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Welcome and Presentation of Smart Power Revolution Thought Leadership Report

Marc Fèvre
Baker McKenzie, London
Morning Keynote Address

Michael Polsky
Invenergy

James P. O’Brien
Baker McKenzie, Chicago
Moderator
New Technologies and Their Impact on Renewable Power

Pauline Doohan
SolarReserve

Peter George
Baker McKenzie, Chicago

Jai Khanna
Baker McKenzie, Chicago

Dan Shreve
MAKE Consulting

Marc Fèvre
Baker McKenzie, London
Moderator
Renewable Storage and its Financing

Dan Cary
Macquarie Capital (USA) Inc.

Alfred Griffin
NY Green Bank

Jonathan Poor
ENGIE Storage

Jeff Russell
Baker McKenzie, San Francisco

Evelyn Kim
Baker McKenzie, San Francisco
Moderator
Offshore Wind Lessons and Market Opportunities

Naoaki Eguchi
Baker McKenzie, Tokyo

Brook Knodel
Mott MacDonald

Brad Nicpon
Baker McKenzie, Toronto

Martin David
Baker McKenzie, Singapore
Moderator
Baker McKenzie.

RENEWABLES 2.0:
2ND ANNUAL GLOBAL RENEWABLE ENERGY CONFERENCE

NEW YORK CITY • APRIL 4, 2018
Afternoon Keynote Address: Best Practices in Corporate Sustainability and Renewables

Ran Tao
Estée Lauder Companies

Skip Rankin
Baker McKenzie, New York
Moderator
Smart Cities and Their Renewable Energy Underpinnings

Enrique Castillo  
Banco Sabadell Miami

Michael Delucia  
Sidewalk Labs

Maxine Ethier  
Baker McKenzie, Toronto

Stephan Feilhauer  
Macquarie Capital

Paula Moreno  
HERE Technologies

José Morán  
Baker McKenzie, Chicago
Moderator
Smart Cities and Their Renewable Energy Underpinnings
Smart Cities: What are they?

Mohanty, Choppali, Kougianos. Everything You wanted to Know about Smart Cities
Smart Cities: Why needed?

Cities Today

- 75% of world's resources and energy
- 80% of greenhouse gases


The United Nations Population Division's World Urbanization Prospects. License: CC BY 4.0

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What is the Future of the Energy System and Will Renewables Be the Disruptor?

Neil Gerber
IBM Global Markets

Sanjay Khanna
Baker McKenzie Whitespace Legal Collab

Michael Quinn
Oncor Electric Delivery

Patrick Woodson
E. ON North America

Mona Dajani
Baker McKenzie, Chicago
Moderator
Blockchain Consortia use cases

Energy, Environment & Utilities industry

Neil Gerber, IBM Global Markets
March 2018
Use cases on 1 page
GRID BALANCING

The Market Operator accesses behind-the-meter Distributed Energy Resources (DERs) like home batteries or batteries in electric vehicles to balance the transmission grid. Typically this happens by agreement via a smart contract between the User/Provider and the market operator, at various timeframes down to 1 minute.
ENERGY USE DISAGGREGATION

Energy usage can be disaggregated behind the meter for all types of energy users - industrial, residential or commercial. The goal is to not only be able to know how much energy a single user has been consuming, but understand the usage on a machine, appliance or singular entity level. Research has shown that this data transparency leads to much higher energy savings. In addition there is a trend in utility regulation to require this capability for end users.
3 RENEWABLE ENERGY CREDITS

Trading platforms already trade renewable energy generation credits from hydropower, wind energy, biomass plants, solar or geothermal plants. Blockchain makes it easier to track provenance of these credits as well as simplify audits and enhance transparency. In addition, tokens can be created that have an embedded carbon footprint offset, providing more consumable and bankable credits.
4 PEER-TO-PEER TRADING

Peer-to-Peer (P2P) energy trading is a novel paradigm of power system operation, where people can generate their own energy from Renewable Energy Sources (RESs) in dwellings, offices and factories, and share it with each other locally. Although not viable yet fully supported by most regulatory regimes, these types of transactions can enhance grid efficiency, and eventually, grid stability.
The confluence of Blockchain and Cybersecurity is still new. Device provenance for all RTUs and other monitored assets in the transmission and distribution grids can be protected by adding an additional security layer at the firmware level. This will be intrusive in nature, but with threat levels increasing this may be a solution that gains fast traction.
1 **GRID BALANCING**

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Update on Renewables in the US

Marisa Martin
Baker McKenzie, Chicago

Patricia McDonald
Baker McKenzie, Chicago

Kevin O’Brien
Baker McKenzie, Washington DC

James P. O’Brien
Baker McKenzie, Chicago
Moderator
Renewables 2.0: 2nd Annual Global Renewable Energy Conference
Mandarin Oriental New York
April 4, 2018