HYTECHCYCLING

New technologies and strategies for fuel cells and hydrogen technologies in the phase of recycling and dismantling

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PROJECT OVERVIEW

- Call year: 2015
- Call topic: FCH-04.1-2015 Recycling and Dismantling Strategies for FCH Technologies
- Project dates: 01/05/2016 – 30/04/2019
- % stage of implementation 01/11/2017: 50 %
- Total project budget: 497 666,25 €
- FCH JU max. contribution: 497 666,25 €
- Other financial contribution: 0 €
- Partners: Foundation for the Development of New Hydrogen Technologies in Aragon (ES)(CO), University of Ljubljana (SL), Foundation IMDEA Energy (ES), Lopez Soriano Industries (ES), Environment Park (IT)

PROJECT SUMMARY

Project LOGO

HyTechCycling aims to deliver reference documentation and studies about existing and new recycling and dismantling technologies and strategies applied to FCH technologies, paving the way for future demonstration actions and advances in legislation and business models.

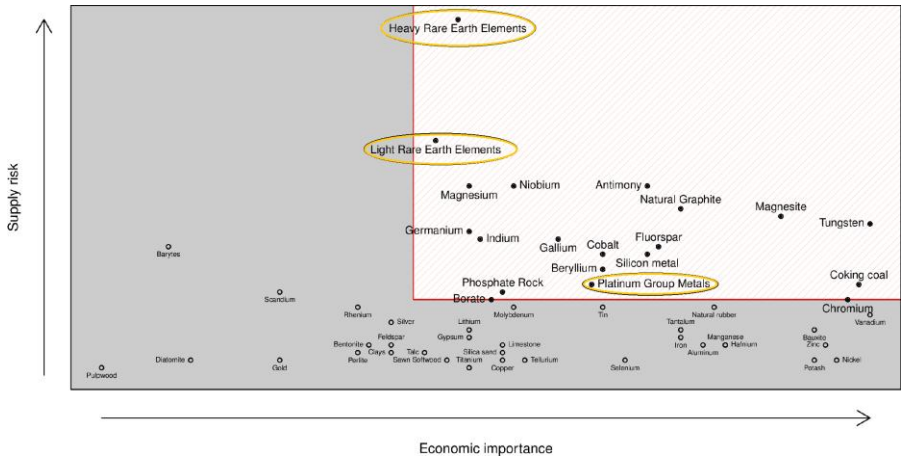
- First European project related with FCH technologies recycling.
- Involves the hole FCH technologies life's cycle.

PROJECT SUMMARY

Project LOGO

IDENTIFYING THE PRESENT. LOOKING TO THE FUTURE:

- Identification and characterization of critical materials.
- Current End-of-Life technologies.
- Regulatory framework and barriers.
- Needs and challenges in the End-of-Life.



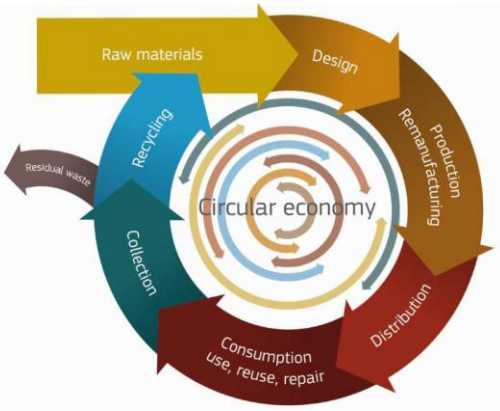
PROJECT SUMMARY

Project LOGO

Life Cycle Assessment (LCA)

- Covering not only the manufacturing process but also the customer use of the FCH technology, to asses a better understand of FCH technologies environmental affections.

- Considering the BoP complete. Different LCA for each technology study in the project (AWE, PEMWE, PEMFC, SOFC)



PROJECT SUMMARY

Project LOGO

CREATION OF NEW BUSINESS MODELS

Looking how to apply the developments of the project, business models will be created, with relevant companies of the FCH technologies life, to implement all the knowledge and outcomes of the project.

SYNERGIES WITH OTHER PROJECTS AND PROGRAMMES

Project LOGO

- **Interactions with projects funded under EU programmes**
  - **CRMRecovery** project (funded by LIFE 2014) Each year around 9.9 million tonnes of WEEE is generated in the EU. Due to poor collection and recycling rates and processes that can only recover a small number of materials, many critical and valuable materials are lost from the system.

- **Interactions with national and international-level projects and initiatives**
  - **Fuel Cell Recovery project (UK):** develop new design guidelines for FC recovery, new remanufacturing and recycling process design to facilitate recovery and new 'circular' business models.

DISSEMINATION ACTIVITIES

Public deliverables

- Assessment of critical materials and components in FCH technologies
- Report on existing recycling technologies applicable to FCH products
- Regulatory framework analysis and barriers identification
- LCA approach in end of life cycle of FCH technologies
- Study on needs and challenges in the phase of recycling and dismantling

Conferences/Workshops

- 1WS organised by the project

Social media

Publications:

- Assessment of Critical Materials and Components in FCH Technologies to Improve LCIA in end of Life Strategy. 10th International Conference on Sustainable Energy and Environmental Protection. ISBN 978-961-286-053-0
- FCH JU project on end-of-life of fuel cell, hydrogen technologies. Fuel Cells Bulletin. Vol.2016 issue8, August 2016, Page 11

Thank You!

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