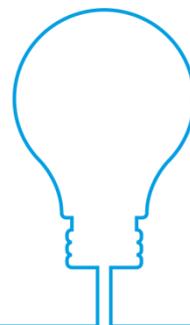




Department for  
Business, Energy  
& Industrial Strategy

# ENERGY STORAGE FEASIBILITY STUDY COMPETITION

Competition Guidance Notes



January 2017

# ENERGY STORAGE FEASIBILITY STUDY COMPETITION

## Competition Guidance Notes

Energy storage feasibility study competition

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Any enquiries regarding this publication should be sent to us at:  
[smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk)

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# BEIS Energy Storage Feasibility Study Competition – Competition Rules & Guidance

## 1. The Energy Storage Feasibility Study Competition – Overview

The objective of the Energy Storage Feasibility Study Competition (the Competition) is to support, through capital grants provided by the Department for Business, Energy and Industrial Strategy (BEIS), a number of feasibility studies focused on **large-scale energy storage technologies – capable of operating cost-effectively from 50MW export power or 50MWh storage capacity upwards.**

The Competition will consider proposals for electricity, thermal or power to gas storage. The feasibility studies delivered through the Competition will provide detailed technical, economic and site-specific information about large-scale energy storage technologies which will enable a decision to be made about a potential follow-on innovation competition to support a First-of-a-Kind (FOAK), large-scale energy storage demonstration project.

While the Competition will be open to all types of energy storage technology, funding will not be provided for technologies which are already widely or commercially deployed (in the UK or elsewhere).

Within the feasibility studies, the project teams will be required to provide detailed, site-specific and project delivery information about a proposed large-scale FOAK demonstrator.

Companies can apply for up to £70k for each feasibility study and will be required to provide a significant level of matched funding (see section 5 for details of grant intensity).

During the application process, applicants will be expected to demonstrate a robust, evidence based case for funding, which will include: levelised (lifetime) costs of storage; energy system benefits; market potential; project delivery capability and sector capacity building.

## 2. Competition Context and Objectives

This Competition is funded by the BEIS energy innovation programme (2016-2021). The aim of the BEIS innovation programme is to reduce the UK's carbon emissions and the cost of decarbonisation by accelerating the commercialisation of innovative clean energy technologies and processes into the mid-2020s.

In November 2016, BEIS published a Call for Evidence on “A Smart Flexible Energy System”<sup>1</sup>; this document noted that “enabling a smarter, more efficient energy system is a priority for Government” and “as patterns of energy supply and demand change we need a system that can cope more efficiently”. Alongside the Call for Evidence, BEIS published the results of new modelling from Imperial College and the Carbon Trust<sup>2</sup> which analysed illustrative deployment of specific flexible technologies – including energy storage, demand-side response, inter-connection and flexible generation - in different demand scenarios given different technology cost trajectories. This modelling indicates that combining flexible solutions in a whole system approach could save the UK £17-40bn cumulative to 2050 through building less low carbon generation capacity, reducing peaking plant and fuel spending, and deferring investment in network reinforcement while still meeting carbon targets.

In the case of energy storage, the modelling also indicates that the deployment of storage will be heavily dependent on its overall, lifetime (levelised) cost. Over the last 10 years, the cost of batteries – specifically lithium-ion batteries - has already fallen substantially and is expected to fall further over the next 5 – 10 years. However, for very large-scale energy storage technologies (i.e. effective at scales of many 10s – 1000s MW), other energy storage technologies are expected to provide the most cost-effective electricity storage (in terms of levelised cost/MWh) in the longer term.

Innovative large-scale technologies, such as compressed air or liquid air energy storage; novel pumped hydro storage; or large flow battery systems, show potential to provide electricity storage cost-effectively at large-scale and could potentially be easier to locate. Unlike smaller energy storage solutions, large-scale electricity storage technologies could also provide black start services in the event of a complete system shutdown.

In addition, hybrid technologies, such as power-to-gas, or thermal storage technologies could provide very long-term (e.g. inter-seasonal) storage of energy which cannot be provided by electricity storage technologies. At the moment, water storage provides the

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<sup>1</sup> Published by the Department for Business, Energy and Industrial Strategy (BEIS), November 2016: <https://www.gov.uk/government/consultations/call-for-evidence-a-smart-flexible-energy-system>

<sup>2</sup> ‘An analysis of electricity flexibility for Great Britain’, published by BEIS, November 2016: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/568982/An\\_analysis\\_of\\_electricity\\_flexibility\\_for\\_Great\\_Britain.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/568982/An_analysis_of_electricity_flexibility_for_Great_Britain.pdf)

main and most cost-effective thermal-storage medium for large thermal storage but some recent small-scale demonstrations have indicated that there are other thermal storage materials or techniques which could provide a cost-effective and more flexible thermal storage solution (e.g. smaller size, easier to construct and maintain).

