

# Questions and Answers for the Longer Duration Energy Storage Competition

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# 1. Application process and timelines

## 1.1. What are the page limits for my application?

The online application form is split into sections, most of which have individual word limits. Where present, any word limits are highlighted in both the online and offline versions of the application form.

## 1.2. What is the submission date for my application?

Applicants must register here for the competition, by 2pm on 23 July 2021; and submit applications by 14:00 on 13 August 2021.

## 1.3. What is the commencement date for second phases?

Phase 2 of stream 1 (Grant) is expected to commence in December 2022. Phase 2 of stream 2 (SBRI) is expected to commence in March 2022.

## 1.4. Have BEIS extended timelines, considering the delays in publication of the guidance?

BEIS have extended the timelines for supplier questions and application submission in light of the delayed publication of the competition guidance. The application timelines are shown in the competition guidance for both streams and significant dates repeated below for reference.

- Submit supplier questions via email to [storage.innovation@beis.gov.uk](mailto:storage.innovation@beis.gov.uk) by 14:00 on 7 July 2021.
- Publication of supplier questions anticipated on or before 14 July 2021.
- Submit registration online by 14:00 on 23 July 2021.
- Submit proposal online by 14:00 on 13 August 2021.

Further competition dates can be found in the competition guidance documents for both streams.

## 1.5. Can I access the application form without registering?

No, you must be registered to access the application form. The registration form requires only a small amount of information and does not oblige a respondent to submit an application.

## 1.6. Are the passwords for the application form unique to each applicant?

No, passwords are not unique to each application. However, when an applicant selects 'Save and Continue' during the application process, the link generated is unique to that application.

## 1.7. Why will only one project from each technology type be allowed to move into Phase 2?

The intention is to fund at least one technology per category (electrical, thermal and power-x) for Phase 2 of both streams. This is because the competition is looking to support a portfolio of technologies across the technology categories. Where budget is available following this initial award, further funding may be awarded in line with the procedure described in section 6.3 of the [competition guidance](#) (both streams).

**1.8. Do all partners in a consortium need to be named at the Registration or only the lead applicant?**

All partners in a consortium, at the point of application, should be named. BEIS recognises that arrangements in relation to consortia and sub-contractors may be subject to future change. Bidders should therefore respond in the light of the arrangements as currently envisaged and are reminded that any future proposed changes in relation to consortia and sub-contractors must be submitted in writing to BEIS for approval.

**1.9. Does the lead organisation need to be the technology provider?**

The eligibility requirements for the lead organisation are set out in the guidance ([Stream 1](#) (Grant) Section 5.11; [Stream 2](#) (SBRI) Section 5.10). There is no specific requirement for the lead organisation to be the technology provider.

**1.10. Can academic institutions lead a project?**

The eligibility requirements for the lead organisation are set out in the guidance ([Stream 1](#) Section 5.11; [Stream 2](#) Section 5.10). For Stream 1 (Grant), academic institutions cannot be sole or lead applicants. For Stream 2 (SBRI), academic institutions can be lead or sole applicants. However, all projects must demonstrate a credible and practical route to market, i.e., the application must include a plan to commercialise the results, even where the lead is a non-commercial organisation.

**1.11. What information is required for each phase of the project?**

The required Submission Content for applications, including what is required for Phase 1 and Phase 2, is described in Section 3.2 of both [competition guidance](#) documents. Applicants are not required to submit detailed information on their Phase 2 plans at application stage; however, they are required to submit outline project plans and budgets for Phase 2.

**1.12. Could a project proceed to Phase 2 earlier than that the relevant commencement date?**

Under current planning assumptions, Phase 2 down-selection is planned for October/November 2022 for [stream 1](#) (Grant) and March 2022 for [stream 2](#) (SBRI). Please note BEIS reserves the right to vary these dates. To ensure fairness in the down-selection process, no projects will be allowed to progress to phase 2 before these dates.

**1.13. Where do applicants register for the competition?**

Before submitting an application, applicants must register [here](#) for the competition, by 2pm on 23 July 2021.

