

eco-design Guidelines for Hydrogen Systems and Technologies

Development of first preparatory study of a hydrogen product, under the principles of the Ecodesign Directive

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Intro



Eco-design is a key factor towards a circular and neutral carbon economy by 2050.

Several relevant documents have reflected this commitment, as in the case of the **EU Green Deal**, the New **Industrial Strategy for Europe** and the **Circular Economy Directive**, among others.





Ecodesign / eGHOST



eGHOST project will contribute to position **fuel cells and hydrogen** and will develop the first preparatory study of a hydrogen product, under the principles of the **Ecodesign Directive**.







eGHOST project

The project will develop **two specific guidelines** for Fuel Cells and Hydrogen products:

- for a **PEM Fuel Cell Stack**
- for a Solid Oxide Electrolyser.







The final goal will be based on three priority objectives:



The first objective is based on the development of life cycle thinking tools to assess the sustainability profile for both products to create a Hydrogen eco-design methodology.

triple-impact decision-making approach







e GHOST



... will contribute to European Initiatives, creating metrics for prospective, environmental and social aspects to be integrated in the EU Taxonomy.

2nd eGHOST objective - METRICS

... giving support the *European hydrogen sector* and setting the basis for **future eco-design** regulations according to Eco-design Directive.





3rd eGHOST objective – WHITE BOOK





... the project will allow the formulation of eco-design guidelines for FCH products where the lessons learned will be integrated into an **eGHOST White Book**, a guidance and reference book for any future Fuel Cells and Hydrogen eco-design project.







Partners map



The eGHOST project relies on the participation of internationally renowned institutions in the fields of energy, hydrogen, life cycle management and Ecodesign:

Time Frame: Jan 2021 – Dec 2023 Funded: Fuel Cells and Hydrogen 2 Joint Undertaking (H2020) Partners: 7 from 4 countries







Department for energy Engineering, FS-UL





Participation in creating new products, technologies, technology solutions and innovations





#BestSucessStory, November 2021

https://hidrogenoaragon.org/en/eghost-and-sh2e-win-hydrogen-weekaward-for-best-success-story/





If you need more info ...







eGHOST



eco-design Guidelines for Hydrogen Systems and Technologies For further information, please visit:

https://eghost.eu

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