



Winterwind

INTERNATIONAL WIND ENERGY CONFERENCE

Program

Monday February 3

PRE-CONFERENCE (open for everyone)

9:20 -17:00 **Field trip**

To the Önusberget Wind Farm, part of the Markbygden cluster, located 35 km west of Piteå.

10:00-13:00 **Green industries** *Moderator: Lisa Ek – Scene 2*

Nordion - Green hydrogen, *Anders Järvelä, Nordion, SE [38]*

The grid of the future, *Inger Edlund Pedersen, Hitachi Energy, SE [43]*

Regional development towards a net zero world, *Ove Bryggman, Skellefteå kraft, SE [44]*

Canada's green industries, *Charles Godreau, Nergica (CA) [48]*

TBA

Panel discussion

Anja Palm, Business Development Director, Skellefteå municipality

13:00-14:00 **Lunch on your own**

14:00-17:00 **IEA Task 54 – Scene 2**

Chairs: Jennifer Pettersson and Timo Karlsson

WORKSHOP: IEA Task 54: Methodology to assess production losses due to icing from power curve analysis, *Jennifer Pettersson, Vattenfall, SE [27]*

17:00-18:00 **Break**

18:00-19:00 **Opening session** *Moderators: Lisa Ek and Per Olofsson*

Helene Hellmark Knutsson - The governor of Västerbotten

Global insights on wind turbine icing: operational envelopes and ice protection system efficiency across diverse climates, *André Bégin-Drolet, Université Laval, CA [46]*

19:00- **Dinner on your own**



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Tuesday February 4

08:00-09:00 Exhibition and registration

09:00-10:00 Hybrid systems – Scene 1

Chairs: Sara Koller and Andreas Wickman

Lessons learned from solar measurements in the Nordics, *Sigbjørn Grini and Ola Kaas Eriksen, Kjeller Vindteknikk, part of Norconsult, SE (21)*

Evaluating curtailment uncertainty in wind and solar hybrid projects, *Henning Straume, DNV, NO (36)*

Hybridization of wind and solar, how to handle icing and curtailment, *Dina Martinsen and Sigbjørn Grini, Kjeller Vindteknikk, part of Norconsult, NO (24)*

09:00-10:00 Rotor ice detection – Scene 2

Chairs: Erika Dahlin and Charles Godreau

Influence of elevation, rotor diameter and hub height on blade icing duration, *Stefan Reimann, Weidmüller Monitoring Systems GmbH, DE (8)*

“Validation of cantilever sensors for ice detection on rotor blades”, *Holger Fritsch, Bachmann Monitoring GmbH, DE (10)*

One system for all demands in cold climates, *Nils Lesmann, Phoenix Contact, DE (34)*

10:00-11:00 Break

10:15-10:45 Poster session

Chair: Narges Tabatabaei

Optimizing conductive heating for rotor blade anti-icing using wireless blade sensors, *Eike Lueken, eologix-ping, AT (42)*

11:00-12:30 Plenary session - Production and revenue Moderator: Lisa Ek – Scene 1

Operational wind power forecasting at Hydro-Québec in winter conditions, *Eric Desrosiers, Hydro-Québec, CA (30)*

The future of the prices and power balance in the power market, *Tor Reier Lilleholt, Value Insight, NO (3)*

What is Hybrid-PPA, and why is they important?, *Jens Nordberg, Varberg Energi, SE (1)*

12:30-14:00 Lunch



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Tuesday February 4

14:00-15:00 Risk management – Scene 1

Chairs: Sigbjørn Grini and Tor Reier Lilleholt

How to Hack Windfarms: Exposing ICS Vulnerabilities
Using Shodan, *Sascha Buhle, energy consult, DE (4)*

Improved daily planning for wind farm operators:
Developing ice risk forecast based on automatic ice
detection from nacelle cameras, *Sigmund Guttu, Kjeller
Vindteknikk, part of Norconsult, NO (16)*

Wind Turbine Risk Assessments, *Christoph Schmidt,
DNV Energy Systems Germany, DE (35)*

