Wind Energ. Sci., 11, 347–348, 2026
https://doi.org/10.5194/wes-11-347-2026

eawe european academy of wind energy
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Editorial: Celebrating the first decade of *Wind Energy Science*

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Published: 8 February 2026

Ten years ago, *Wind Energy Science* published its very first article: *"Long-term research challenges in wind energy – a research agenda by the European Academy of Wind Energy"*. That inaugural paper articulated a vision of what fundamental knowledge the field would need to meet the urgent demands for clean energy of the modern world. The authors boldly stated: *"we want to proclaim that there is also a strong need for basic long-term research in wind energy"*. Ten years later, that vision, that need for basic fundamental knowledge, and many of those challenges have catalyzed into some of the most vibrant research in our field, and the journal has become a central venue where much of that evolution has been described.

The past decade has witnessed extraordinary advances: the rise of ever-larger turbines; the expansion into deeper waters with floating offshore concepts; major progress in our understanding of atmospheric flows; increasingly sophisticated models at all complexity scales of flows and structures, with their mutual interactions; improved control algorithms at both the turbine and farm levels; deeper integration of wind power within the broader energy grid; a shift from cost to a more holistic notion of value, in all its diverse economic, social, and environmental meanings; and many others, too many to list. Within this landscape of exciting research and rapidly growing knowledge, *Wind Energy Science* has served as a home for rigorous, interdisciplinary, and openly accessible research – values that remain core to our mission. While *Wind Energy Science* is owned and founded by the academic community through the *European Academy of Wind Energy (EAWE)*, the journal has also attracted significant attention from the wind energy industry. The interaction between academia and industry is a cornerstone of our field and plays a key role in ensuring the continued relevance of our research.

Our commitment to Open Science, including open access and an open and interactive review process enhanced by comments from the public, together with transparency, reproducibility, and data sharing, have strengthened scientific dialogue while amplifying the global reach of the journal. Building on the call for fundamental research of the inaugural article, we are publishing the Grand Challenges Series, a growing collection of review papers that flesh out the main gaps that still need to be filled.

The next decade will demand even more from the wind energy research community. As our knowledge, modeling, and simulation capabilities have grown, so has the complexity of wind energy systems, making continued progress dependent on the sharing of data, models, and tools. Ensuring that such data, models, and tools can be curated, shared, and used by the community is no longer optional; it is indeed central to the progress of our field. *Wind Energy Science* will continue working to encourage, promote, and support data availabil-

ity, reproducibility, and standardized practices that help researchers build upon each other's work.

Equally transformative is the emergence of artificial intelligence across the entire research landscape. AI offers immense opportunities, but it also presents challenges: questions of validation, bias, interpretability, and the responsible use of machine-generated content. Navigating this AI landscape will require great care and attention. As a community, we must establish best practices that preserve scientific integrity while embracing the power of new tools.

We will keep working to ensure the highest standards through rigorous reviews and transparent and open processes. The resulting high-quality articles will be enriched – whenever possible – with well-structured data and reproducible workflows. We will also keep working with the community to identify key areas where further progress is needed. By doing so, *Wind Energy Science* will remain a catalyst for collaboration and discovery and a platform where rigorous research, open dialogue, and ideas can flourish.

However, beyond reflecting on what we have achieved and trying to look into our future, this anniversary is first and foremost a celebration of our community. Thank you to all authors, reviewers, editors, and readers, on whose dedication the journal is based. The first decade has laid a strong foundation, building on the call for basic, long-term fundamental research of that inaugural paper. We look forward to the next decade of discovery and advancement in wind energy science, built on our strong community.