING: WATER & ENERGY** ..... LEVEL 4 - ROOM L

Navigating the water-energy nexus is a critical issue for every segment of the energy value chain. In the upstream sector, it comes into play in helping manage costs in the current low oil price environment and securing a long-term license to operate. Likewise, in the power sector new regulations and competition from other sources of demand has made water use a key area of focus. This panel explores the role that entrepreneurs play in stimulating breakthrough technologies and business models to meet these challenges.

- **Joshua Adler**, Founding CEO, Sourcewater
- **Richard Broderick**, President & CEO, Fountain Quail Water Management
- **Jean-Louis Kindler**, President, OriginClear Technologies
- **Jim Matheson**, President & CEO, Oasys Water
- **Samir Nangia** (Chair), Managing Director, North America Offshore, IHS

---

### **GOVERNMENT RESPONSE TO LOW OIL PRICES** ..... LEVEL 4 - ROOM G

What have governments done in reaction to lower oil prices? To what degree are fiscal or other regulatory changes being considered or implemented?

- **Raad Alkadiri**, Managing Director, Petroleum Risk, IHS
- **Michael Marinovic** (Chair), Vice President, Energy Strategy Consulting, IHS

---

### **GLOBAL ENERGY SCENARIOS: IS RADICAL CHANGE IN ENERGY DEMAND COMING?**..... LEVEL 4 - ROOM J

Energy demand trends are evolving differently than in the past—and could even be on the precipice of dramatic change. Key interest is focused on the largest markets in Asia (China and India), which are expected to be key drivers of the world's future energy demand growth. In addition to changing economic outlooks, growing social and political concerns about climate change and pollution are key drivers of future demand around the world, abetted by falling costs for renewable energy and signs that batteries could play a growing role in both power and transport. We will use the IHS scenario framework to discuss the future of energy demand in China, India and the world.

- **Gauri Jauhar**, Director, Asia Pacific Energy, IHS
- **Tom De Vleeschauwer**, Director of Long-Term Planning & Sustainability, IHS
- **Rick Vidal**, Director, Global Energy Scenarios, IHS
- **Xizhou Zhou**, Senior Director, Asia Gas and Power, IHS
- **Jim Burkhard** (Chair), Chief Researcher, Global Oil Markets & Energy Scenarios, CERAWEEK Vice Chairman, IHS

**NATURAL GAS LIQUIDS: WILL EXPORTS BALANCE THE US MARKET? .....** LEVEL 4 - ROOM K

The United States has become a major exporter of natural gas liquids (NGLs). Is the United States also the “balancer“ of the global NGLs market? If so, what are the implications for US and international prices?

- **Walter Hart**, Senior Director, Natural Gas Liquids Research & Consulting, IHS
- **Veeral Mehta**, Senior Consultant, Energy Consulting, IHS
- **Darryl Rogers**, Senior Director, Oil Markets & Downstream, IHS
- **Debnil Chowdhury** (Chair), Director, Natural Gas Liquids, IHS

**LATIN AMERICA'S UPSTREAM: MANAGING DECLINE VERSUS GROWTH.....** GEORGE R. BROWN - ROOM 370A

Despite the various opportunities, managing the decline and growth will be critical for Latin America's upstream strategies. Indeed, each play has its own technical, commercial and aboveground risk challenges in the context of various above ground risks in a low price environment. What is the right balance?

- **Ricardo Bedregal**, Senior Director, Latin America Upstream, IHS
- **Claudia Pessagno**, Senior Oil & Gas Equity Analyst, Latin America, IHS
- **Deborah Resley**, Latin America Regional Manager, IHS
- **Marcela Segade**, Director, Latin America Downstream, IHS
- **Ford Tanner**, Associate Director, Petroleum Risk, IHS
- **Rodrigo Vaz** (Chair), Managing Director, Latin America Upstream Consulting, IHS

**E&P "CAPITAL STRATEGIES": FINANCE & CASH FLOW .....** GEORGE R. BROWN - ROOM 370B

The recent fall in oil and gas prices has created uncertainty within the sector that extends not only to operators, but to investors and capital providers as well. The consequences can be seen in the large reductions to upstream capital budgets, the lack of global M&A activity, and limited capital flowing into the sector. What is the impact across differing business models, how are companies going to survive and position themselves to take advantage of the downturn, and what are the catalysts for M&A activity?

- **Andrew Byrne**, Director, IHS
- **Dan Pratt** (Chair), Managing Director, Upstream Company, Transaction & Valuation Research, IHS

**IMPLICATIONS OF ADVANCING CLIMATE POLICY****ON NORTH AMERICA'S UPSTREAM OIL & GAS SECTOR .....** GEORGE R. BROWN - ROOM 370D

Following on COP21, this expert briefing will explore the potential implications for North American climate policy to impact the upstream oil and gas sector. What policies have advanced in North America so far, and what are the prospects for and implications of future climate policies on Canadian and US oil production?

- **Bill Shireman**, President & CEO, Future 500
- **Nancy Meyer**, Associate Director, Climate Change, IHS
- **Kevin Birn** (Chair), Director, Global Oil Markets, IHS

**OPEC & THE OIL MARKETS OF THE FUTURE .....** LEVEL 4 - ROOM A

OPEC's November 2014 decision to not cut production pushed prices lower. Yet the organization and its members continue to hold the market's attention, and with good reason. This discussion will center on what could drive a decision, and if a post-OPEC world is possible.

- **Bhushan Bahree**, Senior Director & Advisor, Global Oil Markets, IHS
- **Jamie Webster** (Chair), Senior Director, Global Oil Markets, IHS

6:20 PM - 7:30 PM

**CONFERENCE WIDE RECEPTION**..... LEVEL 2 - FOYER

Hosted  
by **ABB**

7:30 PM - 9:15 PM

**DINNER & KEYNOTE**..... LEVEL 2 - BALLROOM OF THE AMERICAS

***FUTURE OF THE GLOBAL ECONOMY***

- **Stanley Fischer**, Vice Chairman, Federal Reserve Board
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

# WEDNESDAY, 24 FEBRUARY

7:30 AM - 8:45 AM

## BREAKFAST & STRATEGIC DIALOGUES

Strategic Dialogues provide insights and presentations on key strategic topics; followed by interactive discussion among the presenters and between session participants and panelists.

### *INNOVATION FOR TOMORROW'S INFRASTRUCTURE: FINANCE, POLICY AND DIGITAL TRANSFORMATION* .....

LEVEL 4 - ROOM K

Meeting tomorrow's energy demand will require some \$50 trillion in infrastructure investment over the next two decades. The majority of this investment will be in non-OECD countries with limited access to investment capital. Meeting these needs will require innovation – including adoption of digital technologies, new financing models and policy leadership. This session will explore the interplay of these, and the challenges and opportunities ahead for energy companies: What steps are required to transform energy infrastructure to be more globally integrated? How will the digital transformation enable step changes? How will large scale infrastructure investment be financed? How can policymakers, technology providers and financial institutions better collaborate to accelerate infrastructure development?

- **Ganesh Bell**, Chief Digital Officer and Head of Digital Business, GE
- **Melanie Kenderdine**, Director, Office of Energy Policy & Systems Analysis, US Department of Energy
- **Patricia Rodrigues**, Managing Director, Macquarie Asset Management
- **Robert Stoner**, Deputy Director for Science & Technology, MIT Energy Initiative
- **Atul Arya** (Chair)

### *THE FUTURE OF HEATING & COOLING: SIMPLE BUT BIG IMPACT?*.....

LEVEL 4 - ROOM L

Heating and cooling in buildings is the main use of energy in the residential and commercial sectors, accounting for over 60% of energy consumption in most developed markets. Despite its importance it has long been the Cinderella sector with attention focused on other areas, most notably power. This is now changing as technology offers new solutions to provide high levels of comfort while lowering GHG emissions and as policy makers and market participants seek to exploit the emerging synergies between the heat and power sectors. In this session we will discuss the future of the heating and cooling sector, how it can help support global climate objectives and the implications for market participants.

