



agora

The New Map: Energy, Climate, and Charting the Future

Innovation Agora in Review
1–5 March 2021

ceraweek.com



Innovation Agora @ CERAWeek

The Innovation Agora @ CERAWeek fosters energy innovation and advances solutions to the world's greatest energy and sustainability challenges. The Agora provides an open marketplace for ideas, dialogue, new experiences, and connections. We are proud to host this exciting community of start-ups, technologists, investors, academics, energy companies and government officials – all dedicated to shared learning and exploration.

The program features unique formats, interactive dialogue, and conversations:

- Decarbonization Pathways
- Digital Transformation Technologies
- Mobility and the Built Environment
- Clean Power Technologies
- Innovation and Digital Workforce
- New Models of Finance and Investment

Our Virtual Agora Studios and Voices of Innovation included thought leaders, executives, and technologists driving change in the industry.



AGORA-X

Quick Stats



Key Themes

- **Decarbonization Pathways:** Hydrogen, CCUS, nuclear, storage, more
- **Digital Transformation Technologies:** Technologies, analytics, AI, ML, and cyber security
- **Mobility & Built Environment:** Vehicles, buildings, city of the future, and mobility
- **Innovation and Digital Workforce:** Diversity and inclusion, talent, and building innovation ecosystems
- **Clean Power Technologies:** Advanced technologies, renewables integration, and new supply chains
- **Models of Finance and Investment**



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How Will the Energy Innovation Ecosystem Evolve?

(from left) **Timothy Gardner** (Chair), Vice President, Power and Gas Consulting, IHS Markit;

Barbara Burger, President, Chevron Technology Ventures, Chevron Corporation;

Ashley Grosh, Vice President, Breakthrough Energy; and

Ilan Gur, Chief Executive Officer, Activate

Key Innovation Agora Speakers (select)



Susan Hockfield

President Emerita
& Professor of
Neuroscience, MIT



Ernest J. Moniz

President & Chief
Executive Officer, Energy
Futures Initiative



Walter Isaacson

Author and Professor
of History, Tulane
University



Barbara Burger

President, Chevron
Technology Ventures,
Chevron



Noubar Afeyan

Co-Founder &
Chairman of Moderna
and Founder & CEO,
Flagship Pioneering



Emily Reichert

Chief Executive Officer,
Greentown Labs



Nasir Hj Darman

Chief Technology
Officer, PETRONAS



Pratima Rangarajan

Chief Executive
Officer, OGCI Climate
Investments



Alan Nelson

Chief Technology Officer,
Abu Dhabi National Oil
Company (ADNOC)

Key Innovation Agora Speakers (select)



Dr. Sunita Narain

Director General,
Centre for Science and
Environment (CSE)



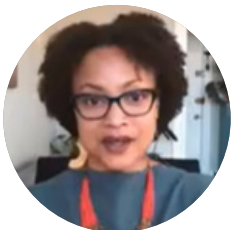
Ahmad O. Al-Khowaiter

Chief Technology Officer,
Saudi Aramco



Karl Johnny Hersvik

Chief Executive Officer,
Aker BP ASA



Shalanda Baker

Professor of Law, Public
Policy and Urban Affairs,
Northeastern University
School of Law, Co-Founder
& Co-Director, Initiative for
Energy Justice



Craig Hayman

Chief Executive Officer,
AVEVA



Bhushan Ivaturi

Senior Vice President,
Technology & Chief
Information Officer,
Enbridge Inc.



Maria Zuber

Vice President for
Research & E. A. Griswold
Professor of Geophysics,
MIT and Co-Chair,
President's Council of
Advisors on Science and
Technology (PCAST)



Diego Díaz Pilas

Global Head of
Ventures & Technology,
Iberdrola



Randy MacEwen

President & Chief
Executive Officer, Ballard
Power Systems Inc.

Key Innovation Agora Speakers (select)



Demosthenis Pafitis

Chief Technology Officer,
Schlumberger



Morag Watson

Vice president & Chief
digital innovation
officer, bp p.l.c.



