



The proposal addresses the call topic very well by aiming at the optimization for hydrogen production of a coupled gasification and hot gas cleaning system, developed in the current FP7 UNIQUE project for electricity production. For that purpose, syngas conversion stages (WGS and PSA) will be added for the production of PEM fuel cell grade hydrogen. The technical objectives are in line with the expected outcome of the call concerning the requirements of the targeted H2 refueling stations. Progress beyond the state-of-the-art is expected for catalysts and hydrogen purification devices. The hot gas cleaning system with catalytic hot gas filter candles is one of the proposed innovations. The combination of the individual processes at the proposed scales is also novel. Starting from the current development level and products already available for the involved participants, the targets seem realistic although ambitious. The S/T methodology is adequate, well elaborated and straightforward. Three different development levels and gasifier sizes are foreseen, lab scale, 100 kWth and 1 MWth, fully in line with the targets of the call topic, but the difficulties of extrapolating the data from the two smaller units to the larger scale have not been properly addressed.

Weight: 1.00

Note: when a proposal only partially addresses the topics, this condition will be reflected in the scoring of this criterion.

- Soundness of concept, and quality of objectives
- Progress beyond the state-of-the-art
- Quality and effectiveness of the S/T methodology and associated work plan

**2. Quality and efficiency of the implementation and the management (Threshold 3.00/5.00)**

Mark: 4.00

Weight: 1.00

Management and implementation are straightforward and rather appropriate. A concern is the role of the "Scientific Coordination" which is essentially coordination as the scientific decisions and orientations are taken by the Steering Committee, although this is not formally mentioned among its responsibilities. The selection procedure and membership of the "Scientific Coordination" is not outlined. Several of these participants are already partners in the current FP7 UNIQUE project. The individuals involved offer a high level of scientific and industrial experience. The consortium is well balanced between academia and industry with all the necessary complementary skills. The resources to be committed have been suitably justified both globally and also with respect to each work package. The distribution of the budget between human resources and equipment is approximately in a 2:1 ratio. The justification behind this weighting has been described. The resources are evenly split between academia and industry.

- Appropriateness of the management structure and procedures
- Quality and relevant experience of the individual participants
- Quality of the consortium as a whole (including complementarity, balance)
- Appropriateness of the allocation and justification of the resources to be committed (staff, equipment...)

**3. Potential impact through the development, dissemination and use of project results (Threshold 3.00/5.00)**

Mark: 3.50

Weight: 1.00

The contribution at the European level could be high and has been clearly outlined in the proposal. If successful, the project will make a significant contribution towards hydrogen production from biomass. The likelihood of success can be regarded as high, since the risks appear rather low in this project which is more development than research. Also the partners will benefit from their current involvement in the FP7 UNIQUE project. The dissemination plan will be detailed only later. There is no exploitation plan. Contacts with the European Biomass Association and the European Biofuels Technology Platform would facilitate the dissemination and exploitation of the results. The IPR management rules will be part of the negotiations between the partners for the consortium agreement.

- Contribution, at the European and/or international level, to the expected impacts listed in the Annual Implementation Plan under relevant topic/activity.

Note: Refer to the applicable list of impacts specified in the Annual Implementation Plan.

- Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

**TOTAL (Threshold 10.00/15.00)**

Total: 11.50

**Any other remarks**  
e.g. recommendations for negotiation, only if the proposal is above threshold

No