14:00-15:00 Icing events – Scene 2

Chairs: Jennie Molinder and Eric Desrosiers

Deep learning models for use in icing event prediction,
*Rasmus Døvnborg Frederiksen, Siemens Gamesa /
Aalborg University, DK (15)*

Eye-On-Site, *Johan Casselgren, Pileus
Scandinavia, SE (28)*

Illustrating icing events complexity using the IEA
Task54 public database, *Jérôme Kopp, Meteotest AG (5)*

15:00-15:45 Break

15:45-17:00 IPS Manufacturers – Scene 1

Chairs: Emilie Iversen and Stefan Skarp

Ice-prevention through coating solutions, *Matiss Sivins,
Phazebreak Coatings, US (18)*

Virtual temperature sensor in blade heating system and
its validation, *Markus Heinonen, Wicetec, FI (6)*

Triggering ice protection systems with weather
forecasts, *Dylan Baxter and Daniela Roeper,
FabricAir, CA (32)*

Nordex: 15 Years of AIS Evolution,
Nils Lehming, Nordex SE, DE (12)

15:45-17:00 Icing losses – Scene 2

Chairs: Jennifer Pettersson and Timo Karlsson

Validation of various approaches to forecasting
production losses due to icing, *Christoffer Hallgren,
Kjeller Vindteknikk, part of Norconsult, SE (23)*

WICE 2.5: Enhanced modelling of icing losses for North
American and European regions utilizing mesoscale
modelling, operational data and Machine Learning,
Luis Baquero, DNV, DE (37)

How to adapt standard ice loss assessment models
to local conditions?, *Marie Cecilie Pedersen,
EMDI International, DK (11)*

Accurately quantifying changes in long-term,
sitespecific, operational icing losses,
Ben Buxton, K2 Management, SE (2)

17:00-18:00 Exhibition break

18:00-19:00 Leisure time

19:00-23:59 Networking among the exhibitors Conference Dinner



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Wednesday February 5

08:00-08:30 **Exhibition and registration**

08:30-09:30 **IPS Assessment** *Moderator: Lisa Ek*

Blade heating system performance envelope field validation - practical experiences,
Tomas Wallenius and Daniela Roeper, Wicetec, FI and FabricAir, CA (7)

Availability of Ice Mitigation Systems – A key driver for performance and revenue,
Simon Grenholm, W3 Energy, SE (22)

The missing piece: Solving the puzzle of Ice Protection System performance,
Patrice Roberge, Icetec, CA (14)

09:30-10:15 **Break**

10:15-11:15 **Assessment – Scene 1**

Chairs: Marie Cecilie Pedersen and Maria Mächtel

Retrofit of IPS – can we estimate the potential gain based on SCADA and model data?, *Jennie Molinder, Kjeller Vindteknikk, part of Norconsult, SE (20)*

Using icing measurements to investigate potential new areas for wind power in severe icing conditions,
John Magne Gitmark, Kjeller Vindteknikk, part of Norconsult, NO (25)

Assessing the influence of anti-icing systems (AIS) on energy production – is AIS consumption adequately considered in pre-construction energy yield assessment?, *Sam Williamson, Wood, GB (26)*

10:15-11:15 **A suitable mix – Scene 2**

Chairs: Daniela Roeper and Johan Casselgren

IEA Wind Task 54: Ice, noise and impact on acceptance,
Timo Karlsson, VTT, FI (19)

Wind climate research in Svalbard: the relevance of local processes, *Matthias Henkies, The University Centre in Svalbard, NO (29)*

Simulating ice throw risks in wind and hybrid farms – Monte Carlo simulations, icing modelling, and probability calculations, *Helmi Uusitalo, AFRY Finland, FI (40)*

11:15-12:30 **Lunch**

12:30-14:00 **Closing session - A cross section – Scene 1**

Moderators: Lisa Ek, Per Olofsson and Charles Godreau

Climate change and wind energy; how can you estimate future yield?
Emilie Iversen, Kjeller Vindteknikk, part of Norconsult, NO (31)

A sustainable energy transition is integrated and circular,
Gitte Haar, Center for Circular Economy, DK (9)

Summary of seminars: Green industries and IEA Task 54

Summary of Winterwind 2025