**1.14. At what stage must a technology be to apply for the two competition streams?**

The two competition streams support technologies at different TRL levels. The TRL requirements for eligibility are discussed in sections 1, 2 and 5 of the [competition guidance](#) documents.

**1.15. Can consultancy firms be the Lead Organisation?**

The eligibility requirements for the lead organisation are set out in the guidance ([Stream 1](#) Section 5.11; [Stream 2](#) Section 5.10). There is no specific exclusion of consultancy firms as the lead organisation.

**1.16. When does the registration for the competition open?**

Registration is already open for the competition. Applicants must register [here](#) for the competition, by 2pm on 23 July 2021.

**1.17. What kind of organisations can lead an application under Stream 2 (SBRI)?**

The eligibility requirements for the lead organisation are set out in the [stream 2 \(SBRI\) competition guidance](#) (Section 5.10). Projects can be led by a private organisation (SMEs or large industrial companies), universities or other non-commercial organisations (academic, research or public sector organisations). However, all projects must demonstrate a credible and practical route to market, i.e., the application must include a plan to commercialise the results, even where the lead is a non-commercial organisation. Special Purpose Vehicles are permitted to lead consortia only if they are constituted as legal entities.

## 2. Technology/Scope

### **2.1. What is the BEIS definition of small-scale storage?**

Given the broad scope of the competition, BEIS has not sought to define size of storage. As noted in section 5 of the [competition guidance](#) for both streams, technologies which have previously received public funding and are being re-proposed at a smaller or equal scale as previously funded are ineligible for the competition. This is the only eligibility requirement placed on scale. Technical parameters for the proposed design should be defined in the Technical Data form in Annex 3 for each stream and are assessed as part of criterion 1b, as set out in the competition guidance for each stream. This criterion does not define scale.

### **2.2. Are vehicle-to-grid applications eligible for the competition?**

Whilst not explicitly excluded, the majority of vehicle-to-grid applications are likely to involve the use of lithium-ion batteries which are themselves explicitly excluded from the competition, as has been noted in sections 1, 2 and 4 of both [competition guidance](#) documents.

### **2.3. Is heat-to-power storage within the scope of the competition?**

No, only technologies that charge using electricity are eligible for this competition.

### **2.4. Is distributed storage eligible for funding through the competition?**

Yes, distributed storage is eligible for funding through the competition, subject to fulfilment of the eligibility requirements.

### **2.5. Are next-generation battery technologies excluded from the competition?**

Lithium-ion batteries are excluded from the competition, as are any technologies which are already commercially or widely deployed for longer durations (i.e. beyond TRL 9) in the UK or elsewhere. Other types of battery technology may be included if they meet the eligibility criteria, including the appropriate Technology Readiness Levels as set out in the competition guidance for each stream. Applicants should note the extensive support being provided to battery technology under the Faraday Challenge.

### **2.6. Is there any limitation/preference for a centralized versus de-centralized approach to storage?**

There is no specific preference for either approach. All projects must meet the eligibility criteria as set out in the guidance. Eligible projects will be assessed against the criteria set out in section 5 of the [guidance documents](#) for both streams. Project scores will then be moderated to determine a ranking list within each technology category that will be used to allocate the funding.

### **2.7. Is storage in underground caverns within scope?**

Projects are eligible for funding as long as they meet the project scope and eligibility criteria set out in the guidance. There is no specific exclusion of underground storage.

**2.8. Blending of hydrogen into the natural gas grid is excluded from the competition. Would projects blending synthetic methane be eligible?**

Blending of any form or combination of hydrogen, including synthetic methane, is excluded from the competition.

# 3. Assessment

## **3.1. Why am I required to quantify costs that are not eligible for funding?**

Costs outside the scope of funding, such as operation and maintenance and decommissioning costs are indicative of a technology's viability in the absence of public funding. The Longer Duration Energy Storage Competition intends to develop technologies that are likely to be commercialised in the future and their future viability without public funding is an important part of this. Such costs are assessed as part of the relevant assessment criteria in section 6 of the [competition guidance](#) for both streams.

