Department for
Business, Energy
& Industrial Strategy

Hydrogen Business Model: Electrolytic Allocation Expert Group meeting

Hydrogen Business Model Team

13th December 2021

Note: The content in the following slides does not represent BEIS policy, but provides ideas for discussion

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Meeting etiquette

Please can you:

- ✓ Turn off your video when not speaking
- ✓ Mute your microphone when not speaking
- ✓ Raise questions via the chat function or put your hand up

This meeting will be recorded for BEIS internal use only.

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Agenda

	Item	Time	Lead
1	**Welcome** ▪ Agenda and objectives for today's meeting	12:30 – 12:40 10 mins	Will Lochhead
2	**Background** ▪ Rationale for pursuing a joint HBM/NZHF process ▪ Strand eligibility and timelines for delivery funding	12:40 – 13:00 20 mins	Jodie Fox & Corinne Ribbons
3	**Proposed eligibility criteria**	13:00 – 13:40 40 mins	Jodie Fox
4	**Proposed allocation process** • Proposed evaluation criteria	13:40 – 13:55 15 mins	Jodie Fox
5	**Close and AOB**	13:55 – 14:00 5 minutes	Will Lochhead

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Objectives for today's meeting

1. Share our draft plans for a joint allocation window of Hydrogen Business Model and NZHF for electrolytic hydrogen projects
2. Get views on our emerging thinking around eligibility and evaluation criteria for the first allocation round in 2022.

Note: this session is focused on allocation design. Any commercial design questions will be picked up in our wider HBM Expert Group sessions.

You are welcome to email your views on allocation or commercial design to Hydrogen.BusinessModels@beis.gov.uk

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Why are we pursuing a joint HBM/NZHF allocation process?

Guiding principles

- Make the application process streamlined, open and accessible for applicants.
- Support projects to deploy at the earliest opportunity, to advance Government's ambition to deploy 5GW of low-carbon hydrogen production capacity by 2030.
- Be consistent where appropriate with Phase 2 cluster sequencing assessment approach, while also recognising the differences between production technologies and pipeline of projects.

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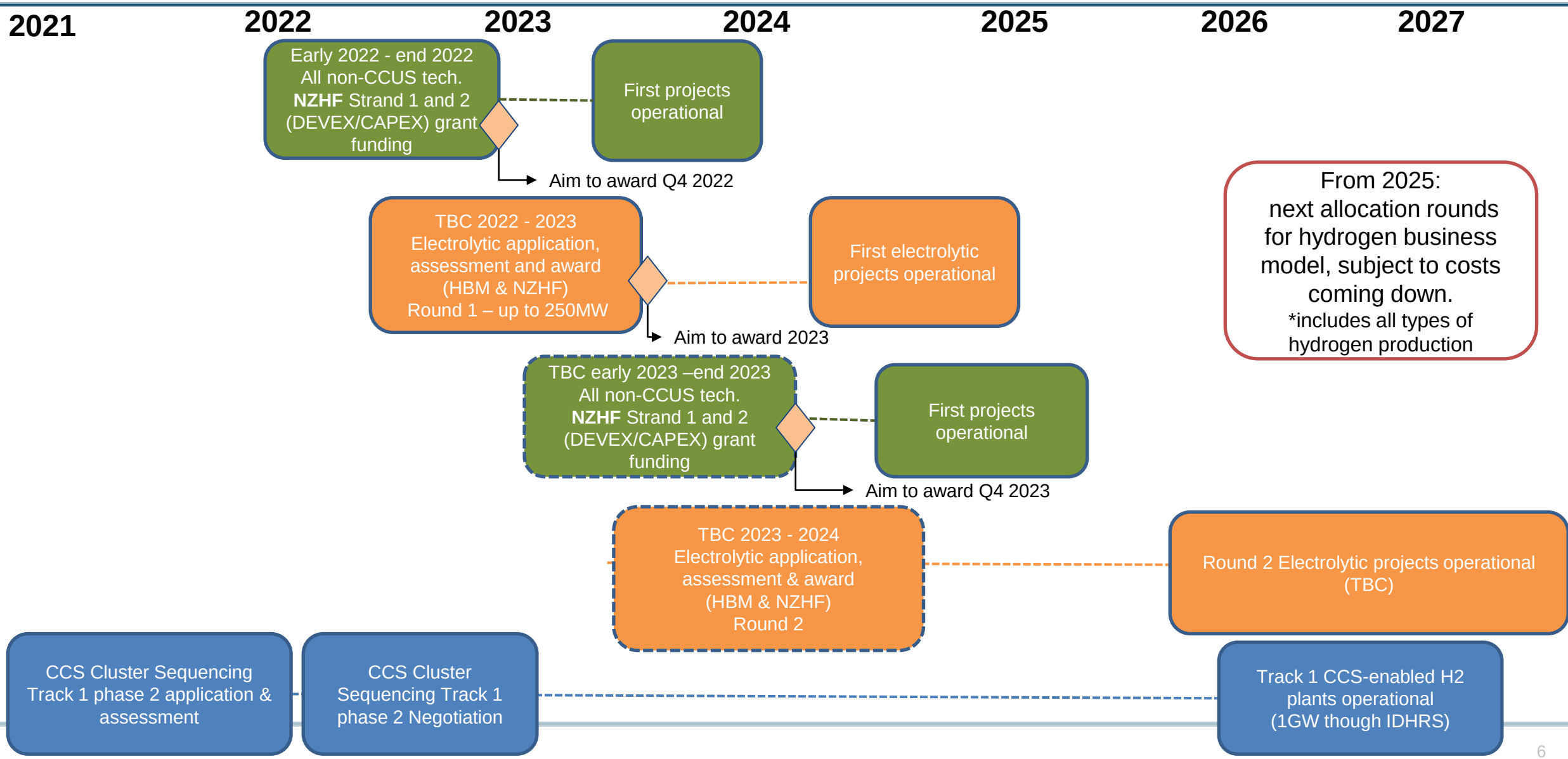
Provisional strand eligibility and timelines for delivering funding



