

**Hydrogen Business Model and Net Zero Hydrogen Fund:  
Market Engagement on Electrolytic Allocation Consultation**

**UKPIA Response:**

1. Do you agree with the proposed eligibility criteria for the first 2022 HBM/ NZHF electrolytic allocation round?

No

If not, please explain why.

The eligibility criteria call for a Commercial Operational Date (COD) of the end of 2025. For a number of projects, this deadline will be extremely challenging. The proposed time between a Final Investment Decision (FID) in the first quarter of 2024 and an expected COD of 31st December 2025 will be very difficult to deliver in practice, particularly for large scale projects. One option to consider is that the COD criteria could be linked to the size of the project with larger projects that typically take longer to deliver having a later COD, and after the end of 2025.

The Hydrogen Business Model (HBM) will have similar features, such as the 12-month Target Commissioning Window (TCW), with a 12 month Long Stop Date (LSD), which is to allow for some slippage in the target COD. However, companies will still be committing to a COD that they know will be difficult (or impossible) to achieve, and this may affect the Targeted Commissioning Window (TCW).

This will also erode into the TCW which might be needed for other genuine reasons and poses a greater risk to the project. Going past the TCW into the LSD erodes into the contract delivery period.

The eligibility criteria also call for one hydrogen off-taker to be established, which does seem reasonable. However, guidance should be provided on the impacts should a single off-taker withdraw from the project. Given that the HMG decision on hydrogen in the gas main as an “off-taker of last resort” will not be made until 2023, this also leaves little time for commercial negotiations to be in place before the project can be considered, further shortening the already challenging timetable for project delivery.

2. Do you agree with the proposed evaluation criteria for the first 2022 HBM/ NZHF electrolytic allocation round?

Yes.

UKPIA broadly agrees with the proposed evaluation criteria for the first 2022 allocation round.

We do have some concerns that economic benefits are scored equally to cost considerations, as the economic benefits are often outside the control of the project once it is delivered.

In addition, the weighting associated with the economics benefits weighting needs to be carefully considered to ensure that the cost of hydrogen outside of the CfD remains competitive for UK hydrogen consumers against international alternatives.

One potential outcome of the emissions sub-criteria of emissions reduction impact is that it is used to favour projects in favour of replacing liquids consumption, rather than natural gas. If that is the intention of this criteria, then it should be explicitly stated that these are the kinds of projects that this round expects to fund.

Finally, would recommend that the evaluation criteria are reviewed after the end of the first round to ensure they are fit for purpose and can achieve the policy objectives.

3. Do you agree with the proposed portfolio factors?

Yes

UKPIA broadly agrees with the proposed portfolio factors. The portfolio factor covering the range of project size should be carefully considered in the context of fully providing the market with low-cost hydrogen.

4. Do you agree with our high-level approach to agreeing a HBM and CAPEX offer?

Yes

UKPIA broadly agrees with the high-level approach.

Ideally, a bilateral negotiation price approach, rather than a “sealed bid” type approach which lacks transparency would deliver the best value for money (VfM) and achieve the best policy objectives. However, we recognise that negotiation resource in BEIS may potentially be limited, and this should potentially be focused on the larger investment decisions.

A two-tiered approach could be useful, where a suitable threshold value is set. A threshold based on electrolyser capacity or total project cost could be a potential way of differentiating projects. Projects below this level could be offered on a “sealed bid” approach, and those above using a bilateral negotiation approach in order to prioritise potentially limited negotiation resource.

Finally, a move to only price-competitive allocations by 2025 may risk later, better technologies being unable to proceed. It may be more appropriate to dedicate a percentage of the allocations to price competitive and a percentage to early breakthrough technologies.

5. Do you think up to 20% CAPEX co-funding alongside HBM support is sufficient to enable electrolytic projects to take FID?

Don't know.

Please explain your answer.

Typically, this would be a commercial matter for companies, and UKPIA is unable to comment in detail. Investors are likely to focus on the overall HBM and Capex package.

As a general principle, 20% may be sufficient for some projects but not for others, which still offer projects that can significantly contribute towards the policy objectives. Therefore, rather than having a fixed percentage for the funding level, it may be better to include the percentage as part of the negotiation approach. However, we understand that BEIS negotiation resource may be limited, and if there is agreement on common maximum cap then then this could potentially avoid spending undue time on unviable applications.

Setting a maximum expected CAPEX level can help investors understand how much they need to borrow, and to see if they are going to obtain it at the level required. Prudent potential investors will have checked with financial advisors on the level of debt that can be raised (given the type of project and degree of credit worthiness) and how much be financed from within the company. If there is a resulting gap, then the company will know how much money the government (HMG) would need to provide. For example, an investor in a Green H2 plant has confirmed with their financial advisor that they are only going to be able to borrow 60% of the capital required (as debt) for the new plant. If the investor only has 30% of the capital required in cash, then they need HMG to provide at least 10% for the project CAPEX to be fully funded.

Another factor to consider is the total project cost will need to be funded through a combination of capital and revenue support. If the level of capital funding decreases, the strike price will need to increase for the project to be viable. Reducing the CAPEX support initially at the expense of revenue support may help more projects to be supported initially, with a view of potential lower revenue payments in the future if prices increase. However, increasing the CAPEX burden for developers means more borrowing at a higher interest rate than HMG debt, meaning that the total project cost will increase, which is an undesirable outcome.

In summary, setting a specific level for CAPEX co-funding offers a simplification to the process and certainty for prudent investors. However, it must be set at the correct level in order to avoid increasing overall project costs as well as supporting unviable projects. 20% may be a reasonable place to start but we would suggest that this is reviewed after the first round to ensure that it achieves the correct policy objectives.

6. For agreeing the HBM offer, would you be in favour of having different pathways or negotiation approaches for projects?

Yes

This is the best way of using available BEIS negotiation resource.

A consistent approach should be undertaken in the HBM process to achieve the optimum VfM as well as the best chance of achieving the policy objectives. Consistency could also be achieved through the Levelised Cost of Hydrogen (LCOH).

7. Do you have any suggestions on what approaches could be used to differentiate projects and determine which pathway a shortlisted project goes into? What criteria would you use (e.g., MW)? What threshold would you use (e.g., 40MW)?

Projects could either be differentiated on a capacity (e.g. MW) or a total investment basis, as these two aspects are likely to be closely linked.

The lower the threshold is set between a “sealed bid” and negotiation approach then the more likely it is to achieve VfM and achieve the best policy objectives. However, the lower the threshold, then the more negotiation resource is required. We are unable to comment on the available BEIS negotiation resource, or the nature of applications through this process, so it is difficult to propose a specific threshold.

One approach may be to review the first-round applications, and set a threshold based on those as well as the available BEIS negotiation resource.