## **3.2. What flexibility services are applicants' technologies expected to support?**

Requirements for flexibility or ancillary services have not been defined for the Competition beyond 'Must have the flexibility to increase electricity demand at times of low demand and high renewable output' in the eligibility criteria. It is the intention that applicants be given sufficient scope to define their flexibility services as they see fit and to base their commercial case on whatever ancillary/flexibility services are appropriate to their proposed design.

## **3.3. To what extent do you want the project to focus on supporting the creation and subsequent validation of flexibility services to assess the commercial value of different flexibility operating regimes versus proving the technology?**

The assessment criteria for both streams allow applicants a reasonably broad scope to discuss the ways in which their proposal is innovative (Criterion 1), the ways in which it will provide flexibility services to and system benefits for the grid (Criterion 2) and its market potential (Criterion 3). We expect all projects that are awarded funding to make a solid commercial and technical case for their proposed technology and to be able to demonstrate their technology's ability to fulfil these promises during the life of their project. In light of this, we expect projects to demonstrate the flexibility services that they have proposed and to prove their technology.

## **3.4. Do we need to have a detailed financial model for the prototype to submit an application?**

For [stream 1](#) (Grant), a detailed financial model is required in the template provided as Annex 4 of the competition guidance. For [stream 2](#) (SBRI), a detailed financial model is not a requirement at application stage. A discussion of the market potential for the proposed technology is required as part of assessment criterion 3 in section 6. The guidance suggests this could take the form of a business plan or financial model, but a lesser level of detail is required of stream 2 projects than of stream 1 projects, due to their lower technology readiness level. For stream 2 the commercial opportunities are expected to be refined further during the feasibility study and will be

assessed again as part of the phase 2 down-selection process detailed in section 8 of the competition guidance.

**3.5. In terms of return on investment, is the weighting focus on replicability, potential UK stored capacity or carbon reduction?**

The assessment process and criteria are set out in the guidance, including the points assessed under each criterion, the weighting allocated to each criterion and the scoring approach used. Criterion 2 assess Energy system and wider benefits secured by the technology; Criterion 3 assesses Market potential for the product; Criterion 5b assesses Value for money to HM Government (5b).

**3.6. How much time is spent evaluating applications?**

Applications will be assessed during the assessment window shown in section 3.1.1. of both [competition guidance](#) documents. Current expectations are that this will be during August and September 2021.

## 4. Eligibility

### **4.1. When is planning permission required for the demonstrator or prototype site?**

To be eligible for phase 2 of either stream, projects must have a defined route to full planning permission, at a minimum. Evidence of this would be expected as part of the deliverables for phase 1, which are expected to be submitted October 2022 for stream 1 (Grant) and March 2022 for stream 2 (SBRI). These eligibility requirements are detailed in section 8.2 of both stream [guidance documents](#).

### **4.2. Can lead organisations be international and can spending take place outside of the UK?**

Nationality requirements for organisations and geographical spending constraints are detailed in the eligibility criteria for both streams, located in section 5 of both stream [guidance documents](#). Applicants should note that the requirements differ between the two streams. Applicants should also note the assessment criteria for their chosen stream, shown in section 6 of both competition guidance documents, especially those around applicability of the proposed design to the UK electricity grid.

### **4.3. Does a novel use of existing technologies meet the eligibility requirements?**

Applicants are strongly encouraged to consider the technology readiness level definitions given in appendix 1 of both stream guidance documents when deciding whether to submit an application. Applicants should also consider how their proposed technology is likely to be assessed against assessment criterion 1 of both streams which will assess how innovative their technologies are. BEIS cannot provide any project-specific guidance to applicants beyond what is in the competition guidance.

In addition, and as noted in section 5 of the [competition guidance](#) for both streams, technologies which have previously received public funding and are being re-proposed at a smaller or equal scale as previously funded are ineligible for the competition.

### **4.4. Are specific locations and identified grid connections required as part of the proposal application?**

Identified locations and grid connections are not required at the application stage. Applicants should note the eligibility criteria in section 5 and the entry requirements into phase 2 in section 8 of both [competition guidance](#) documents which detail the requirements around planning and grid connection for the two stages.

