



Title: FLOW Project 2024: A Year of Innovation, Collaboration, and Impact in Wind Energy

FLOW Consortium Meeting on January 30th and 31st, 2024 in EDF Lab in Chatou, France

The year began with the FLOW Consortium Meeting on 30th and 31st January at the [EDF Lab in Chatou, France](#). This meeting marked a pivotal moment for reviewing the outcomes of the first project year and setting ambitious goals for 2024.

Key highlights included the presentation of initial findings from Work Package 3 (WP3), showcasing advancements in numerical weather prediction models and their integration into the FLOW toolchain. The meeting featured collaborative sessions with sister projects—AIRE, MERIDIONAL, HIPERWIND, and AptWind—focusing on shared goals and innovative methodologies. This gathering sparked a year of accelerated research and development, underscoring FLOW's commitment to advancing wind energy innovation through collaboration.

FLOW Participation at the TORQUE Conference: Showcasing Research Excellence

In May 2024, the FLOW project made a significant impact at the prestigious [TORQUE Conference](#) held in Florence, Italy. This event provided a global stage for the dissemination of groundbreaking research and the presentation of key findings achieved to date. Our partners showcased their latest advancements in wind energy.

Siemens Gamesa shared insights from a comprehensive study on coupled terrain and array interaction flow models, offering critical perspectives on optimising wind farm performance in complex environments. DNV presented findings on the influence of blockage and wake effects across multiple power performance tests, demonstrating FLOW's contributions to refining predictive models. DTU focused on a wind farm flow models verification and validation presentation. Fraunhofer IWES delivered a detailed analysis of synthetic wind fields developed using high-resolution 3D WindScanner measurements and on identifying small-scale wind events using advanced nacelle-mounted lidar technology.

The participation at TORQUE 2024 demonstrated FLOW's commitment to advancing wind energy technologies through collaboration and knowledge sharing.





Consortium Meeting and Stakeholders Seminar in Leuven, Belgium

In September 2024, the city of Leuven in Belgium, hosted two defining events for the FLOW project for a period of three days: The Consortium Meeting and the Stakeholders Seminar. These gatherings solidified FLOW's role as a bridge between cutting-edge research and practical industry solutions.

The [Consortium Meeting](#) highlighted progress in areas such as low-level jet modelling and the FLOW API, tools critical to optimising wind farm performance. A strategic workshop led by INOVA+ focused on ensuring the long-term sustainability of project innovations, aligning them with market and societal needs.

The [Stakeholders Seminar](#) brought together over 100 participants from leading companies like RWE and Parkwind to engage directly with the project's findings, including climatological datasets and insights from measurement campaigns. Stakeholder feedback enriched discussions, ensuring FLOW's outcomes are actionable and industry-relevant.

Launch of WindLab: A New Era of Collaboration

In a landmark collaboration with MERIDIONAL and AIRE, FLOW proudly launched the [WindLab Knowledge and Data Hub](#) on 13 November. WindLab serves as a centralised platform for sharing datasets, tools, and research outcomes, designed to accelerate innovation and foster open collaboration across the wind energy sector.

The webinar introducing WindLab highlighted its potential to transform the accessibility of high-quality data and its implications for improving predictive capabilities in wind farm performance. By consolidating contributions from three EU-funded projects, WindLab stands as a testament to the power of joint initiatives in achieving Europe's carbon neutrality targets by 2050. The launch event received widespread acclaim, with participants expressing enthusiasm for the platform's ability to bridge research and application in real-world contexts.

Looking Ahead

Building on its 2024 successes, FLOW will enhance tools, strengthen industry collaborations, and expand wind energy research contributions. With upcoming seminars, improved measurement campaigns, and ongoing WindLab development, FLOW is dedicated to providing impactful solutions for a sustainable energy future.

For updates on FLOW's developments, visit the project's [website](#) or check the [press releases](#). For media inquiries or further information, kindly contact FLOW's communications and press lead:

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