Welcome to the 2020 JISEA Annual (Virtual) Meeting!

Financial Risks and Opportunities of Decarbonization

4 August 2020

Introduction: Jill Engel-Cox, JISEA Director
Moderator: Mark Ruth, JISEA

www.jisea.org
Some Housekeeping Items

TWO OPTIONS FOR AUDIO
SELECT SETTINGS WHEEL

1
Listen through your computer.
Please select the “Computer” option and review your Microphone and Speakers selection.

2
Listen through by telephone.
Please select the “Phone” option and a phone number and access code will display.

Unless presenting, please mute your audio device.
GoToMeeting: Attendee Participation

- Open and close your control panel.
- Join audio:
  - Choose Computer to use VoIP
  - Choose Telephone and dial using the information provided
- Submit questions and comments via the Chat panel (note if you don’t want to ask verbally)
- We will call on and unmute you to ask question verbally with video on
- Be sure to answer the polling question!
Overall Agenda: All Sessions 8:30-9:45 am MT

• Technical “Poster” Session and JISEA Intern Experience
• Energy for Future Food Systems
• Keynote Discussion: Rural Economies & Social Systems
• Circular Economy of Materials and Global Supply Chains

Aug 3-6: Big Data and Business Systems
• Machine Learning and Artificial Intelligence for Energy Solutions
  • Financial Risks and Opportunities of Decarbonization
• Keynote Discussion: Corporate Decision Making for Systems Innovation & Disruption
• Topic “Tables”: Open Discussion Breakouts with Experts

All sessions about 45 minutes presentation and 30 minutes open questions & discussion
Financial Risks and Opportunities of Decarbonization

Allyson Anderson Book (Baker Hughes)
Alice Jackson (Xcel Energy - Colorado)
Steve Freilich (DuPont – Retired)

Moderator: Mark Ruth (JISEA/NREL)
Survey Question

Where does the risk of decarbonization / climate change fit in your organization’s risk considerations?

- It is the biggest risk we consider
- We are more focused on short-term societal risks
- We are focused on risks that impact the next quarter’s (or year’s) earnings report
- Ask me after we solve the COVID-19 crisis.
JISEA-NREL Analysis of the Future – Scenarios

- Historically, most involve optimization and technoeconomic assessment using discounted cash flow calculations
- Now performing large-scale parameter analyses and developing analytic models
- Future work: Real options, impact assessment, societal cost-benefit?

Figure Credit: Statistical Analysis and Data Mining: The ASA Data Science Journal, Volume: 12, Issue: 4, Pages: 325-337, First published: 13 June 2019, DOI: (10.1002/sam.11419)
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