### **4.5. When is a formal grid connection offer required?**

Applicants are required to have engaged with a grid partner at application stage, but the exact nature of this engagement has not been specified. For guidance, a formal

grid connection offer is not required until the phase 2 downslection process for each stream. Evidence of this would be expected as part of the deliverables for phase 1, which are expected to be submitted October 2022 for [stream 1](#) (Grant) and March 2022 for [stream 2](#) (SBRI). Applicants should be aware of this requirement and have engaged sufficiently to be confident of their ability to fulfil this requirement prior to the relevant date for deliverables submission.

**4.6. We are a young company without published accounts on company house. What actions should we take to pass the financial due diligence checks carried out during the application?**

If there are no published financial accounts due to the age of the organisation BEIS will look for evidence of how the company is able to provide working capital to stay afloat while delivering the project and pay suppliers and staff. This could be a combination of investments or parent company guarantees, if applicable.

**4.7. We have a number of separate potential projects that would be eligible for the funding. If two applications were judged to not be sufficiently unique, or to be beyond the capability of one of the project partners, would that disqualify both of the applications or would BEIS be able to fund their preferred project of the two?**

The eligibility requirements for both streams state that if project consortium members or subcontractors are part of multiple successful bids, they must be able to deliver on them and they must not have applied for funding for the same piece of work more than once. Where BEIS identifies organisations that have bid for the same, or very similar projects more than once during the eligibility check following the application stage, BEIS will contact these applicants to confirm which application they wish to take forward for assessment (Note at this point BEIS will not provide any feedback or indications of preference on applications). Where an organisation has applied for multiple projects, BEIS may contact these and request evidence that sufficient resourcing capability is available to carry out all of the projects for which they have applied. Where this is deemed not to be the case applicants will be asked to confirm which application they wish to take forward for assessment (Note at this point BEIS will not provide any feedback or indications of preference on applications).

**4.8. Does the project need to discharge energy to the UK Grid?**

The objective of this programme is to develop technologies which can operate in and support the UK energy system. As such, the Phase 1 preparatory work/feasibility study must cover the UK, and the Phase 2 demonstrator/prototype must benefit the UK energy system. How the technology would integrate with/contribute to flexibility approaches for the UK energy system is part of the Assessment Criteria (1a) as set out in the [competition guidance](#) for both streams. We expect all technologies in scope to be able to demonstrate the ability to charge utilising electricity, in view of delivering key flexibility services to the UK power grid. The stored energy should subsequently be utilised to undertake useful work as heat, electricity, or to displace an alternative carbon-intensive energy carrier.

**4.9. Would storage technologies that require the transportation of an energy carrier from the place of production to the off-taker be eligible for the competition?**

This is acceptable within the scope of the competition, subject to the eligibility criteria. Applicants should be sure to ensure the scalability of this approach is fully discussed under assessment criterion 3 (section 6, both streams) and the cost implications of the approach are fully discussed under assessment criterion 5 (section 6, both streams).

**4.10. Would distributed energy storage technologies that are controlled from one single location be eligible for the competition?**

This is acceptable within the scope of the competition, subject to the eligibility criteria.

## 5. Funding

### **5.1. Is the funding for phase 2 of the Competition restricted to 1 technology per category?**

The intention is to fund a minimum one technology per category (electrical, thermal and power-x) for phase 2 of both streams. Where there are no projects in a given technology category that meet the requirements for progression to phase 2, the remaining projects may be compiled into a single ranked lists and awarded in order of quality until the budget is depleted. This process for phase 2 is detailed in section 8.3.2 of both stream [guidance documents](#).

### **5.2. Are OPEX costs excluded?**

OPEX costs are excluded for stream 1 (Grant) projects only. OPEX costs are eligible expenditure for stream 2 (SBRI), as discussed in Revision A onwards of the stream 2 competition [guidance document](#).

### **5.3. Can match funding be sought for stream 2 (SBRI)?**

Under SBRI rules, BEIS will fully fund eligible project costs stream 2 (SBRI). Eligible costs are shown in Appendix 3 of the stream 2 (SBRI) [guidance document](#). Stream 1 (Grant) requires applicants to seek private match funding.

