

■ Event Recap: 4th MAIA Workshop on Shaping Europe's Sustainable Energy Future with Hydrogen

We were excited to organize the 4th MAIA Workshop: <u>Shaping Europe's Sustainable Energy Future</u> with Hydrogen, held on April 29, 2025, at the Athens University of Economics and Business as part of the Hydrogen Conference on Shaping Europe's Sustainable Energy Future! This in-person event brought together policymakers, researchers, industry leaders, and civil society to explore hydrogen's critical role in Europe's energy transition.

The Hydrogen Conference, which gathered more than 100 participants, featured expert insights from leading academics, policymakers, and industry stakeholders on the opportunities and challenges hydrogen presents for decarbonization. Participants explored the state of hydrogen technologies, their transformative potential, and the role of countries like Greece in shaping a resilient European hydrogen economy.

Building on these discussions, the MAIA Workshop, moderated by Dr. Konstantinos Dellis and Hezal Dilan Sari, MA, provided an interactive space where participants identified key barriers, mapped influential stakeholders, and co-created a shared European vision for hydrogen's integration into the energy mix.

The workshop served as a dynamic platform for dialogue, knowledge exchange, and collaborative solution-building — reinforcing Europe's commitment to climate action and a sustainable energy future. The participants were introduced to the MAIA project and its suite of tools and services. The MAIA Connectivity Hub was used as an example of drawing information on the policy bottlenecks facing the scaling up of green hydrogen capacity.

Key Takeaways

Regulatory Clarity and Policy Alignment Are Critical

There are major delays and gaps in national regulations, in the EU and Greece in particular, which threaten the timely development of hydrogen and renewable projects. Participants emphasized the need for harmonized EU-wide regulatory frameworks by 2030, clear safety standards, and strong political backing to create a predictable, supportive policy environment.

Infrastructure and Technology Gaps Must Be Addressed



Scalability challenges — including hydrogen production, distribution networks, storage, and refueling infrastructure — emerged as central barriers. Existing technological solutions face compatibility issues, and patent barriers further slow innovation in the field. Advancing robust, flexible, and integrated national and EU-wide innovation systems is essential for large-scale deployment.

Financial Risk and Investment Uncertainty Hold Back Progress

Green hydrogen's high costs, uncertain revenue streams, and lack of clear ROI (especially for SMEs) create investment hesitancy. Stakeholders called for targeted public support measures like grants, feed-in tariffs, and contracts for differences to de-risk early investments and attract private capital. Emphasizing the constraints on market mechanisms, participants advocated for targeted investment schemes and blended finance to boost activity in the field of green hydrogen.

Public Awareness and Social Acceptance Are Weak Points

There is widespread concern over low public understanding and acceptance of the renewable transition, particularly regarding the expansion of PV, wind, and grid infrastructure. Engaging the public through co-created decarbonization visions and improving awareness among policymakers and citizens is crucial to building societal support.

Coordinated Multi-Stakeholder Action Is Essential

The workshop identified a complex ecosystem of actors — EU institutions, national governments, private companies, NGOs, and academia — whose collaboration is vital. Universities can help bridge knowledge gaps, while public authorities need to lead coordination and ensure transparent, inclusive processes.

A Shared Vision for a Hydrogen-Powered Future

The workshop concluded with a clear, collective vision: a fully decarbonized economy powered by 500 GW of hydrogen capacity, enabled by a fully integrated European Hydrogen Market. Decarbonizing hard-to-abate industries, promoting circular materials use, including society in the transition, granting access to de-risked capital, and integrating hydrogen with both established and upcoming technologies are just a few of the top priorities reflected in this vision.

Thank you to all participants who contributed to this meaningful discussion. Together, we're shaping the future of Europe's sustainable energy landscape!