



Session 2: Project selection criteria and assessment metrics

11:45 – Introduction from panel chair, Mike Farley (APGTF, CCSA)
11:55

11:55 – Panel session: The funders' perspective
13:00

- Brian Allison (DECC)
- Harsh Pershad (Innovate UK)
- Andrew Green (ETI)
- Chris Franklin (NERC)



- Workshop lead to paper with
 1. *Improved Project Selection Criteria*
 2. List of R+D Priorities
 3. Relevance of current funding sources



- Workshop conclusion was that:
 - a) CCS R&D priorities need to be better articulated both in terms of priority areas and outcomes sought;
 - and, b) that timeliness/relevance to “Phase 2” projects and potential for cost reduction should be better- integrated into the process of determining which research proposals are awarded funding.

The “Outcome” of the CCS Commercialisation Programme is defined as: *“As a result of the intervention, private sector electricity companies can take investment decisions to build CCS equipped fossil fuel power stations, in the early 2020s, without Government capital subsidy, at an agreed CfD Strike Price that is competitive with the strike prices for other low carbon generation technologies”*



- A typical process for determining which research projects are awarded funding is based on five main stages:
 - R&D needs are identified based on the APGTF Technology Strategy and/or the UKCCSRC RAPID document.
 - Calls for proposals. These often reference the APGTF priorities and/or the UKCCSRC RAPID and include assessment criteria and questions for assessors.
 - Proposals are submitted by applicants.
 - Assessors/evaluators score projects against specified criteria:
 - Quality of research
 - Value for money
 - Impacts
 - Impact commitments
 - User support
 - A panel of assessors ranks applications in terms of total score and then awards funding down the list until the total budget has been allocated.
- Notably, proposal assessment processes do not explicitly consider the overall objective for Government intervention, i.e. to commercialise CCS, and therefore doesn't consider factors such as timeliness (relevance to phase 2) or potential for cost reductions (again, by relevance to phase of deployment).

Improved project selection process

1. Quality of research, leverage of other work and breadth of application, impacts, impact commitments and user support should be used as stage gate criteria, pre-requisite to a project securing funding.
2. The list of assessment criteria provides greater emphasis on timeliness and cost reduction. Proposed new criteria could include (cont.):

Relative weighting	Criteria
Highest weighting	Cost reduction potential relative to projects within scope of funding call.
	Risk reduction potential relative to projects within scope of funding call. Appropriate metrics would need to be determined.
Medium weighting	How well the project meets the subset of more specific priorities identified.
	Contribution towards longer term CCS objectives (i.e. to Phase 3 and beyond).
	Immediacy of impact, e.g. to Phase 1, Phase 2 and/or Phase 3.
	User support

3. Funding bodies should pre-determine the balance sought between long-term and short-term impacts and separate money should be allocated to each 'pot'. Scores should be weighted to put more emphasis on timeliness and projects with an immediate impact, i.e. those that can contribute towards achieving the Outcome, should receive a greater share of the available funding.
4. More specific user support should be required to ensure that R&D projects meet the needs of industry.



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 1. Improved Project Selection Criteria
 2. List of R+D Priorities
 3. *Relevance of current funding sources*
 - EPSRC, NERC,*
 - EU Horizon, RFCS*
 - Innovate UK*
 - DECC, BIS*
 - DECC Energy Entrepreneurs*
 - ETI, Crown Estate*

Relevance of current funding sources

Area	Theme	Timing	Type of project/ budgets	Relevance of current funding
Dynamic operation of the UK energy market including the need/ impact of flexible operators	Whole System	Phase 2/3	University and research institute projects (1 or 2) with industry involvement, each £100-300K 100% funded.	EPSRC; Horizon 2020 LCE 28?
Optimised network for Security of Supply/ benefits of balanced energy portfolio	Whole System	Phase 2/3	University and research institute projects (1 or 2) with industry involvement, each £100-300K 100% funded.	EPSRC; DECC
Opportunities/ issues arising from experience at <u>Sask Power Boundary Dam</u> project and other large scale projects (including the FEED stage of UK <u>Commercialisation</u> projects)	Whole System	Phase 2/3	University and research institute projects (3 or 4) with industry involvement, each £300-500K 100% funded. + Industry-led projects	EPSRC DECC, Innovate UK or Energy Entrepreneurs Fund (where IP developed), Project Horizon LCE 24? RFCS



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Panel discussion

- Are you able to accept the recommended Project Selection Criteria?
- If not, why not?
- What other criteria would you need to add?
- Can all of the project priorities be supported by one or more funding routes?
- Is the (percentage) funding sufficient to encourage industrial CCS R+D ?