- **Frank Amend**, Head of Market Analysis & Strategy, RWE
- **Carlo Germano**, SVP, Innovation & Markets, Veolia Environment
- **Wim Groenendijk**, VP, International Affairs & Regulation, Gasunie
- **Denise Kuehn**, Director, Energy Efficiency Services, Austin Energy
- **Catherine Robinson** (Chair), Senior Director, Gas, Power Renewables (Europe), IHS

### *NORTH AMERICA'S SHIFT TO GAS: LOGISTICS & THE NEW FUEL DYNAMIC*.....

LEVEL 4 - ROOM J

The relative cost of coal and gas has shifted radically creating a rivalry to serve power generation demand. The logistics of the two fuels are somewhat different and while this shift has provided benefits and opportunities, it also has introduced new dynamics, complexities, and risks to the fuel delivery systems and optionality/reliability of the power grid. How will the growing role of natural gas in power generation create structural and operational challenges for gas buyers, focusing on pipeline and storage capacity contracting and operations?

- **Guy Buckley**, Chief Development Officer, Spectra Energy
- **Colette Honorable**, Commissioner, Federal Energy Regulatory Commission
- **David Owens**, VP, Coal & Gas Services, Tennessee Valley Authority
- **Greg Sheul** (Welcome Remarks), President, Americas Region, ABB Group
- **Samuel Andrus** (Chair), Senior Director, North American Natural Gas, IHS


Hosted  
by 



**SOLVING THE GAS SQUEEZE IN THE MIDDLE EAST & NORTH AFRICA:****IMPLICATIONS FOR EXPORTS & IMPORTS ..... LEVEL 4 - ROOM B**

The continuing growth of gas-fired power, at levels of around 10% per annum in many Gulf countries together with commitments to new gas-intensive industries and to upstream use swelled by enhanced oil recovery projects, has left many countries in MENA facing gas shortages. Several are now importing LNG to balance demand, and others are curtailing LNG exports or industrial use. However, many new gas production initiatives are under way albeit often at much higher costs than for conventional gas, and policy moves to improve efficiency and to reduce subsidies are expected to slow the rate of demand growth. Power generation diversification away from gas (and oil) is also underway with nuclear, coal and large-scale solar projects poised to impact the scene – much of the capacity now potentially interconnected via the GCC Grid and other inter-country transmission. How will all these developments interact to underpin the future of LNG and pipeline gas imports and exports in the region?


- **Musabbeh Al Kaabi**, Chief Executive Officer, Mubadala Petroleum
- **Jason Bordoff**, Professor of Professional Practice in International & Public Affairs; Founding Director, Center on Global Energy Policy, Columbia University
- **Rod MacGregor**, Chief Executive Officer, GlassPoint Solar
- **Andy Barrett** (Chair), Senior Advisor, Global Gas & Power, IHS

Russian  
Translation 

**UNLOCKING LATIN AMERICA'S NATURAL GAS POTENTIAL ..... LEVEL 4 - ROOM C**

Natural gas is a growing component of Latin America's energy mix. A significant gas supply potential exists in the region while energy demand continues to grow region-wide at accelerated rates. However, the challenges remain. LNG is now a permanent fixture in Latin America's energy plans. What is the region's potential future gas demand and supply mix?

- **Leonor Calderon**, Director, Corporate Planning, YPFB
- **Fernando Giliberti**, VP, Strategy & Business Development, YPF
- **Hugo Repsold Junior**, Chief Gas & Power Officer, Petrobras
- **Guillermo Turrent**, Managing Director of Modernization, Federal Electricity Commission of Mexico
- **Roberto Cunha** (Chair), Associate Director, Latin America Gas & Power, IHS

Spanish  
Translation 

**NEW LNG ENTRANTS ..... LEVEL 4 - ROOM G**

With the global LNG industry is poised for significant expansion, new players are keen to carve out exposure to the business. A growing spot market and the advent of innovative contracts terms has attracted buyers that had not considered LNG just a few years ago. The discovery of several new gas resources basins also provides opportunities for companies to unlock new LNG supply. Despite this emerging dynamism, the industry faces difficult headwinds in the coming years as foundational LNG demand shows signs of weakness. What role will new LNG entrants play in the future of global LNG balance.

- **Nabil Bourisly**, Managing Director, International Marketing, Kuwait Petroleum Corporation
- **Augusto Macuvcle**, VP Exploration, National Petroleum Institute of Mozambique
- **Dan Werner**, Chief Operating Officer, Fairwood LNG
- **Hon. Josh Frydenberg** (Welcome Remarks), Minister for Resources, Energy & Northern Australia
- **Gautam Sudhakar** (Chair), Director, Global LNG

Hosted  
by

**INDIA GAS DEMAND: WHAT POTENTIAL AT LOWER PRICE LEVELS? ..... LEVEL 4 - ROOM A**

With Asia gas prices expected available at dramatically lower price levels over the medium term, what sources of new demand can be developed? How will small-scale LNG, CHP, and gas for solar integration feature to deliver demand growth, and what policy actions are needed for it to materialize?

- **Ajay Khandelwal**, President – Petroleum E&P, Reliance Industries Limited
- **Rajeev Mathur**, Managing Director, Mahanagar Gas Limited
- **Prabhat Singh**, Chief Executive Officer, Petronet LNG
- **Gauri Jauhar** (Chair), Director, Asia-Pacific Energy, IHS

**ACCELERATING GAME CHANGING OIL & GAS TECHNOLOGIES**..... LEVEL 4 - ROOM D  
Technology has been a game changer for the upstream industry. In the face of low prices, new regulation and changing market dynamics, this need is even more critical. What role do entrepreneurs and investors play in stimulating breakthrough technologies to meet these challenges?


- **Kevin Knopp**, CEO & President, 908 Devices
- **Iain Maclean**, Chief Executive Officer, Zilift
- **Steve Sliwa**, CEO & Founder, Seeq Corporation
- **Eric van der Meer**, Chief Executive Officer, Airborne Oil & Gas
- **Carolyn Seto** (Chair), Director, Upstream Technology & Innovation, IHS

8:50 AM - 9:25 AM

## OPENING PLENARY

..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Gina McCarthy**, Administrator, US Environmental Protection Agency
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

9:25 AM - 10:40 AM

## GLOBAL GAS PLENARY

..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Meg Gentle**, President of Marketing, Cheniere
- **Iain Conn**, Chief Executive Officer, Centrica
- **Yuji Kakimi**, President, JERA
- **Alexander Medvedev**, Deputy Chairman of the Management Committee, Gazprom
- **Michael Stoppard** (Chair), Chief Strategist, Global Gas & Vice Chair of CERAWEEK, IHS

Russian, Chinese &  
Japanese Translation 

10:45 AM - 11:05 AM

## CEO PLENARY

..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Andrew Liveris**, Chairman & CEO, Dow Chemical Company
- **Daniel Yergin** (Chair), Vice Chairman, IHS

Russian & Chinese  
Translation 

11:05 AM - 11:20 AM

## BREAK

..... LEVEL 4 FOYER

11:20 AM - 12:35 PM

## STRATEGIC DIALOGUES

Strategic Dialogues provide insights and presentations on key strategic topics; followed by interactive discussion among the presenters and between session participants and panelists.

