

Hydrogen Market Analyst and Hydrogen Policy Specialist future profession

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This project has been funded with support from the European Union.
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Project: Professionals and their skills in hydrogen
Project number: 2023-1-PL01-KA220-VET-000159821

PROFESSIONAL COMPETENCE WITH MAP OF SKILLS IN THE HYDROGEN SECTOR -

The EU has established a robust framework to support the hydrogen sector.

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This project has been funded with support from the European Union. This article has been written as part of the project 2023-1-PL01-KA220-VET-000159821 Professionals and their skills in hydrogen sector co-funded by the European Union in partnership with 'Zielona Chemia' Cluster from Poland.

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Hydrogen Market Analyst and Hydrogen Policy Specialist

A hydrogen market analyst and hydrogen policy specialist plays a critical role in shaping the hydrogen economy, aligning with the goals of the European Union's Green Deal and the objectives of organisations like the Irish Hydrogen Society. This profession focuses on analysing market trends, developing strategies to foster hydrogen adoption, and navigating the regulatory landscape to ensure compliance with EU and national policies.

The European Union (EU) and Ireland have established comprehensive regulatory frameworks to promote the development and integration of hydrogen as a key component in the transition to sustainable energy.

The EU has implemented several policies to support the adoption of renewable and low-carbon hydrogen:

Renewable hydrogen production rules: In June 2023, the EU formally adopted rules to ensure that renewable fuels of non-biological origin (RFNBOs), including hydrogen, are produced from renewable electricity sources. These regulations are part of a broader framework that includes energy infrastructure investments and state aid rules, aiming to achieve legislative targets for renewable hydrogen in the industry and transport sectors.

Hydrogen Strategy and REPowerEU Plan: The EU's hydrogen strategy, along with the REPowerEU plan, provides a comprehensive framework to support the uptake of renewable and low-carbon hydrogen. These initiatives aim to decarbonize the EU's energy consumption by increasing the share of hydrogen in various sectors.

Regulatory framework for a European hydrogen market: The EU is developing a regulatory framework to facilitate the creation of a European hydrogen market. This includes setting rules for hydrogen infrastructure, market operations, and integrating hydrogen into the existing energy system.

Ireland's Hydrogen Regulations

Ireland has aligned its national policies with EU directives to promote hydrogen development - National Hydrogen Strategy published in July 2023. This strategy focuses on leveraging the country's natural resources, particularly offshore wind, to produce green hydrogen for domestic use and export. The strategy outlines the regulatory framework necessary to ensure hydrogen safety and integration into the energy system.



The development of hydrogen clusters in Ireland includes specific attention to safety issues. A safety roadmap is being developed, and the appropriate regulatory framework will be defined to ensure hydrogen safety, including studies on hydrogen leakage and NOx emissions. Currently, Ireland's gas network does not allow for the injection of hydrogen. However, discussions are ongoing to amend the Code of Operations to facilitate hydrogen integration, aligning with EU regulations and supporting the transition to a low-carbon energy system.

These regulatory frameworks at both the EU and national levels are designed to promote the safe and efficient development of hydrogen technologies, supporting the broader goal of transitioning to a sustainable and decarbonized energy system.

Ireland has been actively developing its hydrogen policy framework to align with the European Union's energy transition goals.

As a summary, key documents and regulations include:

- National Hydrogen Strategy published in July 2023, this strategy outlines Ireland's vision for integrating hydrogen into its energy mix, emphasizing the production of green hydrogen from renewable resources.



Source: <https://www.irishexaminer.com/news/arid-40336385.html>

- Climate action and low-carbon development (Amendment) Act 2021: This legislation sets legally binding targets for reducing greenhouse gas emissions, providing a legislative foundation for hydrogen-related initiatives.
- Policy to enable green hydrogen in Ireland, a white paper discussing the necessary policies to support the development of green hydrogen infrastructure and markets in Ireland.

Key Responsibilities

- monitor and analyse global and regional hydrogen market trends, including production, distribution, and consumption.
- assess the economic feasibility of hydrogen technologies, projects, and infrastructure investments.
- identify opportunities for hydrogen integration in various sectors, such as energy, transport, and industry.

Skills and Qualifications

A degree in energy policy, environmental sciences, economics, or a related field. Postgraduate qualifications in hydrogen technologies or sustainable energy are an advantage:

- analytical skills: proficiency in data analysis, economic modelling, and market forecasting.
- policy knowledge: familiarity with EU hydrogen directives, safety standards, and funding mechanisms.
- communication skills: ability to convey complex information to diverse audiences, including policymakers and industry stakeholders.
- technical awareness: understanding of hydrogen production, storage, and transportation technologies.



Career Opportunities

Hydrogen market analysts and policy specialists are in high demand across sectors, including national and regional government agencies (e.g., climate and energy departments), industry associations (e.g., Irish Hydrogen Society, Hydrogen Europe), energy companies and hydrogen infrastructure developers, research and consulting firms focused on energy transition and market analysis, international organisations supporting the EU's climate goals.

This role is pivotal in achieving the EU's ambition of making hydrogen a cornerstone of Europe's carbon-neutral future and Ireland's national decarbonisation strategy.

To stay tuned with our work, visit our platform:

<https://feriplatform.org.pl/proffesionals-and-their-skills-in-hydrogen/>

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