Global Wind Summit 2018

Submission kit: science & research abstracts

Version: 17 January 2018

Please read this information carefully before submitting your abstract under the science and research category.

The call for abstracts will close on 15 April 2018 at 23:55 CET

Contents

1. Programme development timeline

January 2018	Call for abstracts topics & deadline published on https://windeurope.org/summit2018/
15 January 2018	Abstract submission portal opens, with full instructions and sub-topics
1 March 2018	**Call for reviewers and session chairs closes:** Members of WindEurope and the European Academy of Wind Energy (EAWE) only
4 April 2018	**Call for abstracts portal closes at 23:55 CET**
9 April 2018 – 2 May 2018	**Abstract review: general and scientific** Peer review by members of WindEurope and the EAWE who score abstracts in their field of expertise. This helps topic leaders build a high-quality programme and keep commercial content out! We've extended the review considerably to take account of the holiday period.
End May 2018	**Programme & presenters confirmed** At the programme meeting mid-May, the programme committee build their session proposals based on the highest scoring abstracts. WindEurope will then publish the final programme schedule and invite those selected to give oral and poster presentations.
July 2018	**Scientific full papers review** Full papers from oral presenters from the scientific track to be reviewed by EAWE in view of their publication in the IOP Journal of Physics conference series.
June – September 2018	**Session preparation** Topic leaders and session chairs liaise with confirmed presenters to prepare their session, coordinate presentation objectives and refine content.
25-28 September 2018	**Session chairs and presenters attend a final briefing session** in the speakers' room at the Hamburg Messe venue directly before their session starts.
Beginning October 2018	**Proceedings published** General proceedings on https://windeurope.org/summit2018/: accessible to full conference delegates and WindEurope members in WindEurope members' area. Scientific proceedings (full papers) in the open access Journal of Physics: Conference Series edited by EAWE.

2. About the scientific review

Science & research content at Global Wind Summit 2018 will again be organised in cooperation with the [European Academy of Wind Energy (EAWE)](#), a world-leading wind energy academic & research community. The Academy will bring Global Wind Summit 2018 delegates leading edge wind energy research results, keeping Europe in the forefront of wind energy innovation. This offers a forum for in-depth presentations and discussions on progress and results of wind-energy related scientific research.

In order to result in coherent sessions and a balanced programme, sessions will include the very best presentations on each specific topic, whether they are from 'general' or 'science & research' abstracts. The objective is to avoid duplication in the programme with content on a given topic to be found both in sessions in the former 'technology track' and at the same time in sessions in the former 'science & research track'.

Once the two types of abstract have been reviewed under their respective processes, the two topics leaders will together decide how best to organise the content they have selected in the sessions they have available.

3. Essential requirements for abstracts

Science & research abstracts must describe work that has been done at the moment of submission, not work that will be done. The style of writing may be brief and incomplete, as long as the essential steps in the research are clear and convincing. It should contain new work, not yet published and should not describe work presented at other conferences. It should contain a complete reference list that is not included in the word count given on the website.

- Abstracts should contain **new work, not yet published**.
- **No sales pitches!** Abstracts should not contain overtly promotional or commercial content, but rather strive to present data or results that can contribute to bringing the industry forward.
- Submitted under the **correct topic**.
- Abstracts must respect the **word limits**:
  - Total length: maximum 1,500 words
- Abstract format:
  - PDF (incl. text plus graphs, charts or images as necessary, and embedded fonts). **Please include abstract title, presenting author, co-authors and affiliations in your PDF.**
  - Submitted abstracts should be divided in 5 sections:
    1. **Introduction**
       Briefly describe the work to be discussed in your presentation.
    2. **Approach**
       Briefly describe the approach you used
    3. **Main body of abstract**

4. **Conclusions**
   Outline the significant implications that your paper has for the industry.

5. **Learning objectives**
   If this abstract is presented at the conference, what will delegates learn? Focus on what your abstract will enable them to do in their own jobs.

- **Abbreviations** should be **defined** on first use.