### *FUTURE OF OFFSHORE E&P – THE PLAY GRAB FOR THE NEXT GENERATION* ..... LEVEL 4 - ROOM L


Industry has enormous capital and “strategic intent” invested in the deepwater, deeper plays, HPHT (high pressure, high temperature), other hostile environments, and isolated discoveries divorced from existing infrastructure. Similarly, the business models for many E&P companies are founded on higher risk and often high cost exploration activity. Adding in huge exploration cuts, all higher cost, higher risk developments are in question with respect to remaining viable strategic choices for E&P. Industry must advance cost reduction, project restructuring and de-risking enough in the next five years to foster a lower cost new generation of offshore developments. What new strategic opportunities will this restructuring present for companies to enhance and build portfolios – if they are willing to invest?

- **Susan Cunningham**, EVP, Exploration, EHSR, New Frontiers & Business Innovation, Noble Energy
- **Michel Hourcard**, President & CEO, Total E&P Americas
- **Cindy Yeilding**, VP, Exploration Technology & Assurance, BP
- **Jerry Kepes** (Chair), Vice President, Upstream Research, IHS

### *EUROPE'S FUTURE GAS SUPPLIES* ..... LEVEL 4 - ROOM B

Demand for gas in Europe may not grow significantly in the future, but Europe will still remain an attractive market for gas suppliers. Indigenous production will continue to decline, and therefore the need for imports will continue to rise in the future. What is the future of European gas and what is the strategic choice for suppliers and buyers?

- **Jean Abiteboul**, SVP, International, Cheniere Energy
- **Anton Broenink**, Chief Operating Officer, GasTerra
- **Mario Mehren**, Chairman of the Board of Executive Directors, Wintershall
- **Shankari Srinivasan**, VP Gas & Power, IHS

Russian,  
Translation 

### *TIGHTENING THE VALVES ON GLOBAL METHANE EMISSIONS* ..... LEVEL 4 - ROOM K

Venting and flaring of natural gas occurs throughout the oil and gas supply chain, but several initiatives and regulatory programs are underway to limit these practices which can release large amounts of methane and carbon dioxide into the atmosphere. These initiatives aim to reduce waste and improve operational emissions during a time when industry is facing increased scrutiny of their climate and environmental impacts. What strategies and technologies will be employed to reduce emissions effectively?

- **Mark Brownstein**, VP, Climate & Energy, Environmental Defense Fund
- **Joseph Goffman**, Associate Assistant Administrator for Climate; Senior Counsel, US Environmental Protection Agency
- **Rob Jackson**, Professor, Stanford University
- **Braulio Pikman**, Senior Partner, ERM
- **Nate Teti**, VP, Communications Development & Production USA, Statoil
- **Mary Lashley Barcella** (Chair), Director, North American Natural Gas, IHS

### *LNG COSTS & INNOVATION* ..... LEVEL 4 - ROOM C

The current liquefaction boom which started in 2009 initiated the largest capacity build-up in the history of LNG, but it was also accompanied by a steep increase in liquefaction construction costs. In order for LNG to remain competitive against other fuels and gas supplies, these costs have to come back down. Although there may be no silver-bullet, what innovative options deserve further examination?

- **Maurice Brand**, Managing Director & CEO, Liquefied Natural Gas Ltd.
- **Patrick Mullen**, EVP; Operating Group President of Engineering & Construction, CB&I
- **Samuel Thomas**, Chairman, CEO & President, Chart Industries
- **Rafael McDonald** (Chair), Director, Global Gas & Global LNG, IHS

Chinese  
Translation 

**RETHINKING GAS PRICING IN THE GLOBAL LNG MARKET** ..... LEVEL 4 - ROOM G

The long-anticipated LNG supply glut is now becoming a reality and global gas market players are expected to face many commercial challenges over the medium term. History has shown that it becomes increasingly difficult for gas buyers to honour some contractual commitments in a weak market environment with the result that some key contract terms such as price, destination/resale flexibility and volume obligation will come under intense scrutiny. Industry stakeholders will need to achieve some form of compromise if the longer term development of the international gas business is to be assured. This session will examine the scope for compromise amongst key industry stakeholders and the parameters under which future gas pricing and contract terms can be developed.

- **Roger Bounds**, VP, Global Gas, Shell
- **Stéphane Caudron**, Head of LNG, Gunvor
- **Ernie Thrasher**, Chief Executive Officer, Xcoal & XLNG Energy & Resources
- **Chris Holmes** (Chair), Vice President, Global Gas & LNG, IHS

**FINANCING GAS MIDSTREAM & INFRASTRUCTURE THROUGH THE CYCLE** ..... LEVEL 4 - ROOM A

The current low oil and gas prices have introduced new challenges for the financing of gas upstream and midstream projects—while also potentially giving rise to new opportunities. In addition, low oil-linked LNG prices have cast a shadow over prospective liquefaction projects in North America and globally. Meanwhile capex budgets are being slashed across the industry, and the sovereign financing capability of key gas-producing countries is also reduced by the low price environment. This situation could create new opportunities for financial investors able to develop financing structures suitable for this environment—and those willing to take on higher levels of risk. What new strategies will evolve to finance tomorrow's infrastructure needs?

- **Duncan Caird**, Managing Director; Head of Project & Export Finance, Americas, HSBC Securities
- **David Campbell**, Chief Executive Officer, InfaREIT
- **Alastair Maxwell**, Managing Director, Goldman Sachs
- **Salim Samaha**, Partner, Global Infrastructure Partners
- **Michael Smith**, Chairman, CEO & Founder, Freeport LNG
- **Bob Ineson** (Chair), Managing Director, North American Natural Gas & Global LNG Research, IHS

**NORTH AMERICAN SHALE-PRODUCTIVITY PROGRESS** ..... LEVEL 4 - ROOM D

Major strides in drilling and completion efficiency have proved to be a potent counterweight as drilling activity has dropped in response to plunging oil and gas prices over the past two years. How has the greater effectiveness of drilling, improved efficiency of fracking and recompletions, and greater success in identifying sweetspots, reduced costs and enabled production growth in an era of low prices?

- **Hans-Christian Freitag**, VP, Integrated Technology, Baker Hughes
- **Greg Leveille**, General Manager, Unconventional Reservoirs Technology Program, ConocoPhillips
- **Mark Zoback**, Benjamin M. Page Professor of Geophysics, Stanford University
- **Stephen Beck**, Senior Director, North American Supply, IHS
- **Jim Lockhart** (Chair), Director, North American Supply, IHS

**FUTURE OF ASIA'S GAS MARKETS** ..... LEVEL 4 - ROOM J

Fuel supply choices are being made differently in the well-established markets of Japan and Korea -- contrasted with those in developing markets of South and Southeast Asia. Does the coming global gas surplus more widely enable policies for gas to effectively balance power systems and compete with abundant regional coal resources?

- **Kunio Nohata**, Senior Executive Officer, Tokyo Gas
- **Sampe Purba**, Head of Natural Gas Commercialization Division, SKK Migas
- **Chandima Weerakkody**, Minister of Petroleum Resources Development, Sri Lanka
- **Erik Darner**, Senior Consultant, IHS
- **Ronald Kapavik** (Chair), Managing Director, Asia-Pacific Energy, IHS

**ENERGY & PETROCHEMICALS: NEW CHALLENGES, NEW OPPORTUNITIES .....** GEORGE R. BROWN - ROOM 370A


The decline in crude oil prices has raised uncertainties regarding the near term impact in global chemical markets. How future price trends evolve in the coming 12 to 24 months will have a significant impact on regional competitiveness and future decisions regarding new capital investments in the chemical value chain. The decline in crude oil prices over the past year provided welcome competitive relief for the European, Latin American and Asian petrochemical industries, although it also brings with it a number of challenges. Falling crude oil prices reduce feedstock costs for the predominantly naphtha fed industry, however, while lower inputs costs were welcomed, savvy buyers of products and intermediates see the direction of crude and delay buying decisions causing volatility in pricing in many markets. In North America and the Middle East, how will lower crude oil prices impact overall company profitability? Ethane or gas based petrochemical investments in North America do not carry the same high profile ROI as seen in the past five years. How will this impact the pace of approving new investments in North America (and other regions)?

