

8 February 2019

WP4 PHASE 1: CLARIFICATION QUESTIONS & ANSWERS

1. Q. Phase 2b will take 12 months to complete. Rather than a payment at the end - can this be broken down to smaller milestones to allow better cash flow management?

A. The maximum time permitted for Phase 2b is twelve months, however Phase 2b can be completed sooner than this. There are two key milestones identified in in Phase 2b (see item 2.3. of the Guidance document) and payments against these are weighted in line with outputs required. However, you can submit a proposal, with supporting evidence, for additional milestones (that fit within the two existing milestones) with associated payments, for consideration. If there's strong demand for similar milestones from multiple manufacturers the further breakdown of 7a will be considered. Any changes made will apply to all suppliers taking part.

2. Q. Are there any forms, applications to be completed and submitted with the feasibility report – i.e. is any subcontractor form required? What information about subcontractors needs to be provided? Is there a limit on how much of the work can be subcontracted?

A. There are no forms that need to be submitted. Your report should describe the output for the project as detailed in Section 2 of the Guidance document. There is no specific limit set to the amount of work than can be sub-contracted, however, you should provide the names of any sub-contractors and a clear description of their role within the report. A summary of their skills and expertise should also be provided to demonstrate their suitability for inclusion in your design and development work.

3. Q. Is a detailed financial breakdown required (number of days for each role, list of materials, etc) or should we provide a more high-level cost break down such as the one provided in WP4 Pricing Schedule.

A. A cost breakdown should be provided, in line with the milestones detailed under the Timeline section of your report. This should be split this into days and materials to get an understanding of the true development costs.

4. Q. Can you give more detail about what is expected in relation to Section 2.4 Project Management: 'Assurances of resource allocation' in the Guidance document?

A. In this section we need to see the detail of how you plan to resource the work – particularly with regards to key team members, including any subcontractors and consortium members, and how this will be spread across the duration of the work package and ensure delivery alongside other commitments. For example, an organisation chart of those involved in the work, roles and responsibilities and estimates of time commitments and involvement at different stages of the work schedule. Please ensure that you include in your response the specific requirements outlined in section 2.4 of the Guidance document.

5. Q. We understand that while multiple appendices can be submitted, they're not scored. Engineering and other research material will make our appendices somewhat large – is there a size limit?

A. Whilst multiple appendices are permitted, they will not be scored. Appendices should be kept to a reasonable length - we advise around four pages A4 each (however this is not mandatory). Engineering and research detail should be concise and summarised as appropriate where necessary.



6. Q. You have indicated that ease of integration of our proposed product [into people's homes] is important - what do we need to demonstrate this?

A. Given that a transition from methane to hydrogen would present significant logistical challenge, products that simplify the switch over process are desirable. The essential requirement is for the development of hydrogen gas appliances that are 'like for like' alternatives to existing methane appliances (excepting the 'innovative hydrogen appliance category'). If you're developing a dual fuel, hydrogen ready or adaptable appliance you need to explain what benefits this brings. You must demonstrate your proposed product meets the requirement of the environment into which it will be installed. For example, a product proposed as the primary provider of heat and hot water in a domestic property, must be able to provide adequate heating and domestic hot water to satisfy the requirements of the home. The proposed environment needs to be clearly defined in the report.

7. Q. What is the preferred ratio between heat and power [for the innovative appliance category]? For example is it a 75:25 power:heat ratio or other.

A. There are no set requirements for the innovative appliance category. However, under the Hy4Heat programme the product must meet the needs of the environment into which it is proposed for installation. If being proposed for a domestic setting, consideration should be made to matching the likely power and heat demands. The report should detail the specification of the product and provide justification as to why this suits the proposed environment.

8. Q. Certification in phase 2b is a requirement – can you indicate the level of certification for what will be still a pre-production prototype.

A. Product certification falls into 2 distinct phases:

Phase 2a requires certification to prove the safety and functionality of the product. Certification will be against existing product specific standards. Certification at the end of Phase 2a will be sufficient to enable the product to be installed in the demonstration trial (work package 8). Phase 2b requires refinement of the prototype product and certification to the relevant ecodesign requirements. This will include efficiency and emissions. Certification at the end of Phase 2b will not be full commercial certification, but rather that sufficient to enable the appliance to be installed in a potential community trial.

9. Q. What is the foreseen delivery pressure of the hydrogen. NG is usually ~30mbar(q).

A. As per the functional spec: The hydrogen supply pressure to the property Emergency Control Valve (ECV) will be comparable to the current supply of natural gas in the low-pressure network, at 0.07 to 0.025 bar. The same meter regulators will be used as for natural gas and internal carcass pressure is expected to be nominally 20mbar i.e. similar to natural gas.

10. Q. What would be the temperature level for the co-generated heat: for certification purposes we use flow/return temperatures of 36/30 °C.

A. You are referring to the conditions under which the efficiency test work is performed – if so, we would expect these to remain as per the micro CHP test standard.

11. Q. How will we understand what's happening with other Hy4Heat work packages that may be useful to our appliance development activity?

A. We will give regular updates, hold engagement events and ensure that you are briefed. We aim a session with all stakeholders and give updates on all work packages in the autumn. As appropriate your assistance with other work packages will be encouraged - such as the development of new PAS and IGEM guidance, through the HHIC, etc.