Winterwind
INTERNATIONAL WIND ENERGY CONFERENCE

Winterwind 2027

Conference program · Monday February 8 – Wednesday February 10

Program version 261030 (file 1). Numbers in parentheses after speakers are abstract IDs; numbers after session titles are session IDs.

Monday, February 8 — Welcome to Winterwind 2027!

09:00 — **Registration** 09:00 – 10:00

09:30

Site visit

09:45 Bus departure from hotel

11:15 Welcome to the site!

15:45 Back at the hotel

Electrification seminar (1)

10:00 – 12:00 · Moderators: Lisa Ek and Björn Aronsson

Presentations

Panel discussion

12:00 — **Registration** 12:00 – 13:00 · Lunch on your own

13:00

TBA (2)

13:00 – 14:45 · Chairs: TBA

Storage seminar (3)

13:00 – 14:45 · Moderator: Lisa Ek

Benefits with BESS: a study of optimisation strategies to maximise profitability at wind farms in cold climates
Fredrik Sjödén, Kjeller Vindteknikk, part of Norconsult, SE (19)

Grid-forming battery energy storage: taking responsibility for grid stability as wind and data centers grow in the north
Eric Widéen, Huawei, SE (49)

Panel discussion

IEA Task 54 workshop (4)

13:00 – 14:45 · Moderator: Patrice Roberge

Blade heating performance warranties: What are we actually guaranteeing?
Patrice Roberge, Icetek, CA (15)

14:45 — **Break** 14:45 – 15:00

15:00

Hydrogen seminar (5)

15:00 – 17:00 · Moderator: Björn Aronsson

Presentations

Panel discussion

Grid seminar (6)

15:00 – 17:00 · Moderator: Lisa Ek

Wind power in Sweden: it's about optimising production and value
Lars Skoglund, Ntricity Technologies AB, SE (46)

When the blades ice up, the load steps down: flexible data centers sharing balancing responsibility with wind farms
Lukas Pfeiffer, Gridmetry, DE (42)

From icing signal to bid: forecasting as insurance for cold climate wind
Karl Thunell, rebase.energy, SE (16)

Renewable flexibility for the future, defense, and finances
Kruno Kuljis, Modity Energy Trading, SE (2)

Panel discussion

IEA Task 54 workshop (7)

13:00 – 17:00

18:00

Opening session (8)

18:00 – 19:00 · Moderators: Lisa Ek, Gabriel Niemi-Holén and Per Olofsson

Investigating icing conditions in Norway: Evaluating the Harmonie-Arome model using helicopter campaign data
Eirik Mikal Samuelsen, Norwegian Meteorological Institute, NO (6)

When the blades ice up, the load steps down: flexible data centers sharing balancing responsibility with wind farms
Lukas Pfeiffer, Gridmetry, DE (42)

19:15 — **Student reception** 19:15 – 21:00

Tuesday, February 9

Day 2

08:00 **Exhibition and registration** 08:00 – 09:00

09:00

Technology, OEM Solutions and Maintenance (9)

09:00 – 10:00 · Chairs: TBA

Validating anti-icing performance on a 6 MW-class turbine with wireless on-blade sensors
Thomas Schlegl, eologix-ping, AT (32)

Global ice detection (GID): Vestas software-based multi-sensor ice detection solution for wind turbines
Johnny Nielsen, Vestas, DK (30)

Ice protection systems: Why installation is only half the job
Paulius Sarapnickis, FabricAir, LT (51)

Forecasting (10)

09:00 – 10:00 · Chairs: TBA

Improving winter wind power forecasting at Hydro-Québec through advanced icing loss modelling
Slavica Antic, Hydro-Québec, CA (11)

Icing-aware power forecasting with on-blade ice sensors: results from two winters
Eike Lueken, eologix-ping, AT (34)

Improving short-term wind turbine power forecasts during icing using on-site operational data
Jonathan Nixon, University of Kent, UK (45)

10:00 **Break** 10:00 – 11:00

10:15

Poster session 1 (11)

10:15 – 10:45 · Chair: TBA

Physics-informed Bayesian assimilation and forecasting of rotor icing: First results on the IEA Wind Task 54 database
Max Champneys, University of Sheffield, UK (10)

Anti-icing on blades longer than 80 m: second-winter results from heated and unheated turbines
Thomas Schlegl, eologix-ping, AT (33)

11:00

Plenary session – Responsibility (12)

11:00 – 12:30 · Moderators: Lisa Ek and Björn Aronsson

Hydro-Québec's ambitions as a new player in the world of wind energy developers
Monelle Comeau, Hydro-Québec, CA (25)

Cold Climate Claims – How loss experience has shaped the Nordic wind insurance market
Anders Orebrandt, Max Matthiessen, SE (48)

From reactive to predictive asset management – Who takes responsibility when AI enters the control room?
Emma Fjällvide, W3 Energy, SE (12)

12:30 **Lunch** 12:30 – 14:00

13:25

Poster session 2 (13)

13:25 – 13:55 · Chair: Jens Sperens

How far can SCADA telemetry alone take wind-turbine condition monitoring? A leakage-safe assessment without dedicated CMS sensors
Hith Rahil Nidhan, Delhi Technological University, IN (8)

Leakage-safe multi-resolution forecasting of wind energy production: a comparison of ensemble and deep sequence models
Sanyam Kathed, Manipal University Jaipur, IN (7)

IEA Wind TCP Task 54: IceLossMethod 3.0 and Ice classes review
Charles Godreau, Nergica, CA (28)

Tuesday, February 9

14:00

Wind Farm Performance (14)