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Proposed eligibility criteria

Criterion	Notes and questions
Based in the UK	• Commitment to support decarbonisation across the UK in line with 2050 net zero target and Carbon Budget 6 obligations.
New (electrolytic TBC) hydrogen facility	• Hydrogen Strategy aim to stimulate investment in new production capacity. • Considering whether electrolytic only or include other non-CCUS technologies for first allocation What are your views on electrolytic only vs. non-CCUS-enabled technologies?
Operational by March 2025	• 1GW by 2025 (5GW by 2030) aspiration. • Net Zero Strategy: up to £100m to award contracts of up to 250MW of electrolytic hydrogen production capacity in 2023 with further allocation in 2024. •How long do projects need after signing the HBM contract to become operational? E.g. if contracts were signed in Q3 2023, how feasible is March 2025?
TRL 7 or above	• Ensures projects are at an appropriate stage to be operational by FY25; helps filter out projects where innovation funding more appropriate.
Identified at least one offtaker	• Indicates project is commercially viable if it were to receive funding, though further assessment likely to be done on offtaker arrangements in evaluation criteria (like phase 2) • Aim to cover a range of possible end users.
Minimum capacity of x MW	• We are considering including a minimum capacity as intelligence suggests that small-scale projects (1-2 MW) are unlikely to need HBM support and can deploy through CAPEX alone. What are your views on a capacity threshold and, if set, what threshold is appropriate eg 5MW or 10MW?
Meets the Low Carbon Hydrogen Standard	• Ensures hydrogen being produced is sufficiently low carbon to help meet decarbonisation goals.
Required private sector finance backing lined up	• Ensures projects receiving CAPEX are commercially viable.

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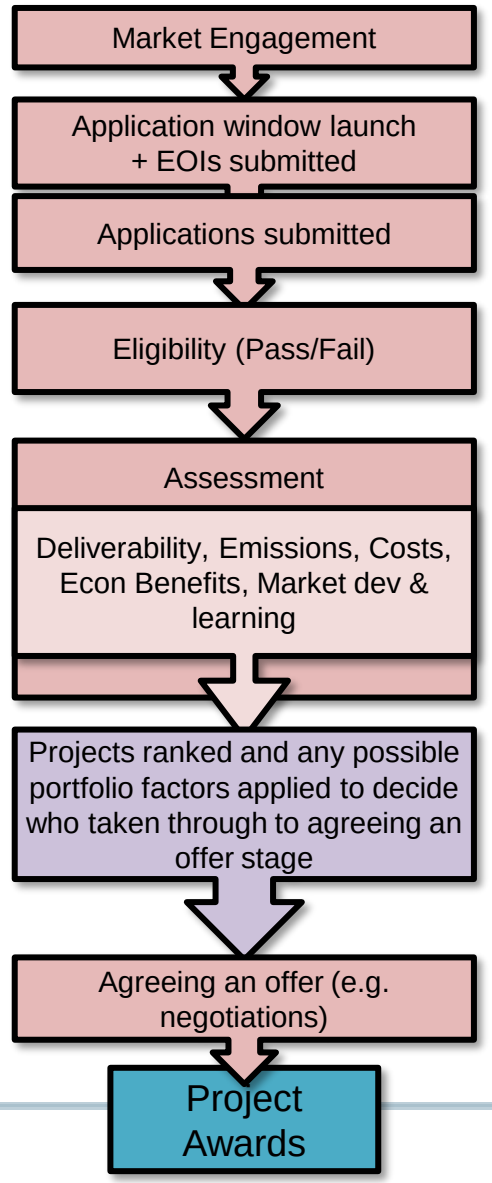
Proposed allocation process



1. Market Engagement window (Spring 2022)
2. Application window launch - Projects submit an EOI to express an interest in applying .
3. Eligibility check to see if projects meet criteria. If they do not meet eligibility requirements, they will not be taken further
4. Projects evaluated against the five proposed evaluation criteria
5. Projects then ranked on their total score
6. Decision making process on who is taken through to ‘agreeing an offer’ stage. Possible portfolio factors may be applied (TBC).
7. Agreeing an offer process commences
8. Projects awarded contract

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Proposed evaluation criteria

Similar to the Phase 2 Cluster Sequencing evaluation criteria, with slight changes to recognise different technology.

- **Deliverability** – Assess viability and credibility of the plant, offtaker, energy input source & h2 T&S to be ready by 2025.
- **Emissions** – Assess CO2e intensity of plant and possibly overall emission reduction impact (TBC)
- **Costs** – Levelised Cost of Hydrogen calculation (LCOH).
- **Economic Benefits** – Jobs, skills investment, wider community benefits.
- **Market Development & Learning** – Evidence of planning and collaboration on development of future production, networks and offtakers. Sharing learnings from innovative tech.

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Next steps

- Further consider key questions around eligibility. Please submit further comments on the below questions to Hydrogen.BusinessModels@beis.gov.uk by 7 January:
  - *What are your views on electrolytic only vs. non-CCUS-enabled technologies?*
  - *How long do projects need after signing the HBM contract to become operational? E.g. if contracts were signed in Q3 2023, how feasible is March 2025?*
  - *What are your views on a capacity threshold and, if set, what threshold is appropriate e.g. 5MW or 10MW?*

- Hold another Electrolytic Allocation Expert Group session in the new year.

- Draft Market Engagement document (to be published in Spring 2022) including proposed eligibility and headline evaluation criteria.