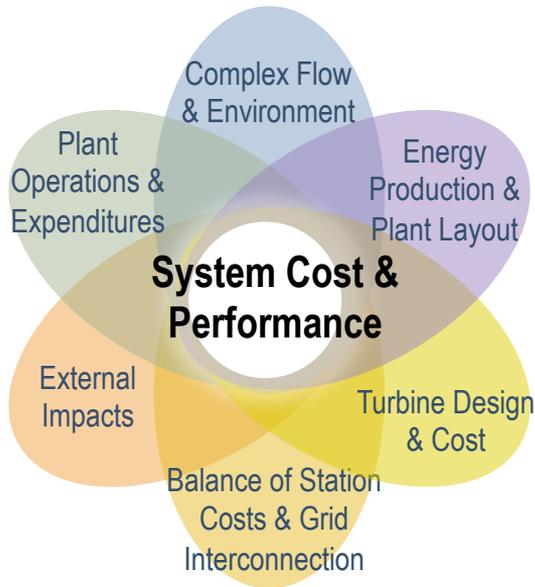




Technical
University of
Denmark



6th Wind Energy Systems Engineering Workshop

NREL

Garrett Barter

Pietro Bortolotti

Mayank Chetan

DTU

Katherine Dykes

Frederik Zahle

CU

Carlyla Clark Dawson

WESE Workshop Overview

Monday	August 29	9:00A – 5:00P	IEA Wind Task 37 Annual Meeting
Tuesday	August 30	8:00A – 5:00P	Workshop Day 1
Wednesday	August 31	8:00A – 5:00P	Workshop Day 2
Thursday	September 1	8:15A – 2:00P	Tour: Option 1) Vestas blade factory Option 2) NREL Flatiron's Campus

WESE Workshop Day 1 Overview

8:15 – 9:00	Registration	
9:00 – 9:15	Workshop Day 1 Overview	Garrett Barter, NREL
9:15 – 9:35	Government Perspective and Kickoff	Ben Hallissy, DOE WETO
9:35 – 10:45	Session 1: <i>Wind Power Plants in the 21st Century Electricity System</i>	Chair: Katherine Dykes, DTU
10:45 – 11:05	Coffee Break	
11:05 – 12:35	Session 2: <i>Systems engineering for next generation floating turbines</i>	Chair: Mayank Chetan, NREL
12:35 – 1:35	Lunch	
1:35 – 3:05	Session 3: <i>Systems engineering for wind farm design</i>	Chair: Matt Hall, NREL
3:05 – 3:25	Coffee Break	
3:25 – 4:10	Keynote 1: <i>Disruption in Aerospace – a few observations on current trends surrounding flying cars, drones and hypersonic aircraft</i>	Robin Riedel, McKinsey
4:10 – 4:50	Session 4: <i>Code Capability</i>	Chair: Frederik Zahle, DTU

WESE Workshop Day 2 Overview

8:20 – 8:30	Workshop Day 2 Overview	Garrett Barter, NREL
8:30 – 8:45	Systems engineering needs for floating offshore wind energy	Ben Hallissy, DOE WETO
8:45 – 9:15	Keynote 2: <i>Developing and Scaling New Technology in Wind - Spiral Welded Tower Case Study</i>	Eric Smith, Keystone Tower
9:15 – 10:45	Session 5: <i>Systems engineering with higher fidelity models</i>	Chair: Frederik Zahle, DTU
10:45 – 11:05	Coffee Break	
11:05 – 12:35	Session 6: <i>Systems engineering for the wind turbine rotor</i>	Chair: Pietro Bortolotti, NREL
12:35 – 1:35	Lunch	
1:35 – 3:05	Session 7: <i>Extending the system - Energy systems and markets</i>	Chair: Chris Bay, NREL
3:05 – 3:25	Coffee Break	
3:25 – 4:35	Session 8: <i>Extending the system – Sustainability and wildlife</i>	Chair: Katherine Dykes, NREL
4:35 – 5:15	Session 9: <i>Code Capability (continued)</i>	Chair: Pietro Bortolotti, NREL

Workshop requests

Audience

- **Wifi: UCB Guest**
- **No pictures or videos during presentation**
- **Organizers will distribute the slides from the authors that have approval to share their presentation publicly**

Speakers

- **Signs and prompts about time remaining**
- **Can either speak loudly or use microphone**
- **If audience members are having trouble hearing, we will ask that everyone use the microphones**
- **If your presentation can be shared publicly, please send to a conference organizer when you are done**

Thu Sept 1 Tour details

Meet at 0815 in SEEC building lobby to board charter bus

Tour Option 1: Vestas Blade Factory in Windsor, CO

- The factory is a ~1hr drive from Boulder: 11140 Eastman Park Dr, Windsor, CO 80550
- **Participants must wear long pants and closed-toe shoes.**
- Tour consists of a 30min Q&A followed by 1hr factory tour
- You might want to bring a snack

Tour Option 2: NREL Flatiron's Campus

- The campus is a ~20min drive from Boulder: 18200 CO-128, Boulder, CO 80303
- **US Citizens: Bring valid ID (driver's license okay)**
- **Non-US Citizens: Bring Passport**
- Tour consists of a 1-1.5hr walking tour of turbine test or manufacturing facilities and new capabilities for hybrid plant research

Social calendar

- **Tue Day 1: Informal and optional gathering around 5:30P**
 - Rayback Collective 2775 Valmont Rd, Boulder, CO 80304
 - <https://www.therayback.com/>
- **Wed Day 2: Informal and optional gathering around 5:30P**
 - Avanti Food and Beverage 1401 Pearl St, Boulder, CO 80302
 - <https://boulder.avantifandb.com/>
- **Trail running with Jared Thomas on Wednesday, August 31**
 - 6:00A meet at Chautauqua Park
 - 6:45A (or earlier) return to trailhead
 - Walkers/hikers welcome too
 - <https://bouldercolorado.gov/locations/chautauqua-park>