This Competition is interested in feasibility study proposals for electricity storage, power-to-gas and thermal storage technologies which offer the most cost-effective operation potential, particularly in larger-scale applications (from 50MW/MWh upwards) – as long as the selected technologies are not yet widely used commercially (in the UK or elsewhere).

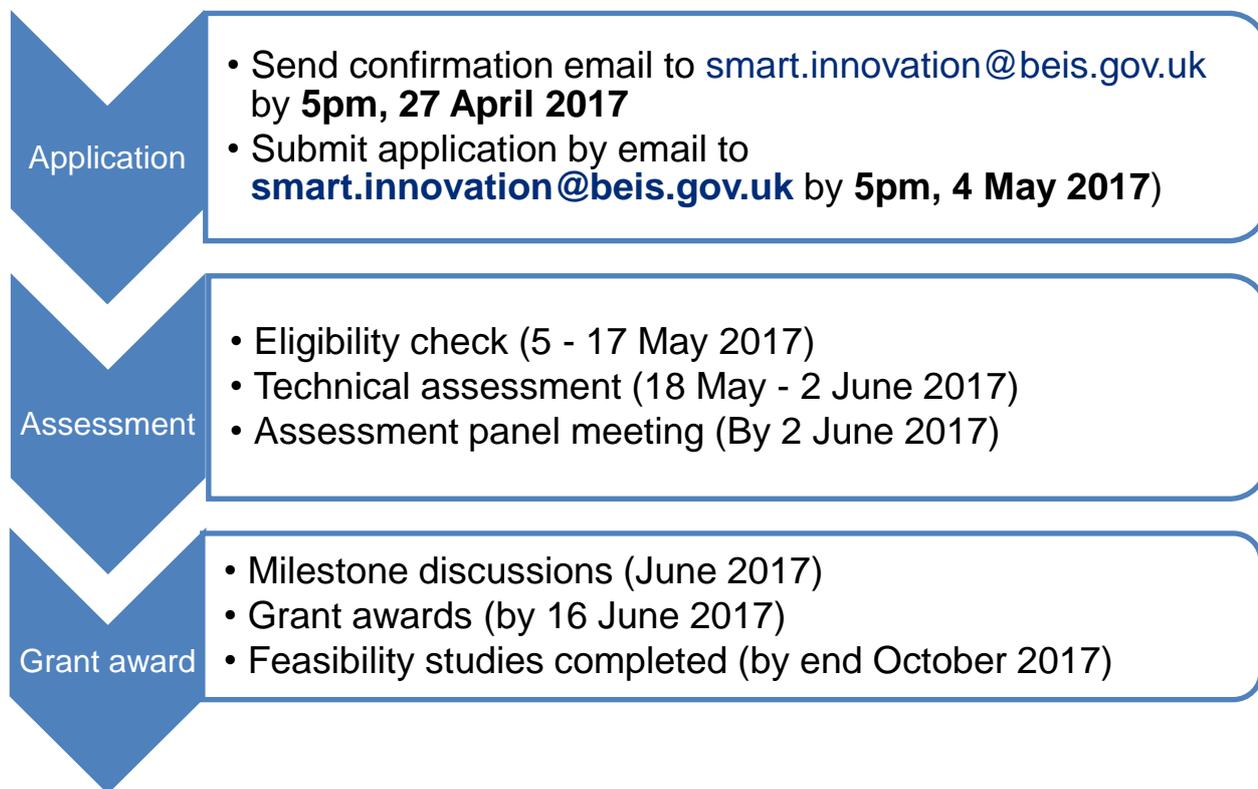
The specific objectives for the Competition are to:

1. Provide high quality techno-economic and site-specific information which will help to encourage private sector investment in the UK and develop export opportunities in new large-scale energy storage facilities;
2. Provide more detailed, robust and site-specific data about large-scale storage facilities in the UK which can help to inform innovation programme planning and inform policy decisions about the role that large-scale energy storage can play in the energy system to 2050;
3. Leverage private sector funding into the innovation process;
4. Encourage collaboration and bring new supply chain partners into this area of technology.

