



Joint Exercise on Auction Design by H2Global and JOGMEC

Analytical Insights into Japan's CfD Scheme

January 2025

 **H2Global**

Background and scope



<https://www.h2-global.org/library/keep-it-simple-aligning-auction-objectives-for-success>

- H2Global’s auction design report analyzed European hydrogen auctions
- Applying the same systematic approach to analyze Japan’s CfD-style support scheme for hydrogen and its derivatives
- Goal: Enhance understanding of Japan’s support approach
- Method: Collaborative workshops, reviewing official documents
- Focus for today: 22 auction objectives identified in the H2Global report and their relevance to Japan’s CfD scheme

6 out of 22 objectives in the report match with Japan's CfD; 1 additional objective identified

22 objectives identified in H2Global's report

Scale

- 1 supporting H2 (derivatives) market creation
- 2 reducing cost of H2 (derivatives) for offtakers
- 3 maximizing economies of scale

Efficiency

- 9 reducing global GHG emissions
- 17 fostering H2 (derivatives) innovation
- 22 maximizing fiscal efficiency

Sustainability & resilience

- 4 supporting value chain establishment
- 5 increasing H2 (derivatives) market liquidity
- 6 diversifying energy supply geographies
- 7 diversifying energy supply companies
- 8 ensuring project completion
- 11 supporting social sustainability and local value creation
- 12 supporting environmental sustainability beyond GHG emissions
- 13 supporting development policy targets
- 16 supporting SMEs

Speed & domestic development

- 10 reducing domestic GHG emissions
- 14 supporting domestic supply market development
- 15 enhancing national industrial competitiveness
- 18 developing specific technologies
- 19 reducing global GHG emissions
- 20 minimizing time to delivery
- 21 minimizing duration of award procedure

Most mentioned in official documents and in line with H2Global list:

- 4 supporting value chain establishment
- 6 diversifying energy supply geographies
- 8 ensuring project completion
- 14 supporting domestic supply market development
- 15 enhancing national industrial competitiveness
- 20 minimizing time to delivery

Objectives outside H2Global's framework

- X Higher share of Japanese companies in the project

3 objectives from the “sustainability and resilience” cluster

4 supporting value chain establishment

The auction focuses on connecting production, transport, infrastructure and/or offtake companies with contractual arrangements

6 diversifying energy supply geographies

The auction focuses on identifying auction winners from different regions/countries/jurisdictions, typically to improve supply security and derisk dependencies on single suppliers

8 ensuring project completion

The auction focuses on derisking projects, typically to improve supply and/or offtake security

3 objectives from the “speed and domestic development” cluster

14 supporting domestic supply market development

The auction focuses on the establishment of clean hydrogen production in the territory of the auction’s sponsor

15 enhancing national industrial competitiveness

The auction focuses on the improvement of the relative economic position of the companies active in the territory of the auction’s sponsor

20 minimizing time to delivery

The auction focuses on reducing the time between the auction award and the start of supply to offtakers

1 new objective adding to the list

Objectives outside H2Global's framework

✕ Higher share of Japanese companies in the project

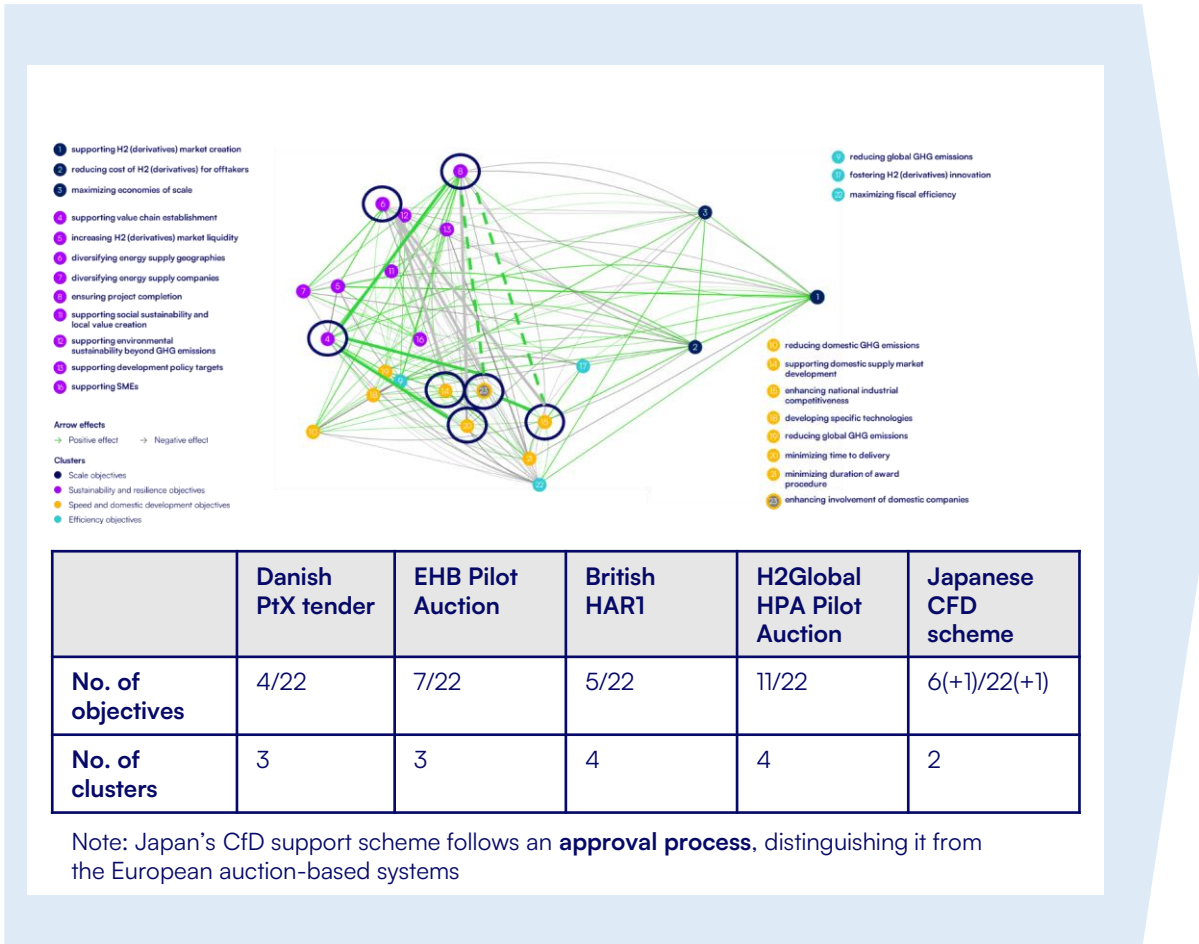


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Enhancing involvement of domestic companies

The auction focuses on promoting the involvement of the auction sponsor's domestic companies, which invest domestically or in overseas energy projects, to improve energy supply and security

Analysis & key takeaways



Step 1: Perform network analysis to explore interrelations of objectives

- Japan's objectives spread across only two clusters, indicating a high degree of coherence of the scheme
- The tradeoff between minimizing time to delivery and ensuring project completion requires closer attention

Step 2: Assess alignment between objectives and design elements, such as support type and eligible markets

- CfD design choice ensures return stability and long-term investment security, aligning with Japan's focus on value chain establishment
- Hybrid supply approach (domestic and internationally) reflects Japan's unique energy strategy



Japan's CfD support scheme objectives are largely coherent and fit well together. However, some tradeoffs should be considered when evaluating the business plans to ensure informed decisions.

Thank you for your attention!

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