- **Mohammad Husain**, President & CEO, EQUATE Petrochemical Company
- **Mark Lashier**, Executive Vice President, Commercial, Chevron Phillips Chemical
- **Spencer Brandon**, Vice President, Oil, Gas & Chemicals, North America, ABB Group
- **Mark Eramo** (Chair), Vice President, Chemicals, IHS

12:45 PM - 2:05 PM

**LUNCHEON & KEYNOTE**..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Hon. Ernest Moniz**, Secretary of Energy, United States Department of Energy
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

2:15 PM - 3:25 PM

**MINISTERIAL PLENARY DIALOGUE** ..... LEVEL 4 - ROOM EFHI


- **Hon. Jim Carr**, Minister of Natural Resources, Canada
- **Hon. Pedro Joaquín Coldwell**, Secretary of Energy, Ministry of Energy of Mexico
- **Hon. Josh Frydenberg**, Minister for Resources, Energy & Northern Australia, Australia
- **HE Yuval Steinitz**, Minister of National Infrastructure, Energy & Water Resources, Israel
- **Carlos Pascual** (Chair), Senior Vice President, Global Energy, IHS

Russian, Chinese & Spanish Translation 

3:35 PM - 4:45 PM

**GAS MARKETS PLENARY** ..... LEVEL 4 - ROOM EFHI

- **Martin Houston**, Founder, Parallax Energy
- **Klaus Schäfer**, Chief Executive Officer, Uniper
- **Chris Holmes** (Chair), Vice President, Global Gas & LNG, IHS

Russian & Chinese Translation **MIDSTREAM PLENARY** ..... LEVEL 4 - ROOM BC

- **Greg Armstrong**, Chairman & CEO, Plains All American
- **Gregory Ebel**, Chairman, President &, CEO, Spectra Energy
- **Jim Teague**, Chief Executive Officer, Enterprise Products Partners
- **Ed Kelly** (Chair), Managing Director, Americas Gas & Power Consulting


4:45 PM - 5:00 PM

**BREAK**

5:00 PM - 6:15 PM

**THE FUTURE OF AMERICAS E&P PLENARY** ..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **David Hager**, President & CEO, Devon
- **Ali Moshiri**, President, Chevron Africa & Latin America Exploration & Production
- **Lorenzo Simonelli**, President & CEO, GE Oil & Gas
- **Scott Sheffield**, Chairman & CEO, Pioneer Natural Resources
- **Daniel Yergin** (Chair)

Russian & Chinese Translation 

6:20 PM - 7:30 PM

**CONFERENCE WIDE RECEPTION**..... LEVEL 2 FOYER

7:30 PM - 9:15 PM

**INSIGHT DINNERS**

CERAWEEK Insight Dinners provide a relaxed and informal opportunity for discussion among industry peers and experts. Each dinner centers on a key theme and features thought provoking remarks by distinguished commentators, followed by moderated discussion and Q&A with dinner participants. CERAWEEK Insight Dinners are open to all CERAWEEK delegates, but seating at each is limited and on a first come first served basis. **These sessions are closed to the media.**

**WOMEN LEADERS IN ENERGY**..... LEVEL 4 - ROOM K

This year's IHS CERAWEEK speakers and attendees include women who lead energy company upstream and downstream operations, government agencies, and financial entities. Yet women still represent only a small minority of board members and a smaller fraction of CEOs. The panel will explore the role of women as leaders in the energy industry. Who are they? How do they lead? And what opportunities will there be for women leaders in the future?

- **Elizabeth Littlefield**, President & CEO, Overseas Private Investment Corporation (OPIC)
- **Zenaida Monsada**, Secretary of Energy, Republic of Philippines
- **Nishi Vasudeva**, Chairman & Managing Director, Hindustan Petroleum
- **Cynthia Warner**, EVP, Strategy & Business Development, Tesoro
- **Antonia Bullard** (Chair), Vice President, Energy, IHS

**FUTURE OF SOLAR: THE NEXT FRONTIERS OF GROWTH**..... LEVEL 4 - ROOM C

New additions of solar PV capacity worldwide have increased for ten consecutive years. This session will explore the emerging frontiers for solar growth -- from utility scale to distributed generation to off-grid electrification -- and the implications for energy and geopolitics.

- **Hon. James Musoni**, Minister of Infrastructure, Republic of Rwanda
- **Francis O'Sullivan**, Director of Research, MIT Energy Initiative
- **Tom Werner**, President & CEO, SunPower
- **John Woolard**, VP, Energy, Google
- **Alex Klein** (Chair), Senior Director, Renewable Power, IHS

**CYBER-SECURITY & THE DIGITAL TRANSFORMATION: THE PROMISE & THE PERIL** ..... LEVEL 4 - ROOM D

The energy industry is adopting connected technologies and artificial intelligence systems at a rapid pace. At the same time, greater connectivity and integration of assets is exposing the industry to ever greater threats from cyber attacks. This dinner will address the promise and peril of the digital transformation, and how companies are approaching the new challenges presented by the connected world of the future:

- What strategies and actions are being taken to build energy system resilience against increasingly severe cyber threats?
- How can companies deal with the harsh reality that adversaries may already be inside their networks
- What lessons can energy learn from the experiences and practices of other infrastructure sectors?
- What is the role of government in energy resilience, and how can government and industry more effectively collaborate?

- **Michael Siegel**, Principal Research Scientist, MIT Sloan School of Management
- **HE Yuval Steinitz**, Minister of National Infrastructure, Energy & Water Resources, Israel
- **Paul Stockton**, Managing Director, Sonecon; Former Assistant Secretary of Defense for Homeland Defense, USDOB
- **Vimal Kapur** (Welcome Remarks), President, Honeywell Process Solutions, Honeywell
- **Tate Nurkin** (Chair), Senior Director, Aerospace, Defense & Security, Thought Leadership, IHS





**CLEAN POWER PLAN: WHAT NOW? ..... THE GROVE - VISTA ROOM**

The United States Supreme court ordered a stay of the EPA Clean Power Plan implementation on February 9th. Four possible scenarios capture what is likely to happen next. First, the courts may simply delay CPP implementation by a couple of years. Second, the EPA may have to reformulate its electricity sector CO2 emission regulations and roll out new proposed rules a few years down the road. Third, limited Federal regulation of electric sector CO2 emissions may take a back seat to a patchwork of state initiatives. Fourth, the limits on EPA actions may force new Federal climate legislation. This dinner discussion will explore these possible pathways and assess the impacts on the pace of change in the fuels and technologies employed to supply US electricity demands.

- **Nicholas Akins**, President & CEO, American Electric Power
- **Christopher Crane**, President & CEO, Exelon
- **Asim Haque**, Commissioner, Public Utilities Commission of Ohio
- **Tyler Reeder**, Partner, Energy Capital Partners
- **Barry T. Smitherman**, Partner, Energy Regulation, Vinson & Elkins
- **Eric Spiegel** (Welcome Remarks), President & CEO, Siemens USA
- **Lawrence Makovich** (Chair), Chief Power Strategist; Vice Chair, CERAWEEK, IHS

Hosted  
by**SIEMENS****SMART CITIES, SMART HOMES: THE CUSTOMER OF THE FUTURE ..... LEVEL 4 - ROOM G**

The pace of urbanization around the world is accelerating by the minute. By 2050, about 70% of the world's population is expected to live in urban areas. Over 60% of the land projected to become urban by 2030 is yet to be built. Reducing the resource intensity of urbanization presents one of the biggest opportunities to tackle climate change while enabling economic growth. In parallel to growing urbanization, the accelerating trend towards integration of the "virtual" with the "physical" due to the advent of new technologies could provide cost effective solutions to improve quality of life, meet the needs of the residents and help reduce carbon footprint. This dinner will explore the convergence of new technologies and urbanization to understand the customer of the future, and what this means for the energy.