Jon Hirschtick

Executive Vice President,
General Manager
Onshape and Atlas, PTC



Jennifer Holmgren

Chief Executive Officer,
LanzaTech



Laura Anderson

Senior Vice President,
Controls and Digitalization,
Siemens Energy



Jordan Ramer

Founder & Chief
Executive Officer,
EV Connect



Michl Binderbauer

Chief Executive Officer,
TAE Technologies



**Dr. Shahidah Mohd
Shariff**

Head, Technology
Research & Chief Executive
Officer, PETRONAS
Research



Maria Korsnick

President & Chief
Executive Officer,
Nuclear Energy
Institute

Agora Program Highlights

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- What Color Is My Hydrogen?
- The Future of AI & ML in the Oil & Gas Industry
- CCUS: Can it scale?
- What Happens to Mobility in the Post-pandemic World?
- Conversations in Cleantech: Powering the energy transition
- New Technologies for Measuring & Reducing Methane
- Utility-scale Batteries & Storage: What's ahead?
- Robots in the Energy Value Chain: What's ahead?
- EV Charging Infrastructure: Conquering range anxiety
- How Will the Energy Innovation Ecosystem Evolve?
- Digital Innovation & Grid Resilience
- Is Fusion Ready for Prime Time?
- New Frontiers for Manufacturing in a Low-carbon World
- How Is the Acceleration of Digital Technology Transforming Energy?
- Powering Decarbonization Through Artificial Intelligence

Agora Studios



New Technologies for Measuring & Reducing Methane

(from left) **Eleonor Kramarz** (Chair), Consulting Executive Director, IHS Markit;

Steve Hamburg, Chief Scientist, Environmental Defense Fund;

Daniel Droog, Vice President, Energy Transition, Chevron Corporation; and

Stéphane Germain, Chief Executive Officer, GHGSat Inc.



Utility-scale Batteries & Storage: What's ahead?

(from left) **Julian Jansen** (Chair), Associate Director, Consulting – Clean Technology & Renewables, IHS Markit;

Johannes Rittershausen, Chief Executive Officer, Convergent Energy + Power;

Andrew Tang, Vice President, Energy Storage & Optimisation, Wärtsilä; and

Roger Lin, Board Director, ESA

Agora Pods — Featuring exciting technology and innovative solutions

- The Future of Work & Safety with AI
- Rapid Manufacture of Perovskite PV Cells
- Global Emissions Monitoring from Space
- Harvesting the Coldness of the Universe
- Hydrogen Evolves from Promising to Possible
- Remote Autonomous Operations
- Chemistry Enables the Future of Mobility

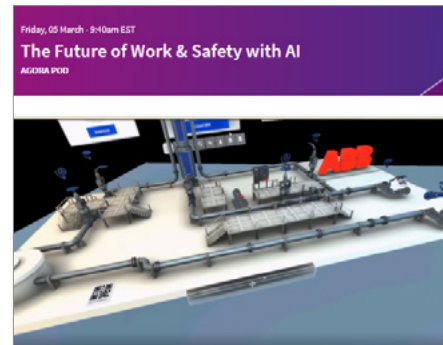
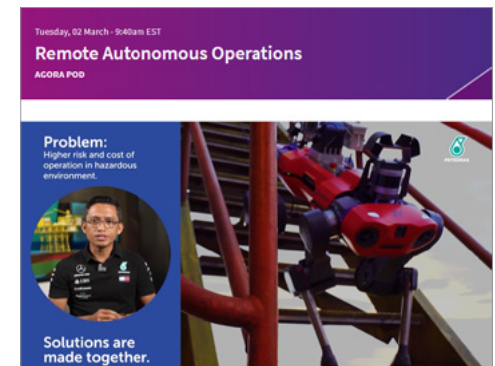


ABB | The Future of Work & Safety with AI

Presented by **Matilda Steiner-Arvidsson**, Global Digital Product Manager, ABB Inc.