### 3. Competition Timetable, Application and Assessment Process

The following dates are applicable to the Energy Storage Feasibility Study Competition:

#### Timings:



As outlined in the diagram above, the competition process will be undertaken in three key stages: application, assessment and grant award.

### Stage 1: Application

- **Registration Email:** Applicants must submit a registration email to [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk) using the title 'Energy Storage Feasibility Study Competition' in the email subject and containing the following information: the name of the lead project organisation (project co-ordinator); the project title; and confirmation of intention to submit an application.

The deadline for submitting registration emails are:

- Registration deadline is 5pm, 27 April 2017.
- **BEIS confirmation:** Within a week of receipt of the Registration Email, BEIS will issue a confirmation email to the applicant with an individual reference number. Please use this reference number to submit any subsequent application or when submitting any questions about the Competition.
- **Questions about the Competition:** If you have read the guidance notes and any online FAQs and still have questions, you may address any queries regarding the competition process to the following email address: [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk)
- **Submission process and deadline:** The full proposal for the Competition must be emailed to [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk) using the title 'Energy Storage Feasibility Study Competition (name of lead applicant)' in the email subject by the following deadline:
  - Proposal submission deadline is 5pm, 4 May 2017.
- **File format and size:** Completed application forms and the completed finance templates and any supporting information should be submitted electronically. The completed finance form must be submitted as a spreadsheet (.xls) file; the completed application form should be submitted in pdf format.

The maximum size email you can send is 10 MB. If your application is larger than 10MB, please break the submission down into smaller sizes and ensure the subject line of each additional email takes the following format 'Energy Storage Feasibility Study Competition (name of lead applicant) – email x of y'.

- **Submission content:** Each proposal must include the following documents:
  - Completed application form (separate word document – this can be downloaded from <https://www.gov.uk/guidance/energy-innovation> or requested from [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk) );

- Completed finance form (separate spreadsheet – this can be downloaded from <https://www.gov.uk/guidance/energy-innovation> or requested from [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk) );
- Completed project Gantt chart or outline project plan (see section 6.1);
- **Optional:** additional letters of support or other supporting information can also be submitted **where they add substantive information** to the proposal; however, you should not assume that any additional information will be cross-referenced or reviewed as part of the selection process – for example, it may only be used to help finalise the assessment of projects which receive very similar assessment scores.

You should endeavour to answer all of the questions on the application in full. Incomplete applications and any containing incorrect information will very likely be rejected although BEIS may, at its discretion, request clarification or additional data before making a final decision.

Any applications or supporting documentation received after the application deadline will not be considered.

## Stage 2: Assessment

Applications will be checked initially against the Eligibility Criteria detailed in section 4.

**Applications which fail the Eligibility Criteria will not be assessed further, so it is essential to ensure that your project meets these criteria before you submit your application.**

Applications which meet the Eligibility Criteria will then be assessed against the Competition Assessment Criteria summarised below and described in more detail in section 7:

- Energy system benefits;
- Market potential;
- Project financing and delivery;
- Sector capacity building.

After this stage, all applicants will receive a short summary of key feedback regarding their applications irrespective of whether they are successful or not. BEIS aims to have provided all feedback to applicants within two months of the final funding decision. However, applicants are asked to remember that BEIS may receive a significant number of applications and the timing of the release of feedback will be at BEIS's discretion.

### **Stage 3: Grant Award**

Prior to the issue of the formal grant offer, there will be an opportunity to discuss the Grant Offer Letter at a meeting with an official from BEIS who will explain the conditions of the letter and respond to any queries which the applicant may have at this stage. BEIS officials will also discuss and finalise the formal project milestones with the project team before issue of the formal grant offer. BEIS may also involve an external technical adviser in these milestone discussions and in subsequent monitoring of the project.

In the case of projects which are delivered by project consortia, the lead company (project co-ordinator) will be the recipient of the grant offer letter and will be responsible for managing payment of grant funding to the other project partners. For consortium projects, funding will not be provided by BEIS until a consortium agreement for the project has been finalised and signed by all the members of the project consortium.