14:00 – 15:00 · Chairs: TBA

Where did the energy go? Understanding and quantifying underperformance in modern wind farms in the Nordics
Ben Buxton, Ramboll, UK (5)

Overcoming the performance gap in the Nordic countries
Narges Tabatabaei, DNV Sweden, SE (50)

From modelling to measured results: first EnVentus field validation of Cold Climate Operation (CCO)
Nils Jehring, Vestas, DE (29)

Climate Change, Site Assessment and Long-Term Wind Resource (15)

14:00 – 15:00 · Chairs: TBA

Cold-climate site classification from an ensemble of new reanalysis datasets
Morten Lybech Thøgersen, EMD International, DK (37)

Scaling icing loss classes with global warming levels using DestinE high-resolution scenarios
Gil Lizcano, Climate Scale, ES (3)

Could climate change increase renewable energy production in the Nordics?
Emilie Iversen, Kjeller Vindteknikk, part of Norconsult, NO (36)

15:00

Break 15:00 – 15:45

15:45

IPS Performance warranties (17)

15:45 – 17:00 · Chairs: TBA

From prediction to performance: a common framework for assessing ice protection systems
Dylan Baxter, FabricAir Canada (BorealisWind), CA (40)

Experiences with ice mitigation warranties
Simo Rissanen, Kjeller Vindteknikk, part of Norconsult, FI (13)

The icing trial: Same data, different verdicts
Patrice Roberge, Icetek, CA (26)

Leveraging IPS performance envelope with icing loss uncertainty assessment: lessons for better warranty and project financing terms
David Grenier-Lévesque, Hydro-Québec, CA (9)

Ice detection (18)

15:45 – 17:00 · Chairs: TBA

Direct ice mass detection on wind turbine blades without electrical conducting sensors and wires in the blades of the wind turbine
Jesper Find Nielsen, Polytech, DK (4)

Raising the performance of blade-based ice detection on Nordex turbines – adaptive referencing and field validation
Sonja Hesse, Wölfel Wind Systems GmbH + Co. KG, DE (20)

Difference between ambient and blade temperature impacting the ice detection
Daniel Brenner, Weidmüller Monitoring Systems, DE (21)

Ice throw risk assessment in wind turbines: The role of operational strategies and anti-/de-icing systems
Hamid Sarlak, DTU, DK (23)

17:00

Exhibition break 17:00 – 18:00

17:15

Poster session 3 (19)

17:15 – 17:45 · Chair: TBA

Comparative thermal modelling of electrical resistance heating and hot-air de-icing systems for wind turbine blades in cold climates
Ali Sarhadi, Technical University of Denmark (DTU), DK (47)

From icing conditions to turbine impact: the two-channel Icing Impact State
Jonathan Nixon, University of Kent, UK (44)

The cost of icing and the gain of forecasts
Sigbjørn Grini, Kjeller Vindteknikk, part of Norconsult, NO (31)

18:00

Leisure time 18:00 – 19:00

19:00

Conference dinner 19:00 – 23:59 · Entertainment

Wednesday, February 10

Day 3

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

08:30 **Ice Protection Systems (IPS), OEM Solutions (20)**

08:30 – 09:30 · Moderators: Lisa Ek and Björn Aronsson

From design to field operation: Validation of the NORDEX N175 anti-icing system
Ines Runge, Nordex Energy SE & Co. KG, DE (38)

Advancing anti-icing technology for cold-climate wind turbines: End-to-end validation from concept to field operation
Miguel Angel González-Posada, Siemens Gamesa, ES (39)

Advancing wind turbine performance in cold climates: The Vestas improvement journey
Stephen Jude Buggy, Vestas, UK (43)

09:30 **Break** 09:30 – 10:15

09:40 **Poster session 4 (21)**

09:40 – 10:10 · Chair: TBA

On the transition from glaze to rime ice formation on wind turbines
Sönke Maus, NTNU Trondheim, NO (41)

Structural repair of wind turbine blades using vacuum infusion
Greger Nilsson, Blade Solutions, SE (17)

10:15 **Ice Throw, Safety and Risk Assessment (22)**

10:15 – 11:15 · Chairs: TBA

Managing the ice throw risk – A subtask of IEA Wind Task 54
Claas Rittinghaus, Energiewerkstatt, AT (14)

Improving wind turbine ice-fall risk assessments through site-specific filtering of meteorological data
Kevin Gutbrod, Pavana, DE (1)

Measuring liquid water content where the ice forms: requirements and concept for a wireless sensor on the rotor blade
Michael Moser, eologix-ping, AT (35)

Icing Physics: Wind-Tunnel and Field Experiments, Ice Accretion and Mitigation (23)

10:15 – 11:15 · Chairs: TBA

Effect of surface roughness and adhesion on ice accretion: Preliminary experimental results for airfoil and cylindrical geometries
Hamid Sarlak, DTU, DK & VTT, FI (24)

Gone with the wind: field observations of the rotor icing ablation mechanism
Charles Godreau, Nergica, CA (27)

Benchmarking ceilometer derived cloud liquid water content against high-end Cloudnet observations
Sara Koller, Meteotest, CH (18)

11:15 **Lunch** 11:15 – 12:30

12:30 **Closing session – A cross section (25)**

12:30 – 14:00 · Moderators: Lisa Ek and Per Olofsson

Could seasonal forecasts provide information about icing losses?
Pia Isolähteenmäki, Kjeller Vindteknikk, part of Norconsult, FI (22)

Renewable flexibility for the future, defense, and finances
Kruno Kuljis, Modity Energy Trading, SE (2)

Summary of seminars: IEA Task 54, Hydrogen, Grid & Storage

Summary of Winterwind 2027
Björn Aronsson

Welcome to Winterwind 2028 in...