- **Kent Larson**, Co-Director, City Science Initiative, MIT Media Lab
- **Nina Bhatia**, Managing Director, Connected Home, Centrica
- **Andrew Bennett**, SVP, Infrastructure, Schneider Electric
- **Steven Koonin**, Director, NYU Center for Urban Science & Progress
- **Atul Arya** (Chair), Senior Vice President, IHS Energy, IHS

**US ENERGY POLICY IN AN ELECTION YEAR & BEYOND ..... LEVEL 4 - ROOM J**

What challenges will the 2016 election year present for U.S. energy policy, globally and domestically, what role will it play in the election campaign and for the new US President?

- How should we understand election rhetoric on energy? What is real behind the surface?
- Can the United States modernize its pipeline infrastructure, or did oil and gas transit infrastructure die with Keystone?
- Does the Supreme Court freeze on the Clean Power Plan unravel U.S. climate commitments at Paris and, if so, what does that mean for the geopolitics of climate change?
- Can the U.S. manage the Sunni/Shia oil wars for market share, keep the Iran nuclear agreement alive, and retain traditional alliances with Saudi Arabia, UAE and Kuwait?
- Does the U.S. have leverage through energy policy, and if it does, how should it be used?
- **Jason Bordoff**, Professor of Professional Practice in International & Public Affairs; Founding Director, Center on Global Energy Policy, Columbia University
- **Karen Harbert**, President & CEO, US Chamber of Commerce Institute for 21st Century Energy
- **Michael Levi**, David M. Rubenstein Senior Fellow for Energy & the Environment, Council on Foreign Relations
- **Elizabeth Rosenberg**, Senior Fellow & Program Director, Center for a New American Security
- **Carlos Pascual** (Chair)

## THURSDAY, 25 FEBRUARY

7:30 AM - 8:40 AM


**BREAKFAST & STRATEGIC DIALOGUES****(CHOOSE ONE)**

Strategic Dialogues provide insights and presentations on key strategic topics; followed by interactive discussion among the presenters and between session participants and panelists.

**HOW EUROPE IS MANAGING ITS ENERGY TRANSITION ..... LEVEL 4 - ROOM C**

Over 266 GW of renewables capacity have been added in Europe since 2000 and the region is expected to add more than 309 GW over the next 16 years led by wind and solar technologies. This will be over twofold the capacity added in the US within the same period. By 2030, renewables including hydro will account for over 45% of the region's total power generation, compared to 18% in the US. Intermittent renewable generation on this scale will require all sections of the power system—distribution, generation and transmission— to become much more flexible. The IHS base case planning scenario expects the transformation to cost almost US \$1 trillion through 2030. This session will focus on the opportunities and challenges associated with this ongoing build out of capacity by exploring: How will incumbent players adapt to this new reality? How will transmission and distribution system operators integrate a significant amount of distributed and intermittent generation in flat demand growth markets? How will mature renewables technologies compete with conventional generation sources? How will this energy transition be financed?

- **Laurent Yana**, Vice President Strategy, Engie
- **Michel Derdevet**, Secretary General & Member of the Board, ERDF
- **Holger Lösch**, Member of the Executive Board, Federation of German Industries
- **Jeannette Smits van Oyen**, Head of EMEA Utilities Investment Banking, JP Morgan
- **Eduard Sala de Vedruna** (Chair), Senior Director, European Power & Renewables, IHS

French  
Translation 

**NORTH AMERICA: POWER LOGISTICS & THE NEW FUEL DYNAMIC ..... LEVEL 4 - ROOM G**

The relative cost of coal and gas has shifted radically creating a rivalry to serve power generation demand. The logistics of the two fuels are somewhat different and while this shift has provided benefits and opportunities, it also has introduced new dynamics, complexities, and risks to the fuel delivery systems and optionality/reliability of the power grid. This strategic dialogue will consider how the growing role of natural gas in power generation has created structural and operational challenges for the railroads, coal buyers and sellers, and for power generators trying to ensure firm fuel supply and a reliable power grid.

- **Andy Blumenfeld**, VP, Analysis & Strategy, Arch Coal
- **Steve Bobb**, EVP & CMO, BNSF Railway
- **Brian Fuller**, Coal Services Director, Southern Company
- **Rob Hardman**, VP, Coal Supply, Dynegy
- **Jim Thompson** (Chair), Senior Director, North American Coal, IHS

Hosted  
by **EnergyCapital**  
Partners

**LATIN AMERICA RENEWABLES HEATING UP ..... LEVEL 4 - ROOM A**

Latin America has long been defined as one of the least carbon intensive power markets. Strengthened clean energy policies in Chile, Mexico, Colombia, Argentina, and Brazil point to continued renewables growth across the region. Meanwhile, many of the region's most hydro dependent markets including Brazil and Colombia have struggled with the impacts of prolonged droughts and are looking at innovative approaches to attract more investment in dispatchable thermal resources to stabilize their power system. How will each market balance meeting its clean generation goals while also attracting sufficient thermal investors? Which technologies and development strategies are best positioned? Does a renewables boom drive the need for additional thermal investments or emerge as a competitor for share in the generation mix?

- **Jose Aparicio**, VP, Power & Gas Mesoamerica, Siemens
- **César Hernández Ochoa**, Undersecretary of Electricity, Ministry of Energy of Mexico
- **Stéphane Landry**, Managing Partner, Brookfield
- **Lluís Noguera**, Director, Strategy & Business Development, Global Power Generation
- **Timothy Stepure** (Chair), Director, Latin America Energy, IHS

**EPA'S CLEAN POWER: MANAGING UNCERTAINTY** ..... LEVEL 4 - ROOM D

The US EPA issued the final rule for power plant carbon emissions in August 2015, known as the Clean Power Plan (CPP). Twenty seven states have filed lawsuits opposing the new rule; eighteen have filed arguments supporting it. Despite the uncertainty of its final disposition, many states are working with stakeholders in preparing State Implementation Plans. On 9 February 2016, the US Supreme Court ordered a stay of the CPP implementation until the completion of the judicial review. Panelists from state regulatory agencies and major utilities will discuss their strategies and actions in managing the CPP amid legal uncertainties, possible evolution of the CPP, what state and federal policies may be implemented beyond the CPP, and how the power generation mix, fuel consumption, and carbon emissions may evolve over the coming decades.

- **Toby Baker**, Commissioner, Texas Commission on Environmental Quality
- **Jack Ihle**, Director, Environmental Policy & Emerging Technology, Xcel Energy
- **Asim Haque**, Commissioner, Public Utilities Commission of Ohio
- **Scott Weaver**, Manager - Strategic Policy Analysis, American Electric Power
- **Jone-Lin Wang** (Chair), Vice President, Global Power, IHS

**TEXAS POWER: SHAPING THE FUTURE** ..... LEVEL4 - ROOM J


Texas leads the nation in transitioning its power system for the future. Environmental regulations, renewable resources, and ensuring the reliability of the electrical grid are key issues confronting the region. This session will engage policymakers and stakeholders directly involved in shaping the future of the region's power market.

- **Hunter Hunt**, President & CEO, Hunt Consolidated Energy
- **Bill Magness**, President & CEO, Electricity Reliability Council of Texas
- **Donna Nelson**, Chairman, Texas Public Utility Commission
- **Patrick Woodson**, Chairman, Wind North America, E.ON
- **Michael Pickens** (Chair), Associate Director, North American Power Market Fundamentals, IHS

**THE FUTURE OF ASIA'S POWER MARKETS: REDEFINING FUEL COMPETITION** ..... LEVEL4 - ROOM B

The next phase of Asia's power market expansion will significantly impact plans for energy resource developments worldwide and long term climate goals. As global fuel markets face structural oversupply, a sizeable quantity of LNG and coal will be looking to compete for existing as well as uncontracted Asian power demand. The growing appetite for renewables, concerns over air quality, and the need to manage generation costs and subsidies present further challenges. What are the evolving power business models, market structures, policies, and technology options across Asia's established and most promising power markets; and the opportunities, challenges, and risks for fuel marketers, project developers and investors?