## 4. Eligibility for Funding

### 4.1 Competition Eligibility Criteria

To be eligible for funding, proposed projects must meet all of the following eligibility criteria:

#### 1) Innovation and technology readiness

The deliverable for this Competition is feasibility studies (see eligibility criterion 3) which will describe proposed First-of-a-Kind large-scale energy storage projects. The energy storage technologies which are the subject of these feasibility studies must be at a relatively high level of technology readiness – ready for deployment in a very large-scale demonstrator. Therefore, the energy storage technologies proposed in the feasibility studies are expected to be at a minimum technology readiness level of 6 (i.e. ready for prototype system demonstration). A description of Technology Readiness Levels is provided in Annex 1.

Funding will not be provided for feasibility studies relating to technologies which are only at early-stage, proof-of-concept or component-stage testing (i.e. technology readiness levels 1 – 4) or for energy storage technologies which are already commercially or widely deployed in the UK or internationally at large or very large scale, from 1MW/1MWh (i.e. beyond TRL 9).

#### 2) Technology scope

The Competition can support feasibility studies relating to electricity storage, power-to-gas and thermal storage technologies - which are not already commercially or widely deployed in the UK or elsewhere. The Competition will prioritise energy storage solutions which offer the most cost-effective operation potential in very large-scale applications (from 50MW export capacity or 50MWh energy storage capacity upwards).

#### 3) Project activity

This Competition will only support feasibility studies, as defined within the EU General Block Exemption Regulation<sup>3</sup> (GBER) Section 4 Article 25 (Aid for research and development projects). Under the terms of the GBER, a feasibility study is defined as:

“the evaluation and analysis of the potential of a project, which aims at supporting the process of decision-making by objectively and rationally uncovering its strengths and weaknesses, opportunities and threats, as well as identifying the resources required to carry it through and ultimately its prospects for success”

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<sup>3</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0651&from=EN>. The UK's rights and obligations of EU membership, including compliance with State Aid rules, continue to apply until the UK's exit from the EU has been completed.

**4) Project status**

BEIS is unable to fund retrospective work on projects.

**5) Additionality**

Projects can only be funded where evidence can be provided that innovation would not be taken forwards (or would be taken forwards at a much slower rate) without public sector funding.

**6) Grant size**

The maximum grant for this competition is up to £70,000 for each feasibility study.

**7) Aid intensity (match funding) and eligible project costs**

The funding levels applied for must be consistent with the relevant GBER aid intensity levels for feasibility studies. Under the GBER rules, the maximum aid intensity (i.e. the maximum level of public sector funding) is 50 % of the eligible costs for feasibility studies – and this aid intensity may be increased by 10 percentage points for medium-sized enterprises and by 20 percentage points for small enterprises. The GBER rules on aid intensity require applicants to have private funding in place to cover the balance of the eligible project costs. Such funding may come from a company's own resources or external private sector investors, but must not include funding attributable to any public authority or EU institution.

Also under the GBER rules, the eligible costs for feasibility studies shall be the costs of the study and must not include any of the non-eligible costs listed in Annex 2.

**8) Project location**

The activities for any study supported in this Competition must be conducted largely in the UK (and the majority of the eligible project costs must be incurred in the UK).

**9) Project duration**

The feasibility studies should be completed – including all reporting requirements – within 4 months of the grant award and by end October 2017.

**10) Applicants**

Companies of any size are eligible to seek funding, including applications from SMEs, as defined by the EU<sup>4</sup>. Proposals from project consortia are also eligible and are encouraged but every project consortium must be led by a private sector company (not by an academic partner or research organisation). In the case of projects carried out by consortia, the project leader/co-ordinator will be the grant recipient and will be responsible for managing distribution of funding to other partners and for ensuring

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<sup>4</sup> [http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\\_en](http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en)

overall delivery of the project.

Universities or research organisations can only participate in this Competition as members of a project consortium.

Previous recipients of public sector innovation funding can apply but the proposed project must be a new proposal which has not previously received funding. Applicants will be required to provide details of other public sector funding which they have received or for which they have applied which relates to the same technology.

#### **4.2 General conditions**

Applicants(s) must be financially viable and undertakings must not be subject to an outstanding order from the Commission to recover incompatible aid already granted or in financial difficulty (e.g. seeking rescue and restructuring aid).

In addition, Annex 3 lists a number of questions relating to issues including bribery, corruption or fraud and BEIS would not expect to provide grant funding to companies which cannot answer 'No' to all of these questions.

