



Cross-cutting Topics in 2015 call



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The projects called for in 2015 will cover the following themes...



Recycling of FCH Technologies
Education and training
Safety-related issues

through the following specific topics...

Topic	Type of Action	Ind. Budget M EUR
FCH-04.1-2015: Recycling and Dismantling Strategies for FCH Technologies	Coordination & Support Action (CSA)	2,5
FCH-04.2-2015: Novel Education and Training Tools		
FCH-04.3-2015: Best practices guidelines on safety issues relating to current and emerging FCH Technologies		

Challenge

- FCH technologies will be required to **meet the environmental standards**.
- Therefore, **safe recycling and dismantling FCH products** at the end-of-life should be envisaged, with special attention towards the **recycling of critical and scarce materials**.

Scope

- Definition and assessment of **current and novel strategies for recycling and dismantling** FCH Technologies.
- Identify **critical raw and rare materials and components**.
- Development of **Life Cycle Assessment models**.
- Development of **business model** on how to promote and make economically feasible the strategies proposed.
- Recommendations for **introduction of the new processes in the recycling centers** .
- **Showcase in a recycling center** for at least one FCH product.

Impact

- Provide **guidance on future need and focus of recycling strategies**
- Establish a **road map for recycling and dismantling strategies** for FCH technologies.
- **Harmonize procedures** at EU level for both phases: recycling and dismantling.
- Pave the way for future large demonstration projects validating the business model proposed.

Indicative Funding; No. of projects; Expected duration

- EU contribution of 0.5 MEuro; 1 project; 2-3 years

Cross-cutting Activity Area

Topic 4.2: Novel Education and Training Tools

Challenge

- The **presentation of the FCH technology and its fundamental processes through modern information technology concepts**, serviceable for higher education, industry or by self study.

Scope

- Development of **new digital based methods** to educate on FCH technologies and fundamental processes behind.
- The **e-learning concept: web-based platform**, open access software, **free access** and **shall link others existing e-learning platforms**, databases and digital education material.
- In addition, user interfaces shall be envisaged to **expand the e-learning platform also to e-science**.
- **International collaboration** with similar activities shall be an advantage.

Impact

- Development of **new digital based methods and concepts** to educate and train engineers and technicians.
- Inclusion of **figurative language and representation** to support and explain physical and mathematical principles.
- Inclusion of **digital opportunities to transpose self-study** on FCH technologies **and virtual practicing measures**.
- **Interconnections** with already existing e-learning platforms and digital training materials.
- Provision of **freely accessible e-learning platform** implementing education and training methods developed

Indicative Funding; No. of projects; Expected duration

- EU contribution of 1.5 MEuro; 1 project; 2-3 years

Challenge

- The overall safety of an assembly can be increased through improving safety coefficients of individual components.
- **Best practice guidelines** are required on current and emerging FCH technologies including information at the component level for which definition of fail-safe modes and restrictions on use might be applied.

Scope

- Improve the overall safety by **improving safety coefficients of individual components** within the assembly.
- **Best practice in assembling and installing** components to extensive plants, based on known practical issues and safety standards.
- Creation of comprehensible and specific **best practices guidelines**
 - based on already identified practical issues.
 - Implementing new standard operating procedures and safety standards.
 - Implementing restrictions according to the assembly of materials, components and interfaces.
 - Including general procedures to define the best compromise of cost-reduction, safety and industrialization.
 - Identifying further requirements to technical components common to both, energy and transport sectors.

Impact

- **Reduce failure ratio** of several assembled plant technology.
- **Raise public confidence** in FCH Technologies.
- **Improve the operation and maintenance** of FCH plant technologies by best practice guidelines.

Indicative Funding; No. of projects; Expected duration

- EU contribution of 0.5 MEuro; 1 project; 2-3 years

Call Material <http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h2020-jti-fch-2015-1.html>

FCH JU official website:
www.fch.europa.eu



**European Industry Grouping
for a FCH-JTI (NEW-IG):**
<http://www.fchindustry-jti.eu>



**New European Research Grouping
on FCH (N.ERGHY):**
<http://www.nerghy.eu>

