

1st Annual Global Platform of Leading Electricity Distribution Operators

27 January 2021, 14.00 — 17:00 CET

On an initial idea of Rosseti and Enel GI&N, organised and hosted online by E.DSO, EPRI and Eurelectric

#GlobalDSO21 @GlobalDso @EDSO_eu @eurelectric @EPRINews

Opening



Mark McGranaghan

Vice-President Innovation, EPRI

Housekeeping Rules

Video and audio

- Video and audio are allowed only for Speakers or Panelists.
- Speakers will be asked to switch audio OFF when not talking.

Participants Questions

- Participants can place their questions directly through the platform or the chat feature at the bottom right. Please direct your question or answer to “Everyone”.
- Indicate your name and company/institution when posting your question.
- The Moderator will select a couple of questions and ask the relevant speakers or panelists to comment.
- Raise the hand feature will not be used.



Digital Transformation

Preserve affordability through the digital energy technology

- Resilient communications
- Sensors, communications, and AI
- Smart maintenance and diagnostics

Mitigation (low-carbon future)

Advance an interconnected grid

- Clean energy resources:
Generation and storage
- Grid modernization to enable
efficient electrification
- Transmission

Create clean molecules from
clean electrons

- Hydrogen
- Ammonia
- Synthetic methane

Adaptation (grid resilience)

Mitigate climate impacts and
cyber/physical risks

- Grid modernization
- System hardening
- Cybersecurity
- Microgrids

Change grid design basis for
new weather normal

- Undergrounding
- Resilient T&D system

Making Energy More

Clean

Affordable

Reliable

Welcome and Keynote Speech

The value of shared creation of knowledge to
tackle the present and envision the evolution of
the distribution value chain



Christian Buchel

Director for Territories, Customers and
Europe, Enedis

Chair, E.DSO

Keynote Speech

Vision on Energy Transition as booster for Sustainable Development



Antonio Cammisecra

Head, Global Infrastructure & Networks,
Enel

Monitoring the Change — a global platform to track the transition

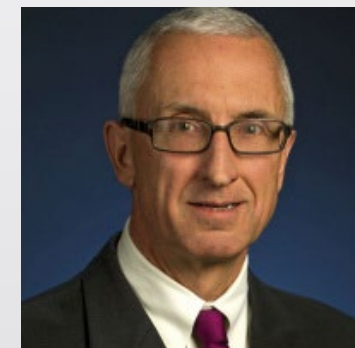


Roberto Zangrandi, Secretary General, E.DSO

Mark McGranaghan, Vice-President Innovation, EPRI



Kristian Ruby, Secretary General, Eurelectric



Panel Discussion

DSOs boosting the global Energy Transition



Moderator:

Mark McGranaghan

Vice-President Innovation, EPRI

Panel Discussion

DSOs boosting the global Energy Transition

Panelists:

Antonio Cammisecra, Head, Global Infrastructure & Networks, Enel

Kenny Mercado, Executive Vice President, Electric Utility, CenterPoint Energy

Maria Pope, President and CEO, Portland General Electric

John Borchert, Senior Director Energy Policy, Central Hudson Gas & Electric

Rob Sheridan, DSO Roadmap Development, National Grid US

Anthony Marone, President and CEO, Avangrid Networks

John Lee, Senior Director Xcel Energy

Maude Gauthier, Network Strategy Manager, Hydro Quebec

Rafael Lazzaretti, Distribution Commercial Director, CPFL Brazil

Panel Discussion

DSOs boosting the global Energy Transition



Antonio Cammisecra

Head, Global Infrastructure & Networks,
Enel

“Sustainability and Circularity”

Panel Discussion

DSOs boosting the global Energy Transition



Kenny Mercado

Executive Vice President, Electric Utility,
CenterPoint Energy

“Grid modernization to support continued growth,
electrification and distributed resource integration”

“Climate change and resilience”

Panel Discussion

DSOs boosting the global Energy Transition



Maria Pope

President and CEO, Portland General Electric

“Resilience”

“Climate Change”



Maria Pope, CEO Portland General Electric

January 27, 2021

Our Commitment to Customers

- Decarbonize, Electrify and Perform
- System reliability and resiliency
- Affordability
- Clean Energy Solutions
- Healthy employer and strong community partner

About PGE

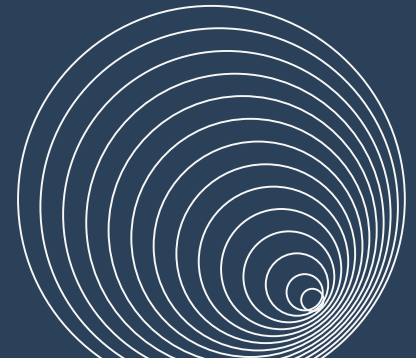
Oregon's largest energy provider

Vertically integrated:

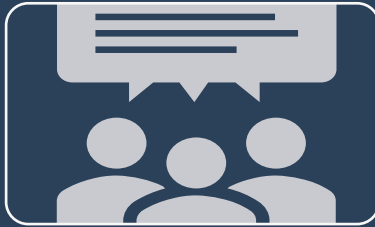
- 16 generation facilities,
- 30,000 miles T&D lines

900,000 retail customers within a service area of 2 million residents

75 percent of Oregon's commercial and industrial activity occurs in our service area



Climate Change Urgency



Customers

Expectations for tangible progress on sustainability and decarbonization



Political and Community Leaders

Local, state and federal policies focused on combating climate change



Investors


Environmental, Social, Governance (ESG) frameworks and net zero carbon targets

Our Climate Goals

Goals:

- Reduce greenhouse gas emissions associated with the power we serve customers by at least 80% below 2010 levels by 2030
- Goal of zero greenhouse gas emissions associated with the power we serve customers by 2040
- Achieve net zero greenhouse gas emissions associated with our internal operations by 2040

Path to Achieve:

- Closing fossil plants, expanding renewables
 - Integrated grid and distributed energy deployment
 - Customer interests at the center of all we do
- 

Integrated Grid Strategy

GRID MODERNIZATION



Investments in advanced technologies improve performance and capabilities

RESILIENCY & ENERGY STORAGE



Storage supports resiliency, grid services, and renewables integration

CUSTOMER PRODUCT DEVELOPMENT



Goal to ease energy burden, drive efficient electricity use and support system needs

TRANSPORTATION ELECTRIFICATION



EVs will dramatically accelerate carbon reductions and increase electricity use

Reliability & Resiliency = Peace of Mind

Resource Adequacy	System Investments	Technology Advancements	Strategic Partnerships
<ul style="list-style-type: none">• Enable ever increasing renewable generating resources while maintaining reliability	<ul style="list-style-type: none">• Address aging infrastructure and smart grid technology opportunities while improving resilience	<ul style="list-style-type: none">• Deploy storage, advanced utility equipment, communications, digital and other technologies while keeping service affordable	<ul style="list-style-type: none">• Enable broad partnerships and collaboration essential to meaningful transformation



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Oregon

kind of energy



Panel Discussion

DSOs boosting the global Energy Transition

John Borchert

Senior Director Energy Policy,
Central Hudson Gas & Electric



“New York Climate Leadership and Community Protection Act (CLCPA) – Role of the Distribution Company”

“Integration of Renewables and Distributed Resources”

“New competencies required in the workforce”

Panel Discussion

DSOs boosting the global Energy Transition



Rob Sheridan

DSO Roadmap Development,
National Grid US

“DSO Capabilities required, DSO/ISO Coordination”
“Challenges in operating across multiple jurisdictions”

Panel Discussion

DSOs boosting the global Energy Transition



Anthony Marone

President and CEO, Avangrid Networks

“Resilience”

“Investment Strategy”

Panel Discussion

DSOs boosting the global Energy Transition



John Lee

Senior Director, Xcel Energy

“Integration of Renewables and Distributed Resources”

“Flexibility Requirements for the future grid”

Panel Discussion

DSOs boosting the global Energy Transition



Maude Gauthier

Network Strategy Manager,
Hydro Quebec Electric

“Development of a Climate Change Adaptation Plan”

Panel Discussion

DSOs boosting the global Energy Transition



Rafael Lazzaretti

Distribution Commercial Director,
CPFL Brazil

“Decarbonization Strategy in Brazil”

“Digitilization and customer engagement in the new
context”

Q&A and Polls



Questions for Discussion

Please ask questions in the Chat area and feel free to provide answers/comments on other questions.

If question is for a specific person, indicate as @person

- How do you see the role of the customer changing in this decade and what does that mean for planning and operation of the distribution system?*
- As digitalization and data become keys to all systems, how will that change our workforce characteristics and needs for training?*
- Who should be responsible for the data platforms that will be required to integrate distributed resources, customers and communities for flexibility, energy management and resiliency?*
- How can our regulatory and policy structures keep up with the pace of change, support digitalization, promote innovation and enable new technologies and services?*
- ...*

Concluding Remarks



Mark McGranaghan

Vice-President Innovation, EPRI

Thank you for your participation!