- **Heyn-Bin Lee**, Vice President, Korea Electric Power Corporation
- **Zenaida Monsada**, Secretary, Republic of the Philippines Department of Energy
- **Dinh The Phuc**, Deputy Director General, Electricity Regulatory Authority of Vietnam
- **James Ooi** (Chair), Senior Director, Asia-Pacific Gas & Power, IHS

Russian  
Translation 

**ELECTRICITY CONSUMERS: WHAT DO THEY WANT?** ..... LEVEL4 - ROOM K

Consumer behaviors often reveal consumer preferences that differ from the conventional wisdom. This session will focus on consumer actions regarding the willingness to pay more for clean energy, the desire to access real time consumption information and value of reliability in electric service.

- **Alexander Edwards**, President, Strategic Vision
- **Kevin Yates**, President, Siemens Energy Management, USA
- **Badar Khan** (Welcome Remarks), President & CEO, Direct Energy
- **Kristian Bodek** (Chair), Director, North American Power, IHS

Russian  
Translation 

Hosted  
by

**centrica**

8:50 AM - 9:55 AM

## NORTH AMERICAN POWER CEO PLENARY..... LEVEL 2 - BALLROOM OF THE AMERICAS


- **Nick Akins**, Chairman, President & CEO, American Electric Power
- **Christopher Crane**, President & CEO, Exelon
- **Thomas May**, Chairman, President & CEO, Eversource Energy
- **Lawrence Makovich** (Chair), Chief Power Strategist; Vice Chair, CERAWEEK, IHS

 Russian & Chinese  
Translation 

9:55AM - 10:25 AM

## ELECTRIC POWER AT THE CROSSROADS: A GLOBAL VIEW..... LEVEL 2 - BALLROOM OF THE AMERICAS


- **Peter Terium**, Chief Executive Officer, RWE
- **Daniel Yergin** (Chair)

 Russian & Chinese  
Translation 

10:25 AM - 11:25 AM

## POWER MARKETS, POLICY & TECHNOLOGY PLENARY..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Lisa Davis**, Member of the Managing Board, Siemens
- **Mohamed Al Hammadi**, Chief Executive Officer, Emirates Nuclear Energy Corporation
- **Enrique Ochoa Reza**, Chief Executive Officer, Federal Electricity Commission of Mexico
- **Carlos Pascual** (Chair)

 Russian & Chinese  
Translation 

### ENERGY INNOVATION PIONEER SHOWCASE

LOCATED NEXT TO THE LEVEL 2 ESCALATORS ON THE WEST SIDE OF THE HOTEL

Current and past pioneers will present their company, technology, and recent milestones during the breaks in the main agenda.

11:25 AM - 11:55 AM

**GLOBAL POWER DIALOGUE** ..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Zhenya Liu**, Chairman, State Grid Corporation of China
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

11:55 AM - 12:05 PM

**BREAK** ..... LEVEL 4 - FOYER

12:05 PM - 1:15 PM

**STRATEGIC DIALOGUES**

Strategic Dialogues provide insights and presentations on key strategic topics; followed by interactive discussion among the presenters and between session participants and panelists.

**FUTURE OF COAL: WHEN IS THE UPTURN?** ..... LEVEL 4 - ROOM J

Coal markets have slumped into recession of a depth not seen since the 1990s, raising the hopes of some opponents to coal that the industry is at last moving into terminal decline. However, there will remain a vibrant and growing market for coal, while there are already signs emerging of the recovery that is to come. This session focuses on the causes of the industry's current ills and on what is already being done to address them, providing a guide to the survival of price recession that many players in the oil and gas industries might find useful for their future planning.

- **Adam Anderson**, President, T. Parker Host
- **Nicholas Glancy**, Chairman, Blackhawk Mining
- **Mark Levin**, Senior Research Analyst, BB&T Capital Markets
- **John H. Massey II**, Head of US Coal, BTG Pactual
- **David Price** (Chair), Senior Director, Global Steam Coal, IHS

**POWER SYSTEM & GRID OPERATIONS: KEEPING THE LIGHTS ON THROUGH****AN ERA OF CHANGE** ..... LEVEL 4 - ROOM K

The falling cost of wind, solar, battery storage, and energy management technology signals an era of change for power system planning and operations. Renewables introduce more variability into a system which must be carefully balanced at all times; batteries and automated demand management devices offer the possibility of much more granular, precise control. This session will focus on the coordination requirements emerging as transmission and distribution networks incorporate more demand-side management, distributed generation and storage technologies.

- **Jon Jipping**, EVP & COO, ITC Holdings
- **Chris Shelton**, Vice President & Chief Technology Officer, The AES Corporation
- **Jacob Worenklein**, Chairman & CEO, US Grid Company
- **Bob Yeager**, President, Power & Water Solutions, Emerson Process Management
- **Andy Lubershane** (Chair), Senior Analyst, Renewable Power & Grid Storage, IHS

**ELECTRIC POWER FINANCE: BALANCING RISK & RETURN** ..... LEVEL 4 - ROOM A

Power sector capital requirements are growing as interest rates move up from historically low levels and policy initiatives gain more traction. This session focuses on managing the risks and reward trade-offs in the future electric power investment climate.

- **Jim Hempstead**, Associate Managing Director, Moody's Investors Service
- **Robert Hoglund**, SVP & CFO, Consolidated Edison
- **Pete Labbat**, Partner, Energy Capital Partners
- **Brent Ridge**, VP, Corporate Services; Chief Financial & Risk Officer, Energy Northwest
- **Brady Sadek**, Managing Director; Head of Power & Utilities Investment Banking, Mizuho Bank Americas
- **Parker Littlehale** (Chair), Associate Director, North American Power Market Fundamentals, IHS

**RENEWABLE POWER: EXPECTATIONS FOR SCALE** ..... LEVEL 4 - ROOM C

As wind and solar costs fall, policymakers are setting more ambitious targets for renewables growth. This session will focus on the drivers and challenges of scale for the renewable power sector. What are effective policies and regulatory frameworks for stimulating renewables investment? What are the changes that renewable power expansion is forcing in the operation of power systems? What are the implications for fuel competition on a global scale?

- **Elizabeth Littlefield**, President & CEO, Overseas Private Investment Corporation (OPIC)
- **Mike O'Sullivan**, Senior Vice President, NextEra Energy Resources
- **Irene Rummelhoff**, EVP, New Energy Solutions, Statoil
- **Tom Werner**, President & CEO, SunPower
- **John Woolard**, VP, Energy, Google
- **Alex Klein** (Chair), Senior Director, Renewable Power, IHS

**ELECTRIC MARKET STRUCTURE: CONTINUED EVOLUTION** ..... LEVEL 4 - ROOM D

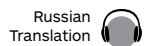
North American power systems are responding in a variety of ways to the challenge implementing the right mix of market forces and regulatory processes to shape power sector outcomes. This session will compare and contrast the evolution of power industry structures in the North America.

- **John Bear**, President & CEO, MISO
- **Cheryl LaFleur**, Commissioner, Federal Energy Regulatory Commission
- **Bill Magness**, President & CEO, Electricity Reliability Council of Texas
- **Andy Ott**, President & CEO, PJM Interconnection
- **Doug Giuffre** (Chair), Director, North American Power Market Fundamentals, IHS

**THE POWER GENERATION MIX: BALANCING COST, SECURITY & THE ENVIRONMENT** ..... LEVEL 4 - ROOM B

Flexibility is one of the most valuable things about electric power. Just about anything containing energy can be turned into electricity—coal, oil, natural gas, uranium, wood chips, sunlight, wind, ocean waves, biomass, trash—even used tires. Around the globe countries with abundant or scarce resources face challenges balancing multiple objectives when managing power generation mix. Panelists from Japan, UAE, and the US will discuss their power generation mix issues and targets, key uncertainties, policies and market structure deployed in managing the mix, and lessons learned.