4. How abstracts will be rated

Scoring of science & research abstracts
Reviewers of science & research abstracts will base their scores on the following criteria:

- the abstract has to describe work that has been done at the moment of writing the extended abstract, not work that will be done.
- while the style of writing may be brief and incomplete, the essential steps in the research must be clear and convincing.
- the abstract should contain new work, not yet published.
- the abstract should include a complete reference list.
- the methodology and results should be plausible and free of errors.
- the work in the abstract should be up-to-date as regards previous knowledge and the contribution of others.
- the work should be scientifically/technically relevant.

For each criterion, the abstract will be marked from 1 – 3, giving a maximum score of 21. Each abstract is reviewed by a number of different reviewers, and the average score out of 21 is calculated.

The 1-3 scale for each criterion is:

1 = not sufficient
2 = adequate
3 = good

Recommendations made by abstract reviewers
As well as providing a numerical score for your abstract, each reviewer will make a recommendation. The options available to reviewers are:

- This abstract should be rejected
- I strongly recommend that this abstract is selected for poster presentation
- This abstract is more suitable for poster presentation than oral presentation
- This abstract is more suitable for oral presentation than poster presentation
- I strongly recommend that this abstract is selected for oral presentation

Please note the recommendations of reviewers are intended as a guide for the programme committee.

They do not guarantee the final outcome.

5. How to write a good abstract

An abstract is a short document that is intended to capture the interest of the reviewers. It should engage the reader, making it clear what your paper is about and why it would make an excellent oral or poster presentation.

Keep the following in mind to ensure that yours has a good chance of being accepted.

- Don't leave preparation of your abstract to the last minute.
    - There's no problem submitting right before the deadline (we get 90% of abstracts in the final 48 hours!), but give yourself enough time to think about how best to present your work.
- Keep the abstract requirements and scoring process (above) in mind so you understand the criteria your abstract will be marked on.
- Ensure that your ideas are well thought out and follow a logical, coherent flow:
    - State the issue to be discussed;
    - Give a brief background to the issue;
    - Brief description of what you are doing to address it;
    - Implications/outcomes: why is what you've done of value to other specialists?
- Ensure that the abstract relates to the chosen topic in a direct way.
- Ensure your abstract will contribute to the conference:
    - Highlight why your work is innovative: what new ideas/research will you bring to the people who are listening to you?
    - How is your work relevant to delegates? What will they learn and what can they take back to their jobs?
- Think of an attention-catching title:
    - It should still be clear what you want to present;
    - Avoid using acronyms in your title;
    - If selected for a session, a good title will encourage delegates (including generalists such as journalists) to come and listen to you.
- Look at past abstracts/conference papers to pick up the tone and style of successful abstracts.
- Run your abstract past someone who is familiar with both the topic and this type of abstract process.

6. Scientific proceedings

By submitting an abstract in the scientific track, you commit - should your abstract be selected for an oral presentation - to submit a full paper that will be published in the conference's scientific proceedings. These will be published online in a specific open access volume of the IOP *Journal of Physics: Conference Series*.

Scientific full papers selected for publication will be due **in July 2018**.

Important: please read before you submit a paper for publication
Conference Series operates a publishing licence, under which authors retain copyright of their papers and they no longer need to sign and submit copyright assignment forms. Any author who wishes to publish in IOP Conference Series must agree to the terms of the licence and by submitting a paper for publication it is assumed all authors of the paper agree, in full, to the terms of the licence. The licence terms and conditions are available online at
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http://conferenceseries.iop.org/content/authors.

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What you need to provide
The PDF file of your paper: when preparing your paper ensure that you follow the author guidelines. When preparing your paper please check that:

- Paper size is European A4.
- Margins are at least 25mm all round.
- The paper includes the author name and affiliation (full address including country).
- There are no page numbers, or headers and footers, within the paper.
- The PDF is free of formatting errors (e.g. corrupt equations, missing or poor resolution figures), since conversion from Word to PDF can introduce formatting errors.
- Text is single spaced, not double spaced.
- The PDF file is editable and not password protected.
- All pages are portrait (landscape pages should be rotated).