PETRONAS | Remote Autonomous Operations

Presented by **Shah Rizal Dahlan**, Head, Group Technical Solutions (GTS) & Head, Planning & Corporate Services (P&CS), PETRONAS

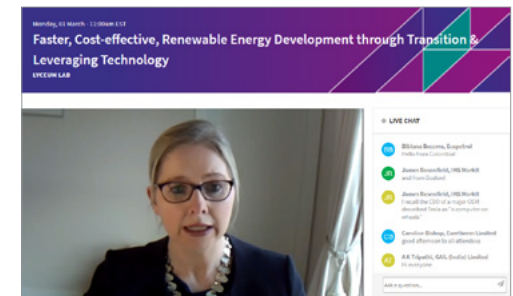
Lyceum Labs — Interactive learning sessions with thought leaders and innovators

- Faster, Cost-effective, Renewable Energy Development
- How AI & ML Are Transforming Industrial Operations
- SPACS: Funding the future of energy innovation?
- Cybersecurity: Protecting the digital energy ecosystem
- A Clean Energy Future: Modeling using open source data & models



SPACS: Funding the future of energy innovation?

Presented by **John Traugott**,
Managing Director, Credit Suisse



Faster, Cost-effective, Renewable Energy Development through Transition & Leveraging Technology

Presented by **Mary Quaney**, Group
Chief Executive Officer, Mainstream
Renewable Power

Partnership

CERAWeek Innovation Agora Partners help to build a culture of idea exchange, learning, and relationship-building between industry, government, and society to secure the global energy future.

The program integrates branding, knowledge contribution, media support, delegation support, hosting, and networking into a single, tailored strategy that supports the Partner's objectives.

Partner Benefits

- ✓ High-level engagement before, during, and after the conference
- ✓ Maximized impact and experience of your executives' participation
- ✓ Support by the CERAWeek Executive Steering Committee and a team of dedicated CERAWeek Partner Liaison Managers

This unique platform creates an opportunity for Partners to deepen relationships with key stakeholders, developing and sharing ideas and thought leadership, while enhancing their visibility and profile. CERAWeek Partners also benefit from access to exclusive CERAWeek private programs, networking, and meeting spaces. The former are reserved exclusively for CERAWeek's senior-most participants, providing an invitation-only track of designated professional communities. These interactive sessions draw on Partners' expertise and thought leadership contributions.

Agora Partners



Engage with the CERAWeek community throughout the year

Innovation Agora Conversations

CERAWeek Conversations—with senior executives, government officials, thought leaders, academics, technology innovators, and financial leaders—offer insights on the energy future and timely perspectives on critical issues and responses in the wake of the global pandemic and oil price volatility.

CERAWeek Conversations advance the latest discussions and debates by industry leaders on what's timely and vital for the energy industry and keep a finger on the pulse of technologies and the future of work, leadership, diversity, and inclusion.

View CERAWeek Conversations at **www.ceraweek.com** or on your favorite podcast channel.



5th India Energy Forum by CERAWeek

20-22 October 2021. New Delhi + Virtual.

Entering our fifth anniversary, the India Energy Forum by CERAWeek convenes an international community of 5,000+ delegates for dialogue and exchange of ideas from 400+ organizations across 45 countries. Previous participants have included Indian and international federal government ministers, regulatory heads, chief executives of Indian and international energy companies, and senior officials and thought leaders from across the technology, finance, automotive, petrochemical, environmental, and civil society spectrum. Discussions have ranged from key insights into the energy future and India's role in a world of transition to the country's hotbed of innovation and technology and its ecosystem for start-up enterprises that are transforming the energy landscape.

With the growing significance of climate and sustainability, this Forum provides an integrated platform for stakeholders across value chains and highlights the role of policies and regulations to enable goals of the energy transition in India, Asia, and the interconnections with global energy. For his inaugural address at the 2020 India Energy Forum, Prime Minister Narendra Modi outlined India's path to energy sustainability before leading his annual roundtable with CEOs of global energy organizations, which was held alongside the India Energy Forum.

For more information, go to **indiaenergy.ceraweek.com**.

40th CERAWeek

7-11 March 2022. Houston, TX + Virtual.

We look forward to welcoming you in person at CERAWeek, as we celebrates its 40th anniversary in Houston, 7-11 March 2022.



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About IHS Markit

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

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