## 5. Funding Levels and State aid requirements

### 5.1 Grant intensity

To avoid provision of state aid, this competition will be operated in accordance with the EU General Block Exemption Regulation (GBER) – specifically: Section 4, Article 25 (Aid for research and development projects)<sup>5</sup>.

The GBER specifies the maximum level of public funding (the grant intensity) which can be provided by BEIS for feasibility studies supported by this Competition – the funding levels for different types of organisation are summarised in Table 1.

Table 1 summarises the maximum grant intensity applicable to companies and other organisations supported by funding through this Competition. BEIS may choose to award a lower level of funding – below the maximum permitted by the State Aid regulations – in order to secure greater value for money.

**Table 1: Maximum public funding for projects in the Energy Storage Cost Reduction Competition**

Research Category	Type & size of applicant <sup>6</sup>	<u>Maximum</u> amount of public sector funding towards eligible Project Costs
<b>Feasibility Study</b> - Single Company or Collaborative Application (a higher funding level is not available for collaborative feasibility studies)	Small enterprise	70%
	Medium enterprise	60%
	Large enterprise	50%
<b>Feasibility Study</b> – Universities or Research Organisations in Collaborations  (N.B. Universities or research organisations can only participate in this Competition as members of a project consortium)	Universities or research organisations (as defined in the GBER) may be entitled to receive full funding for their eligible project costs as long as they are not undertaking any economic activities in the project. University and research organisations should confirm the funding position with BEIS prior to application.	

**Note:** State Aid compliance is a legal requirement and the risk of non-compliance rests with the grant recipient<sup>7</sup>. It is therefore crucial that you address State Aid fully within the application, as any errors at this stage may result in BEIS being able only to offer a reduced level of funding or repayment of grant by applicants.

<sup>5</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0651&from=EN>

<sup>6</sup> [http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\\_en](http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en)

<sup>7</sup> The UK's rights and obligations of EU membership, including compliance with State aid rules, continue to apply until the UK's exit from the EU has been completed, and therefore for this competition.

## 5.2 Public funding

When considering levels of aid intensity (described above), public funding includes the grant and all other funding from, or which is attributable to, other government departments, UK public bodies, other Member States or the EU institutions. Such funding includes grants or other subsidies made available by those bodies or their agents or intermediaries (such as grant funded bodies).

In applying to this Competition you must state if you are applying for, or expect to receive, any funding for your project from public authorities (in the UK or in other Member States) or the EU or its agencies. Any other public funding will be cumulated with BEIS funding to ensure that the public funding limit and the aid intensity levels are not exceeded for the project.

Whilst BEIS will check the information provided to try and ensure that applicants meet the requirements of State Aid, applicants should establish that they fall within the state aid rules before submitting applications. BEIS requires applicants to notify them of any change to situation or circumstance during the project.

If there is a breach of State aid regulations, for whatever reason, the European Commission requires repayment of any grant received, including interest, above that which was due. In this situation applicants will be required to repay any funding received. It is also important to ensure that the total grant funding for the project from public sources (including from the European Commission) does not exceed the permitted percentages stated for the relevant Article.

As part of the assessment process, the added value and additionality of public funding will be tested. Applicants will need to demonstrate why public funding is required to deliver this project.

## 5.3 Collaborative projects

Under the GBER regulation, no additional public funding is awarded to participants carrying out collaborative feasibility studies but projects should meet one of the following conditions to be defined as collaborative:

“(i) the project involves effective collaboration:

— between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or

— between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results;

(ii) the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.”

## 6. Project Plans, Finances and Financial Viability

### 6.1 Project Plans

Projects are expected to be up to 4 months in duration. All projects must be completed, including all reporting requirements, by 31 October 2017. All projects must submit a detailed Gantt chart, or equivalent as part of their application, which details the project timeline, the various work packages and the project milestones.

### 6.2 Project Costs

All applicants must complete the separate Competition Finance Form spreadsheet detailing their expected expenditure and spending profile for the project (this is available online at: <https://www.gov.uk/guidance/energy-innovation> or by emailing [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk) ).

During the assessment of applications, the project costs and plans that are submitted as part of the application process will be fully assessed along with the answers to the questions on the application form to ensure they are what might be reasonably expected.

The eligibility of all costs under state aid rules and the financial viability of your organisation will be checked following the decision to select an applicant but before a formal offer is made. Being contacted for this information does not indicate either success or failure in the assessment process.

