

## **HYNET PROJECT: A BOLD STEP TOWARDS EUROPE'S SUSTAINABLE ENERGY FUTURE**



The HYNET consortium officially launched its groundbreaking initiative with a **kick-off meeting held on 10-11 October 2024 in Brussels, Belgium**. Hosted by UBITECH ENERGY, the event brought together a diverse group of **experts, stakeholders, and innovators** all dedicated to shaping the future of Europe's energy systems.

**HYNET** is set to tackle one of the most critical challenges in modern energy transition—integrating renewable energy sources and power electronics into traditional AC systems. The project will focus on developing and deploying advanced control algorithms, protection mechanisms, and grid-forming capabilities to improve grid management, enhance network security, and support islanding operations. By addressing these core aspects, HYNET aims to facilitate more reliable, sustainable, and efficient energy grids across Europe.

HYNET ambition centers around advancing the integration, stability, and resilience of **hybrid AC/DC energy distribution networks**. It aims to develop innovative operational tools for power dispatch, voltage control, and security within these grids, addressing the current challenges in **transitioning from traditional AC systems to hybrid ones that integrate DC components**. The project introduces new control algorithms, protection mechanisms, and grid-forming capabilities to manage the increasing penetration of renewable energy sources and power electronics. Additionally, HYNET plans to enhance network security, facilitate islanding operations, and support investment planning by incorporating multi-energy modeling, thus enabling more efficient grid management across varying conditions and supporting the European energy transition. Through real-world demonstrations in diverse settings, HYNET targets to establish a robust framework for the future of European energy systems.



*“We are excited to embark on this journey with such a talented and forward-thinking group of partners,” said Ilias Zafeiropoulos, Technology Director of UBITECH ENERGY. “HYNET represents an important step forward in the development of smart grids that can efficiently integrate renewable energy while ensuring the stability and security of power networks.”*

The HYNET consortium’s work will be pivotal in meeting the growing demands for cleaner, more efficient energy systems, and it stands as a key contributor to Europe’s energy transition.

Looking ahead, the next plenary meeting will take place on 8-9 April 2025 in **Paris, France**, and will be hosted by our esteemed partner, **EDF**. This meeting will continue to build on the progress made in the initial phase of the project and further solidify collaborations among key stakeholders in the HYNET initiative.

For more information about the HYNET project and its progress, please visit <https://hynet-project.eu/>





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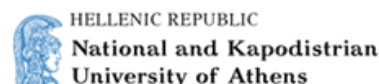
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