

Safe Wood Pellet Storage

Preventing, Detecting, and Managing Self-Heating Incidents

September 2-3, 2025

Note: the tour and workshop will be in English.

September 2, 2025

12:00 – 18:00 Tour of Ørsted BECCS Project: Asnæs Power Plant

Ørsted will take attendees on a tour of Asnæs Power Plant one of its Bioenergy Carbon Capture and Storage (BECCS) projects.

- 12:00 – 12:10 Pick up at Copenhagen Central Station - Banegårdspladsen/Københavns hovedbanegård
- 12:15 – 12:25 Pick up at Hotel Marriott, Kalvebod Brygge 5
- 12:25 – 14:00 Travel to Asnæs Power Plant
- 14:00 – 14:30 Arrival at Asnæs Power Plant & Safety Briefing
- 14:30 – 14:45 Short intro of Asnaes Power Plant
- 14:45 – 15:15 Short intro Ørsted BECCS projects incl. coffee break
- 15:15 – 16:00 Guided tour at Asnaes Biomass CHP, unit 6
- 16:00 – 16:45 Bus trip at the BECCS site
- 16:45 – 18:00 Return to Copenhagen by bus
- 18:00 Arrival at pick-up locations in Copenhagen

September 3, 2025

Location Ørsted, Nesa alle 1, 2820 Gentofte, Denmark

8:30 – 9:00 Registration, Networking, Pastries, Coffee

9:00 – 9:15 Opening Remarks

Speaker: Ole Thomsen, Senior Vice President, Bioenergy & Infrastructure Assets, Ørsted

9:15 – 10:45 Case Studies on Major Incidents that Resulted from Runaway Self-Heating – Consequences and Lessons Learned

Speakers: Jens Kai Holm, Chief Specialist, Ørsted, John Swaan, Operations and Project Development Expert, FutureMetrics

Learn about real-world case studies of major incidents caused by runaway self-heating from around the world. You'll discover the consequences of each incident, along with the mitigation strategies and best practices derived from these experiences.

10:45 – 11:00 Coffee Break

11:00 – 12:15 Technical Deep Dive: Causes, Contributing Factors, and Detection Methods for Self-Heating

Speaker: Fahimeh Yazdan Panah, Associate Executive Director, Wood Pellet Association of Canada

Explore the biological and chemical mechanisms that drive spontaneous heating, as well as current laboratory and field methods used to assess self-heating potential, including isothermal calorimetry, crossing point tests, and temperature profiling. The session will distinguish between intrinsic contributors, moisture content, particle size distribution, and chemical composition and operational factors like cooling efficiency, storage practices, and transport conditions.

12:15 – 13:00 Lunch

13:00 – 13:45 Minimizing Self-Heating Risk in Wood Pellet Storages

Speaker: Jens Kai Holm, Chief Specialist, Ørsted

Examine key strategies for mitigating self-heating risks in storage facilities, focusing on laboratory measurements of wood pellet reactivity, storage practices in wood pellet silos and flat storage, and industry best practices for large-scale storage.

13:45 – 14:30 Detecting a Self-heating Incident: Early Warnings and Beyond

Speaker: Håkan Johansson, Division Manager – Senior Advisor, Firefly

This session will outline methods for identifying self-heating incidents, including temperature and gas measurements, spark detection, and infrared surface temperature monitoring.

14:30 – 14:45 Coffee Break

14:45 – 15:30 If an Incident Happens: Effective Approaches for Mitigation and What NOT to Do!

Speaker: John Swaan, Operations and Project Development Expert, FutureMetrics

Learn about immediate response measures, fire suppression techniques, and mistakes to avoid in the event of an incident.

15:30 – 16:45 Open Forum: Industry Collaboration for Safer Pellet Storage

Moderator: William Strauss, President, FutureMetrics

Join us for an interactive discussion where approved registered attendees will have the opportunity to give a five-minute presentation related to the workshop topics, followed by an open discussion.

An experimental measurement technique to detect self-heating in biomass

Baldeep Kaur, Senior Lecturer, The Wolfson Centre for Bulk Solids Handling Technology, University of Greenwich

Biomass Pelleting Safety - Fire and Explosion Summary

Presenting risks and preventing methods in the Biomass pelleting process

Lars T. Bloch, Plant Solution Manager, Capital Business, ANDRITZ FEED & BIOFUEL

From the Woodyard to Delivery: Enviva's Lessons Managing the Self-Heating of Wood Pellets Produced in the US Southeast

Derek Corbett, Ph.D., Sr. Process Engineer, Wood Science Quality, Enviva

Safe Handling of Silo Incidents: Lessons from Graanul Invest Group

Elizabeth Denna, EHS Manager, Matthew Miller, Area Manager, Graanul Invest Group

16:45 – 17:00 Closing Remarks

Speakers: Søren Alsing, Director, Fuel, Commercial, Ørsted, William Strauss, President, FutureMetrics

19:00 Dinner in Copenhagen hosted by Ørsted at Madklubben Vesterbro, Vesterbrogade 62, 1620 Copenhagen

Note: Transportation to the dinner venue is the responsibility of each attendee.