- **Hirohide Hirai**, Director-General, Agency for Natural Resources & Energy, METI, Japan
- **Marc Potkin**, VP, Power Marketing, Entergy Wholesale Commodities
- **David Scott**, President, IDG
- **Jone-Lin Wang** (Chair), Vice President, Global Power, IHS

**NEW POWER TECHNOLOGIES: INNOVATING TO MEET THE CLIMATE CHANGE IMPERATIVE** ..... LEVEL 4 - ROOM G

When it comes to addressing climate change, the power sector is widely expected to do much of the heavy lifting. Recent improvements in the cost and performance of wind, solar, and battery storage, as well as a proliferation of new IT-enabled demand-side technologies are reinforcing that view and prompting additional questions. What's next on the technology horizon? How are models of innovation evolving in the face of new market realities like low fuel prices and reduced risk tolerance? And what are effective company strategies for evaluating and adopting emerging technologies? This session will explore these questions and provide an on-the-ground perspective from a panel of leading practitioners, including members of the 2016 Class of Energy Innovation Pioneers.

- **Hans Kobler**, Managing Director, Energy Impact Partners
- **Tanuj Mohan**, CTO & Co-Founder, Enlighted
- **Dale Prouty**, Chief Executive Officer, Tri Alpha Energy
- **Throop Wilder**, President, CEO & Co-Founder, 24M
- **Kristian Bodek** (Chair), Director, North American Power, IHS

1:25 PM - 2:35 PM

**LUNCHEON & KEYNOTE**..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **Norman Bay**, Chairman, Federal Energy Regulatory Commission
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

2:45 PM - 3:45 PM

**CLIMATE CHANGE PLENARY: WHAT'S AHEAD?**.. LEVEL 4 - ROOM EFHI


- **Anita Marangoly George**, Senior Director, Energy & Extractives, World Bank Group
- **Didier Holleaux**, Executive Vice President, Engie
- **Robert Orr**, UN Special Advisor on Climate Change; Dean of the School of Public Policy, University of Maryland
- **Carlos Pascual** (Chair)

Russian & Chinese  
Translation 

3:45 PM - 4:10 PM

**PRESIDENTIAL DIALOGUE**..... LEVEL 4 - ROOM EFHI

- **HE Paul Kagame**, President, Republic of Rwanda
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

4:10 PM - 4:25 PM

**BREAK**..... LEVEL 4 - FOYER

4:25 PM - 5:35 PM

**INFRASTRUCTURE & TECHNOLOGY PLENARY:  
THE SHAPE OF THINGS TO COME**..... LEVEL 4 - ROOM EFHI

- **Steve Bolze**, President & CEO, GE Power
- **Russ Girling**, President & CEO, TransCanada
- **Kim Greene**, EVP & COO, Southern Company
- **Hirohide Hirai**, Director-General, Agency for Natural Resources & Energy, METI, Japan
- **Lawrence Makovich** (Chair), Chief Power Strategist; Vice Chair, CERAWEEK, IHS

Russian & Chinese  
Translation 



5:50 PM - 6:30 PM

## IHS EXPERT DISCUSSIONS

IHS Expert Discussions provide presentations and outlooks by IHS analysts followed by interactive discussions. Each session provides insight on strategies, risk, and opportunities in a key energy area. **These sessions are closed to the media.**

**ASIA & COP 21: WHICH FUTURE OF FUEL CHOICES FOR ASIA'S POWER SECTOR?** ..... GEORGE R. BROWN - ROOM 370B  
The world's largest and fastest growing power markets in Asia are evolving rapidly. The region continues to depend heavily on coal, with China building 60 GW of new coal-fired power last year alone and South Korea, Indonesia, and India alike also with aggressive new coal programs. But with climate change obligations becoming increasingly evident for emerging Asia, where some of the world's largest emitters are, there are critical questions regarding future fuel choices in China, India, Southeast Asia, and Northeast Asia. In this session IHS experts will share their latest insights on how different drivers in different countries are leading to changes in Asia's power sector development, and outline key risks and opportunities for project developers, fuel suppliers, equipment suppliers, and engineering/construction companies.

- **Julien Bédin**, Associate Director, China Energy, IHS
- **Gauri Jauhar**, Director, Asia-Pacific Energy, IHS
- **James Ooi**, Senior Director, Asia-Pacific Gas & Power, IHS
- **Jenny Yang**, Associate Director, China Oil & Gas, IHS
- **Xizhou Zhou** (Chair), Senior Director, Asia Gas & Power, IHS

**NORTH AMERICA SHALE GAS RELOADED: MARKETS PERSPECTIVE**..... GEORGE R. BROWN - ROOM 370A  
The evolving shale gas resource base in North America continues to expand and drop in cost. Shale Gas Reloaded, IHS Energy's thorough reassessment of the resource base in the US Lower 48 and Canada, concludes that 1400 Tcf of natural gas is recoverable at a break even Henry Hub price of \$4/MMBtu or less. This represents a 66% increase from a 2010 IHS Energy estimate that more than 900 Tcf could be produced at a \$4/MMBtu breakeven price, after accounting for the 176 Tcf of gas produced during 2010-15. This has profound long-term producer and consumer implications for North American and global natural gas markets.

- **Raoul LeBlanc**, Vice President, North America Upstream & Finance, IHS
- **Keith McWhorter**, Associate, North American Natural Gas, IHS
- **Curtis Smith**, Director, Upstream Consulting, IHS
- **Stephen Beck** (Chair), Senior Director, North American Supply, IHS

**LATIN AMERICA GAS & POWER TRENDS** ..... LEVEL 4 - ROOM D  
Latin American faces several power market challenges, including weakening demand, meeting renewable energy targets, and the viability of new LNG-to-wire developments across the region. This session will focus on these issues and other emerging opportunities in the gas and power sectors across Latin America.

- **Roberto Cunha**, Associate Director, Latin America Gas & Power, IHS
- **Muched Nassif**, Research Associate, Power, IHS
- **Emanuel Simon**, Sr Research Analyst, IHS
- **Raul Timponi**, Associate, Latin America Gas & Power, IHS
- **Timothy Stephure** (Chair), Director, Latin America Energy, IHS

**NORTH AMERICAN POWER TRENDS**..... LEVEL 4 - ROOM A  
Transformation of the US electric power sector is underway. 2015 was a record year on many fronts: a decade low in average natural gas prices, retirement of approximately 5% of the coal-fleet, an increase of over 40% in solar PV installed capacity and several significant policy milestones. IHS Energy experts will share their views on key policies and associated implications (including the recent extension of renewable tax credits and the fate of the Clean Power Plan) and market fundamentals that will further shape the power sector in the decade ahead.

- **Kristian Bodek**, Director, North American Power, IHS
- **Doug Giuffre**, Director, North American Power, IHS
- **Alex Klein**, Senior Director, North American Renewable Power, IHS
- **Meg McIntosh** (Chair), Senior Director, North American Power, IHS

**ENERGY INFRASTRUCTURE SECURITY..... LEVEL 4 - ROOM B**

Energy infrastructure is increasingly at risk, particularly in the Middle East but also elsewhere. More actors in command of more and better capabilities are generating a diverse range of security challenges for which private companies and government organizations need to prepare. This session will assess current and emerging risks emanating from geopolitical competitions, sovereignty challenges, non-state armed groups, emerging technologies and cyber. It will also introduce intelligence methods and techniques useful for mitigating risks and anticipating new threats in uncertain and complex environments.