### **5.4. Are costs after the contract end date eligible for funding?**

Costs after the expected end dates (31st March 2025 for stream 1 (Grant) and 31st March 2024 for stream 2 (SBRI)) are not eligible for funding.

### **5.5. Are patent costs excluded?**

Patent costs are ineligible expenditure for both streams.

### **5.6. Is in-kind support acceptable for SBRI-funded projects?**

In-kind support is not acceptable within the SBRI rules.

### **5.7. Are duty fees resulting from the import of components cost that can be covered under stream 2 (SBRI)?**

Provided duty fees are as a result of items specifically required for the project then they would be a legitimate cost to include.

### **5.8. Are customer payments an acceptable form of match funding for stream 1 (Grant)?**

The competition is specifically for pre-commercial demonstrators. The presence of customer payments implies commercial activity and would most likely mean that the proposed project would be rendered ineligible under the TRL-related and pre-commercialisation criteria under 'Innovation and Technology Readiness' (section 5, [stream 1 competition guidance](#)).

In addition, match funding is required as a condition of funding. If this match funding were not secured prior to the grant funding agreement being signed, the project would be ineligible for funding.

**5.9. What are acceptable forms of match funding for stream 1 (Grant)?**

Sources of match funding are expected to come from an applicant's own funds, or from other private investors. The applicant is required to make clear any sources of match funding prior to project commencement.

**5.10. Is there any restriction to funding relating to previous grant awards from BEIS?**

BEIS cannot provide funding for retrospective work on projects or provide funding to projects which have already begun. Funding will not be provided for the demonstration and trialling of technologies which have previously received public funding and are being re-proposed at a smaller or equal scale as previously funded. For Stream 1 (Grant), a project can receive up to the maximum grant intensity (including public funding from other sources) as defined in Section 4.2 of the [guidance](#). Table 1 sets out the maximum grant intensity limits. Projects must not be in receipt of other government funding which would take them above allowable grant intensity levels. For Stream 2 (SBRI), BEIS will fund 100% of the eligible project costs through this competition.

**5.11. Which competition offers grants and which offers contracts?**

The competition streams will be delivered through 2 different funding mechanisms. [Stream 1](#) is a Grant competition, whereas [Stream 2](#) is contracted under Small Business Research Initiative (SBRI) rules.

## 6. Other

### **6.1. Will slides and a recording from the Longer Duration Energy Storage Innovation Demonstration Competition engagement event be made available?**

Slides and the event recording will be made available on the gov.uk website following the event.

### **6.2. Will BEIS assist with the formation of consortia?**

BEIS is unable to assist with the formation of consortia.

### **6.3. What are the requirements for risk-sharing within the SBRI framework?**

Risk-benefit sharing is discussed in section 5 and section 13.1 of the [competition guidance](#) for stream 2 (SBRI). Evaluation criteria 5 in section 6 also discusses how projects are expected to deliver cost savings under the SBRI contract compared to the case where the project was carried out under an exclusive development contract.

SBRI's allow BEIS to fully fund a project. The contractor is required to take the risk of delivering the agreed deliverables against the funding milestones agreed at the contract award stage. The price bid for delivery of the contract and agreed at award stage would act as a price cap for the project. Only actual invoiced costs will be paid for by BEIS, subject to eligibility discussed in Appendix 3 of the stream 2 competition guidance. Awardees must be aware that BEIS expects the project scope to be delivered at or below the agreed amount of awarded funding and take the risks of any cost overruns on this basis.

### **6.4. Will contact details of event attendees be published?**

Contact details of attendees will not be published. A recording of the event itself will be published.

### **6.5. How many partners would you recommend for Stream 2 (SBRI) Phase 1?**

We cannot provide recommendations on the number of partners in a consortium. This will depend on the project being proposed and the capacity and expertise of different partner organisations. The project team's overall capacity and capability to deliver the project will be assessed under Criterion 4: Project Delivery (see Section 6 of the [competition guidance](#) for stream 2).