

IEA Wind TEM #109 Feb 28 – Mar 1, 2023

University of Colorado, Boulder
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Tentative Agenda

Day 1: Tuesday, 28 February 2023

Time	Topic	Presenter
8:00 AM	Check-in, Badging, Coffee/Tea	All
8:30 AM	Welcome Overview of IEA Wind	Jim Ahlgrimm, U.S. Department of Energy's Wind Energy Technologies Office
8:45 AM	Opening Remarks IEA Renewable Energy Working Party (REWP) Chair / REWP Vice-Chair	Alejandro Moreno, Office of Energy Efficiency and Renewable Energy at the U.S. Department of Energy
9:00 AM	Workshop Objectives and Expectations Background to the Grand Challenges and identify the research directions and initiatives needed for wind to become the backbone of a carbon neutral energy system.	Paul Veers, National Renewable Energy Laboratory (NREL) Katherine Dykes, Technical University of Denmark (DTU)
9:30 AM	Grand Challenges Future Vision What is the vision of the Grand Challenges long term in the eyes of IEA Wind?	Stephan Barth, IEA Wind Chair, ForWind
9:45 AM	Group photo	
10:00 AM	Networking Break	
10:15 AM	Setting the Stage – Grand Challenges Presentations	Paul Veers, NREL
10:20 AM	The Atmosphere Wind resources, atmospheric science, and the physics of air flow at wind farms.	Sue Haupt, National Center for Atmospheric Research
10:40 AM	The Turbine System dynamics and materials involved in wind turbines and wind farm technology.	Carlo Bottasso, Technical University of Munich
11:00 AM	The Plant and Grid Optimization and control of wind farm operation and maintenance for reliability and resiliency.	Hannele Holttinen, Recognis, Oy
11:20 AM	Environmental Co-Design Environmental co-design to situate wind farms to local constraints and opportunities.	Cris Hein, NREL
11:40 AM	Social Impacts and Issues Social science to identify how wind plants can add value to host communities.	Lena Kitzing, DTU and Suzanne Tegen, Center for the New Energy Economy
12:00 PM	Networking Lunch	
1:00 PM	Instructions for Breakouts: Description of critical issues that will need to be resolved for wind energy to supply half or more of electricity supply by mid-century and potentially half of total energy in the long run.	Paul Veers, NREL
1:15 PM	Parallel Sessions: Each group will prepare a description of the high-level critical issues in their area (1-4 per group) AND the	

	major initiatives needed to address them (supporting rationale should be captured as well)	
2:45 PM	Networking Break	
3:15 PM	Parallel Sessions: Discuss how each identified major issue impacts potential cost and value, as well as scale of deployment. Can the scientific issues be related to these metrics to articulate their impact? Also, does this perspective help identify other issues?	
4:45 PM	Wrap Up and Adjourn	

Day 2: Wednesday, 1 March 2023

Time	Topic	Presenter
8:00 AM	Check-In Coffee/Tea	
8:15 AM	Facilitated Discussion <ul style="list-style-type: none"> Summaries by each group on the findings of the previous day Discussion of results with emphasis on cross-area linkages and collaborative activities Charter/instructions for morning breakouts with combined and crosscutting groups 	Katherine Dykes, DTU
9:45 AM	Networking Break	
10:15AM	Parallel sessions: How does each scientific topic intersect with Environmental and Social issues (break Atmosphere, Turbine, and Grid groups in half between environmental and social topics and spread the Environmental and Social groups among these groups, three each. Six total breakout groups) Document crosscutting issues and potential initiative to address them.	
12:00 PM	Networking Lunch	
1:00 PM	Facilitated Discussion Each group presents the cross-area linkages and opportunities identified in the previous breakout	Katherine Dykes, DTU
2:30 PM	Networking Break	
3:00 PM	Parallel sessions Each of the original 5 groups refines their conclusions from all prior breakouts as input to the TEM report	
4:00 PM	Wrap-up, Open Forum Next Steps	Paul Veers, NREL
5:00 PM	Close	