- **Carlos Cardenas**, Deputy Head of Latin America Forecasting, Country Risk & Forecasting Team, IHS
- **Hugo Foster**, Senior Analyst, Geospatial Analysis, Country Risk & Forecast Team, IHS
- **Tate Nurkin** (Chair), Senior Director, Aerospace, Defense & Security, Thought Leadership, IHS

**NORTH AMERICAN GAS & POWER SCENARIOS: INCORPORATING POLICY RISK IN STRATEGIC PLANNING..... LEVEL 4 - ROOM J**

Environmental and energy policy uncertainty is a dominant risk factor in North America's power and gas markets. In this interactive session we will outline how IHS approaches this key risk factor in the scenarios and the strategic implications for market participants.

- **Barclay Gibbs**, Senior Director, North American Power Modeling & Analytics, IHS
- **Ed Kelly**, Managing Director, Americas Gas & Power Consulting, IHS
- **Mark Griffith** (Chair), Senior Director & Advisory, North American Gas & Power Scenarios, IHS

**POWER GENERATION & STORAGE TECHNOLOGY TRENDS ..... LEVEL 4 - ROOM G**

Major technological changes are occurring in power supply for both generation and storage of electricity to magnitudes not seen for some time. Gas turbine technology improvements are resulting in higher performance both in efficiency and flexibility and at a lower cost per unit. Battery storage is evolving rapidly relative to previous decades enable by the synergies with transportation applications. Solar and wind continue to experience performance improvements driven by advances in manufacturing and innovative applications of data analytics resulting in lower electricity costs. In this session we will explore these trends and the impact it is having on transforming the power sector.

- **Matt DaPrato**, Associate Director, Americas Renewable Power, IHS
- **Andy Lubershane**, Senior Analyst, Renewable Power & Grid Storage, IHS
- **Wade Shafer**, Senior Analyst, Renewable Power
- **Roger Kranenburg** (Chair), Director, Global Power, IHS

**TWO PART HARMONY: MEXICO, US GAS & POWER DYNAMICS ..... LEVEL 4 - ROOM L**

Just as the "shale gale" reinforces the interdependence between the US natural gas and power sector, it is also reinforcing the Mexico's dependence on imports as a cheap alternative to power its economy. Likewise, as Mexico continues to forge ahead with its energy reforms, the transformation of the natural gas sector will significantly influence the power markets evolution. The challenge of this two part harmony is coordination---gas-electric coordination, and coordination between countries.

- **David Crisostomo**, Associate Director, Latin American Gas & Power
- **Nikolay Filchev**, Associate Director, North American Natural Gas
- **Marcela Rosas**, Director, North American Natural Gas
- **Bob Ineson** (Chair), Managing Director, North American Natural Gas & Global LNG Research, IHS

**IHS OUTLOOK FOR FUEL PRICES & INTER-FUEL COMPETITION..... LEVEL 4 - ROOM C**

The end of the great commodity super cycle has left excess supply across the entire energy spectrum setting up a global race to the bottom featuring inter- and intra-fuel rivalries with significant economic and geopolitical ramifications. IHS Experts will explore the key issues, rivalries, and price expectations for natural gas, oil, coal, and LNG globally. They will answer the questions: How does the inter-fuel rivalry play out in Europe; Is there a future for coal?; Is the United States the global swing supplier for oil?; Does Asia demand hold the keys to future global energy prices?; Does Henry Hub become the new global benchmark?; Will the United States gas/oil dynamic keep global oil and gas connected?

- **David Price**, Senior Director, Global Steam Coal, IHS
- **Catherine Robinson**, Senior Director, Gas, Power Renewables (Europe), IHS
- **James Stevenson**, Director, North American Coal, IHS
- **Gautam Sudhakar**, Director, Global LNG
- **Spencer Welch**, Senior Manager, IHS
- **Samuel Andrus** (Chair), Senior Director, North American Natural Gas, IHS

6:20 PM - 7:30 PM

**CONFERENCE WIDE RECEPTION**..... LEVEL 2 - FOYER

7:30 PM - 9:30 PM

**DINNER & TECHNOLOGY KEYNOTE**..... LEVEL 2 - BALLROOM OF THE AMERICAS

- **JB Straubel**, Co-founder and Chief Technology Officer, Tesla Motors
- **Daniel Yergin** (Chair)

Russian & Chinese Translation 

## FRIDAY, 26 FEBRUARY


## PLENARIES

7:30 AM - 8:30 AM

**BREAKFAST & DIALOGUE** ..... LEVEL 2 - BALLROOM OF THE AMERICAS**REFLECTIONS ON CERAWEEK 2016:  
WHERE DO WE GO FROM HERE?**Russian & Chinese  
Translation 


- **Antonia Bullard**, Vice President, Energy, IHS
- **Jim Burkhard**, Chief Researcher, Global Oil Markets & Energy Scenarios, CERAWEEK Vice Chairman, IHS
- **Roger Diwan**, Vice President, Global Energy & Finance, IHS
- **Michael Stoppard**, Chief Strategist, Global Gas & Vice Chair of CERAWEEK, IHS
- **Lawrence Makovich**, Chief Power Strategist; Vice Chair, CERAWEEK, IHS
- **Atul Arya** (Chair), Senior Vice President, IHS Energy, IHS

8:30 AM - 9:20 AM

**DEMOGRAPHICS & THE SECOND  
MACHINE AGE** ..... LEVEL 2 - BALLROOM OF THE AMERICASRussian & Chinese  
Translation 

- **Nicholas Eberstadt**, Henry Wendt Chair in Political Economy, American Enterprise Institute
- **Andrew McAfee**, Principle Research Scientist; Co-Director MIT Initiative on the Digital Economy.  
Author, *The Second Machine Age*
- **Zbyszko Tabernacki** (Chair), Vice President, Economics & Country Risk, IHS

9:20 AM - 10:00 AM

**PROSPECTS FOR THE MIDDLE EAST  
& THE WORLD** ..... LEVEL 2 - BALLROOM OF THE AMERICASRussian & Chinese  
Translation 

- **William Burns**, President, Carnegie Endowment for International Peace;  
Former US Deputy Secretary of State
- **Carlos Pascual** (Chair)

10:00 AM - 10:20 AM

**BREAK** ..... LEVEL 4 - FOYER

10:20 AM - 11:30 AM

**MIT PLENARY@CERAWEEK** ..... LEVEL 4 - ROOM EFHI

***FRONTIERS OF SCIENCE & INNOVATION:  
FUTURE TECHNOLOGIES TO MEET THE ENERGY  
& CLIMATE CHALLENGE***


Russian & Chinese  
Translation 

- **Robert Armstrong**, Director, MIT Energy Initiative; Chevron Professor of Chemical Engineering, Massachusetts Institute of Technology
- **Yet-Ming Chiang**, Professor, Materials Science & Engineering, Massachusetts Institute of Technology
- **Jeffrey Grossman**, Professor, Materials Science & Engineering, Massachusetts Institute of Technology
- **Kristala Jones Prather**, Associate Professor, Massachusetts Institute of Technology
- **Yogesh Surendranath**, Assistant Professor, Chemistry, Massachusetts Institute of Technology
- **Daniel Yergin** (Chair)

11:30 AM - 12:30 PM

**THE US & GLOBAL ENERGY FUTURE:  
POLICY PLENARY** ..... LEVEL 4 - ROOM EFHI

- **Hon. John Cornyn**, Majority Whip, United States Senate (Texas)
- **Hon. Lisa Murkowski**, Chairman, US Senate Energy & Natural Resources Committee (Alaska)
- **Daniel Yergin** (Chair)

Russian & Chinese  
Translation 

12:30 PM - 1:15 PM

**NETWORKING LUNCH** ..... LEVEL 4 - FOYER



