The Hydrogen Energy Association's response to DBT and DESNZ: 'Corporate Power Purchase Agreements'

March 2026

The Hydrogen Energy Association (HEA) is the leading pan-UK trade body in the hydrogen energy sector, with a mission to support the growth of our members and the sector, and to ensure that the right policy framework is in place. Our ~100 member companies represent over 200,000 employees globally, with combined revenues over £400 billion, and cover the entire value chain from raw material sourcing, to supply chain and components, financing, professional services, B2B and consumer facing solutions.

Opening remarks

The HEA welcomes the opportunity to respond to this consultation. Corporate Purchase Power Agreements (CPPAs) are recognised by our members as a valuable and important mechanism for securing long term green electricity at pre-agreed prices. CPPAs are highly valuable to hydrogen sector, especially for production projects, which require physical low carbon power to qualify under the Low Carbon Hydrogen Standard.

HEA supports greater backing of CPPAs alongside Government support to aid adoption for hydrogen businesses, as CPPAs are an important instrument to lock in power prices and aid long term financial planning. Measures and tools that increase cost certainty, such as CPPAs, will help to facilitate hydrogen projects through to Final Investment Decisions (FID).

We are pleased to share feedback from our member engagement in response to the request for information with this consultation on Corporate Purchase Power Agreements from the Department for Business and Trade (DBT) and the Department for Energy Security and Net Zero (DESNZ).

HEA's response

Question 1: To what extent and in what ways are CPPAs **attractive** for industrial and commercial electricity consumers **compared with other electricity supply arrangements**?

In your answer, consider different types of CPPA and what makes each type more attractive.

Hydrogen businesses are a key proponent of CPPAs

CPPAs are attractive for hydrogen production businesses as industrial consumers of electricity, particularly those within the Hydrogen Business Model (HPBM) due to the ability of CPPAs to fix power prices for low carbon electricity and support eligibility under the Low Carbon Hydrogen Standard. Development of policy and support mechanisms for Purchase Power Agreements will support projects by reducing the residual merchant power risk from the HPBM, which does not index the strike price to the power.

Securing renewable physical power, either via an integrator or directly with renewable assets themselves, is critical for hydrogen production, both those who are progressing in Hydrogen Allocation Rounds (HAR), as well as developers outside of this process. A well-functioning CPPA market materially mitigates wholesale price volatility relative to full merchant exposure and acts as a capital enabler. By reducing cashflow volatility, CPPAs allow hydrogen projects to demonstrate improved debt service coverage, model IRR sensitivities with greater confidence, increase debt capacity, and ultimately reduce cost of capital.

CPPA development is necessary to unlock affordable debt and reduce the subsidy burden on hydrogen support mechanisms over time by closing off the merchant power price risk that is residual under the contract.

Virtual CPPAs should be within scope for this consultation and are an attractive option for industrial and commercial electricity consumers

Members concurred that virtual CPPAs should be within scope for this consultation and referenced virtual CPPAs as a useful option to fix the price without the same physical power requirements.

Virtual CPPAs are very useful to hydrogen projects to fix their power price if they have an aggregator to supply them with temporally matched physical LCHS compliant power. Virtual CPPAs are often easier contracts to secure due to their relative simplicity compared to sleeved or private wire CPPAs, making them faster to agree upon and smoother to implement. Furthermore, the total financial exposure between the involved parties is less than with sleeved CPPAs, as the contract is simply for either topping up or paying back at a given price. This lessens the challenge of adoption, which is recognised in the consultation brief; virtual CPPAs were noted to be an increasingly popular mechanism for securing contracts.

The HEA would support the inclusion of virtual CPPAs as within scope of this consultation and in future policy decision making; virtual CPPAs are seen as an attractive option by HEA members.

Question 2: To what extent can CPPAs **support the development of new electricity generation capacity?**

In your answer, consider different types of CPPA.

CPPAs can support the development of new electricity generation capacity by securing industrial consumers, such as hydrogen businesses

The HEA and its members note that historically, CPPAs have supported new electricity generation capacity, with a limited number of projects having gone down a CPPA route to fix the price of electricity. However, interest in CPPAs has fluctuated due to changes in the electricity market, and currently it seems that renewable generators are likely to prefer to secure a CfD than a CPPA due to the electricity CfD clearing prices being higher than the forward power curve forecasts. We see that CPPAs have a key role in supporting new electricity generation capacity in the situations where CfDs could not be secured.

The HEA supports the development of the CPPA market in its potential to support hydrogen businesses and reduce the counterparty risk associated with securing an electricity supply by guaranteeing credit risk.

Question 3: What actions could **support growth** in the GB CPPA market and make CPPAs a better option for:

- Electricity buyers?
- Electricity generators?

If relevant, reference specific business level barriers your organisation has encountered when attempting to enter into a CPPA.

Members suggested that the following actions could support growth in the GB CPPA market:

- Government financial support in covering all or a high percentage (e.g. 80%) of the counter-party risk
- Supporting the option of standardised contracts for organisations that would like them
- Facilitating matches between buyers and generators of electricity to stimulate market growth

References to multiple industries would support wider industrial confidence, including in the hydrogen sector

The HEA notes that the use of low carbon electricity to support hydrogen production and its associated industrial processes is essential to produce low carbon hydrogen. Hydrogen holds significant long-term potential to benefit the economy, support UK manufacturing and UK jobs. The HEA's State of the Hydrogen Nation report identifies a growing need to bolster market confidence, which is achieved through projects progressing towards and reaching

Final Investment Decisions. Greater revenue certainty and a strong policy landscape are critical enablers of this progress and CPPAs support these aims.

Members noted that there was a lack of reference to the hydrogen sector in the consultation, and highlighted the consultation's emphasis on data centre electricity demand and the suitability of CPPAs for data centres. While the HEA supports data centre investment, we wish to express that hydrogen offers a wide energy system benefit for decarbonisation of hard-to-abate industries and extensive opportunities for job creation and UK economic growth. We see that Government should recognise hydrogen as an important technology that will support across the energy sector and that hydrogen businesses stand to benefit from CPPA market growth.

Question 4: What **best-practice** approaches developed in comparable markets could address the challenges in developing and agreeing CPPAs in Great Britain?

Reference any experience of participation in these markets, and any evidence of how approaches could be adapted to fit the GB market.

HEA members noted that compatibility of GB CPPAs with overseas CPPA markets, including Ireland and Northern Ireland, the European Union, USA and other international markets, is an important consideration. This could require changes to the Low Carbon Hydrogen Standard, which needs power to be sourced from GB for GB projects and Irish SEM for NI projects. Members identified that compatibility with EU and global CPPA markets should be considered in GB policy thinking to reduce administrative hurdles and risk of future challenges.

Overall, we welcome this initiative; CPPAs are an important mechanism for securing low carbon electricity prices and offer key advantages to hydrogen businesses. The HEA sees that the development of the CPPA market, including and with particular note to virtual CPPAs, would facilitate the energy transition and UK economic growth. We look forward to seeing further developments of this policy area.