



FCH 2 JU Programme Review Days 2015

Concluding remarks

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Programme Reviewing Process

- The Programme Reviewing Process is getting more and more professional and it is a unique opportunity for highlighting the achievements, addressing questions to the community, expressing opinions, debating and learning from the best practices;
- The great majority of projects show a good relation to the defined objectives in the MAIP/MAWP and AIP/AWP and the achievements to-date, are consistently good;
- The projects maintain Europe at the leading edge of international H₂FC development;
- There are many cutting edge achievements with relevance at international level in the field of H₂FC busses, electrolyzers, distributed energy production and integration of intermittent energy sources that have to be promoted in the communities and have to be converted in competitive businesses.

Dynamically Adjusting Targets in MAWP/AWP

- In a very quick changing context at regional and global scales the Programme Reviewing process has to take into consideration the changes in the society and to adapt dynamically. At the same time, the outcomes of the implementation process has to contribute to adjusting the targets in MAWP and AWP;
- Better definition and harmonization of specific objectives is needed in addressing the projects where the complexity is very high (HyTRANSIT is addressing fleet management, HRS infrastructure and grid connectivity but, the last objective looks just like an appendix without relevance);
- IMPALA's message: "The targets defined for automotive applications concern Pt loading, power density, operating conditions and durability. They are clearly the ones required at present for this application but can't really be *considered as reachable within a 3-years single project. Therefore the definition of "partial" or "intermediate" targets could be more easily addressed by one individual project and the success of this project could then be more easily checked*".

Enhanced Collaboration in Implementation

- Coordinated approach has to be followed for infrastructure build-up with regards to locations, technology, capacity /performance.
- A methodology for Value Analysis/Value Engineering could be implemented for putting a strong emphasis on customer views.
- Creative solutions for market deployment have to be encouraged for new approaches as the concept of Infrastructure as a Service.

Scientific Research

- Scientific research activities are crucial to achieve many MAWP targets, in particular regarding durability and cost.
- Cost reduction cannot only rely on manufacturing volume effect. It should be generated a strong emphasis on the involvement of new manufacturing concepts.
- Breakthroughs in new materials and architectures are needed, especially for HTPEM, PCFC and SOFCs. Specific targeted projects with low TRL may have stronger impact than when integrated with subsystem or system activities.

International Cooperation & Inclusiveness

- The good practices on cooperation and sharing of the results between the projects has to become a norm contributing to the generation of synergies and cross fertilization.
- RCS activities are generic areas for enhancing international cooperation.
- Much more emphasis has to be put on the contribution of the projects in promoting inclusiveness in the EU.

Final Remark

During the PRDs, we have discovered that we have a huge treasure consisting of Terabits of data from testing, extensive experience in many different fields, large and sophisticated infrastructures for testing, experimental investigations and simulation of various real conditions, multiscale and multiphysics modeling and simulation tools and much more than all of these, we have a large community of highly educated, cultural diverse and creative community of people.

It is only up to us to value this treasure for a better future for all of us!