- Reference lists are checked for accuracy. References can only be linked via CrossRef if they are correct and complete.
- Figures are placed within the text, not collected at the end of the document.
- A thorough proof read is conducted to check standard of English and ensure wording is clear and concise.
- Ensure that your paper includes an abstract.
- Any multimedia files you wish to publish online
- JPCS encourages authors to submit multimedia files to enhance the online versions of published research articles.

Journal enquiries
General enquiries regarding IOP Conference Series should be directed to:
IOP Conference Series
E-mail: conferenceseries@iop.org

7. Questions

If you have any questions the conference programme team is at your disposal:

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8. Call for abstracts topics

Topics relevant to:

🌀 Onshore wind energy   ≋ Offshore wind energy   🎓 Scientific review by EAWE.

Topics plus non-exhaustive list of sub-topics:
Assessing the wind resource and turbine performance 🌀 ≋ 🎓
- Measurements and wind speed predictions   - Mesoscale modelling   - The model chain   - Wake effects   - Forecasting   - Wind atlases   - Performance assessment   - Complex sites and adverse climatic conditions   - New sensing devices   - Real-world experiences   - Big data (specific applications)   - Resource assessment of sites to be repowered/refurbished
Developments in turbine technology 🌀 ≋ 🎓
- Innovations in the design of rotors, towers, support structures, foundations   - Going offshore: problems, challenges, solutions   - Going even bigger: 10-20MW wind turbines   - Floating wind turbines   - Improvements and experience with load control and performance enhancement   - New developments in drive trains and generator technologies   - Advanced electrical systems   - Real-world experiences   - Big data integration (specific examples)   - Turbines for low-wind sites
Digitalisation (transversal) 🌀 ≋ 🎓
- Managing data   - Sharing data   - Protecting data   - Using data for improved operations   - Using data for improved industrial processes   - Using data for improved integration   - Artificial intelligence / Robotics   - Using data to maximise value of every MWh produced   - Using data to improve power forecasts   - Experience from other industry sectors in using digital technologies
End-of-life issues 🌀 ≋ 🎓
- Policy & regulatory issues   - Technology options   - Life extension, repowering, decommissioning & recycling: real life experiences   - Environmental impact of repowering/refurbishing projects   - Potential for repowering/refurbishing project financing
Environmental impacts, social acceptance & spatial planning 🌀 ≋ 🎓

- Impact of wind energy on global climate
- Local impacts (wildlife)
- Survey techniques
- Radar
- Best practices in corporate social responsibility
- Environmental impact of repowering/refurbishing projects
- Co-existence with other industries
- Spatial planning
- Social acceptance: ownership models, community benefits – real life examples of successful partnership between utilities and cooperatives or other forms of organisations
- Waste management

Health & safety

- Safety culture and/or leadership
- Incidents and lessons learned
- Standardisation
- Best practices in crisis management
- Training

Installation and logistics

- The development of wind energy hubs, ports and hinterlands
- Installation technologies and examples from other industries
- Real-world experiences
- Future logistics, transport and access

Integrating wind into the energy system

Grid Integration
- Big data applications for grid integration
- Data exchanges with TSO & DSO, and governance arrangements
- System integration studies
- load aggregation technology / approaches
- virtual power plants
- blockchain technology

Electrical aspects and the grid

Grid support services as additional revenue streams
- Main barriers and best practices regarding the participation of wind farms in balancing and congestion management markets, and other ancillary services
- Innovative storage and grid integration practices
- Operating wind farms in hybrid mode (with storage, with PV, etc.)

Market design
- Priority dispatch/access and rules for curtailment in times of system stress
- Enhancing system flexibility (e.g. design of intraday market, limiting must-run generation, local vs. single flexibility market)
- Long term investment signals: design of support schemes and market integration (e.g. energy vs. capacity based), price formation (e.g. bidding zone configuration) and potential for hedging instruments

Operations and Maintenance

- Reliability, condition monitoring
- Operation & maintenance

• Big data applications to O&M (specific examples and case studies)
Supply chain and procurement 🌀 〰️ 🎓
• Procurement issues • Supply chain models • Smaller components • Big data applications to supply chain management • Sustainability of the supply chain