

The project team wishes to invite relevant stakeholders and interested people to the development of a specific guidance document on Life Cycle Assessment for application to hydrogen and fuel cell technologies.

Why (Public) Consultation?

In order to meet the practical requirements of real life cases, the project team invites experts to bring in their specific knowledge and ideas to make sure to achieve comprehensive adjustment within the stakeholders and reach broad acceptance within the fuel cell, hydrogen and LCA communities.

How to Participate?

After compiling a first version of the guidance document, invited experts (the invited expert consultation step) will be able to comment on the draft guidance document. For that purpose a dedicated workshop will be organised in Brussels in mid-February 2011.

In addition to the workshop in a second consultation step (public consultation step), experts and the interested public will be invited to comment on the advanced guidance document within a timeframe of 4 weeks, starting April 1st. The document for consultation will be made available on the project webpage.

Project Coordination





Project Members

























Training Courses

For easier application of the guidance document two training courses will be conducted in August/September 2011. These training courses are targeted to industrial stakeholders, LCA practitioners and officers involved in the governmental normative on innovative energy devices and processes.

For further information about the project, its outputs, partners, timeline and the consultation process you are very welcome to visit our website www.fc-hyguide.eu.

To contact the consortium please refer to info@fc-hyguide.eu

Life Cycle Assessment Guidance for Fuel Cells and H₂ Technologies



What is FC-HyGuide?

The overall objective of FC-HyGuide is to develop a guidance document, related training materials and courses for LCA studies on fuel cells and hydrogen production. Based on the ILCD Handbook procedure and together with specific examples, this manual will offer step by step guidance for LCA practitioners in industry, as well as for researchers.

What is the background of the project?

Fuel cells are not yet a commercial technology and a considerable effort in research and development is ongoing to meet not only the efficiency, durability and cost targets but also environmental sustainability is required to gain significant market shares and be fully accepted by consumers. Life Cycle Assessments can increase this acceptance. Moreover, LCAs will be obligatory in this field in the future and so common rules to carry out such assessments will be necessary.

How to approach this topic?

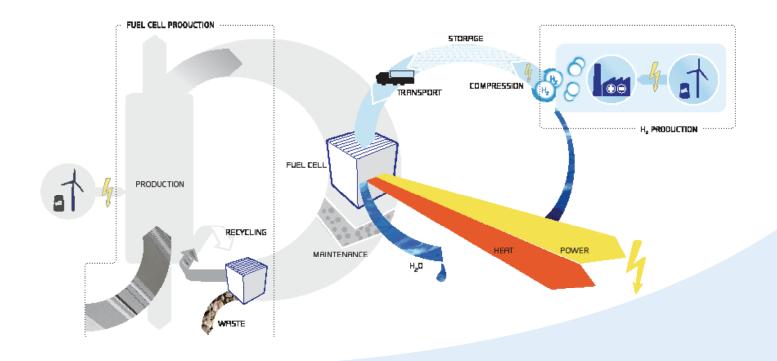
A modular approach will allow each technology developer to assess their own technology without taking into account all the possible combinations in more complex systems, and to make the related information available in the ILCD (International reference Life Cycle Data system) Data Network. The structure of information modules allows the accumulation of knowledge to build up assessments also for more complex systems.

Output

The main output of the project will be a PCR-type guidance document - based on the ILCD handbook - that is scientifically sound, industry accepted and quality assured. Structured in one section for fuel cells and one for hydrogen the document will contain the following information:

PART I - General information

- 1. About this document
- 2. How to use this document
- 3. Introduction in LCA



PART II - Guidance on performing Life Cycle Assessment on hydrogen production/fuel cell technologies

- 4. Introduction
- 5. Goal of the Life Cycle Assessment study
- 6. Scope of the Life Cycle Assessment study
- 7. Life Cycle Inventory Analysis of the study
- 8. Life Cycle Impact assessment of the study
- 9. Interpretation and quality control of the study
- 10. Reporting of the study
- 11. Critical review of the study

Annex I – LCA study reporting template on hydrogen production/fuel cell technologies

Annex II – Data collection template for hydrogen production/fuel cell technologies

Annex III – Example from case studies on hydrogen production/fuel cell technologies

The idea behind FC-HyGuide: guidelines for assessing technology modules (fuel cells or hydrogen production) or full technology systems

Following the FCH JU strategy this project will speed up the development of hydrogen supply technologies to the point of "commercial take off".

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