While BEIS understands that project costs are subject to change prior to agreeing a Grant Offer Letter and throughout the course of the project, we do expect the final version of the Finance Form to be our guide to project expenditure through delivery and costs should not vary significantly from this without prior agreement of the Department.

### 6.3 Financial viability checks

BEIS will undertake financial viability checks on all successful applicants. These will include looking at the latest independently audited accounts filed on the Companies House database.

Where a business is not required to file accounts with Companies House, other financial information may be requested to enable an appropriate financial viability review to be undertaken. We will be looking for evidence of your ability to resource the project appropriately, so the information we request will be focused on understanding how your business operates in this respect.

Before your project starts, BEIS will ask for evidence that you have the funding mechanisms in place to manage your cash flow across the life of your project. This could include letters of credit or other such mechanisms. We do not expect you to have cash deposits to cover the entirety of your project at the start. However, if you do not complete your project due to cash flow problems that you could have anticipated and managed, we may request repayment of any grant already issued to you.

BEIS will not make payments in advance of need and typically makes grant payments in arrears on satisfactory completion of agreed milestones and deliverables. BEIS understands, however, the difficulties which small businesses may face when financing this type of project. BEIS will explore cash flow issues with the applicant as part of developing the financial and milestone profile during the Grant Award process. BEIS will offer flexibility in terms of profiles and payments, within the confines of the requirements for use of public money within which it operates.

#### **6.4 Grant Use**

Grants provided will only cover the cost of the feasibility study (as defined in Article 2 (83) of the General Block Exemption Regulation) and must not include any of the non-eligible costs listed in Annex 2.

## 7. Assessment Process and Criteria

### 7.1 Assessment Process

All applications will be considered initially against the competition eligibility criteria (described in section 4) and then against the assessment areas outlined below which are based on the Competition’s objectives.

Eligible projects will be ranked against projects within the same storage type – i.e. electricity storage; power-to-gas storage; or thermal storage. Projects will be required to secure an assessment score of at least 60% to be awarded funding and funding will be awarded to the highest ranking projects from these three categories. BEIS may allocate less than the total budget depending on the quality of the applications. BEIS may also choose to allocate the budget to lower scoring projects in a different category to ensure support for a wider range of technologies.

The application form and these Guidance Notes are designed to inform you about the types of information you should provide to BEIS in order for your proposal to be assessed. The application form can be downloaded from <https://www.gov.uk/guidance/energy-innovation> or requested from [smart.innovation@beis.gov.uk](mailto:smart.innovation@beis.gov.uk).

For the avoidance of doubt, the individual questions listed under the headings below do not constitute assessment sub-criteria, but are an indication of the kinds of factors that will be taken into account in assessing each aspect of a proposal.

### 7.2 Assessment Criteria

<b>Criterion 1</b>	<b>Lifetime costs of the energy storage system</b>
Weighting	25%
Guidance	<p>This criterion will be used to assess the expected lifetime costs of the energy storage system, looking at current costs and, where relevant, expected future costs (where evidence is provided to support the future cost reduction assumptions).</p> <p>BEIS will use the performance, lifecycle and cost information provided by applicants to estimate the lifetime costs of the storage technology – to enable all applications of the same storage type to be assessed on the same basis.</p>
Scoring	Highest marks will be awarded to the technologies expected to lead to the lowest levelised cost of storage.

<b>Criterion 2</b>	<b>Energy system benefits to be secured by the technology</b>
Weighting	20%

Guidance	<p>This criterion will be used to assess the benefits to the energy system which could be secured by the proposed energy storage system, assuming the proposed innovation is successfully deployed.</p> <p>Applicants will be asked to explain – with supporting evidence about the energy storage system’s performance parameters – how and when their energy storage system will secure one or more of the following benefits for the energy system:</p> <ul style="list-style-type: none"> <li>- reducing overall energy system costs;</li> <li>- enabling increased deployment of intermittent or inflexible low carbon generation technologies (including ancillary services, black start capability);</li> <li>- securing cost-effective efficiency improvements in generation technologies (renewable or non-renewable).</li> </ul>
Scoring	<p>Highest marks will be awarded to projects that can demonstrate the best expected performance against the required energy system benefits.</p>

<b>Criterion 3</b>	<b>Market potential</b>
Weighting	15%
Guidance	<p>This criterion will be used to assess the likely scale and scope of the market for the proposed energy storage system, assuming the proposed storage is successfully deployed.</p> <p>Applicants will be asked to explain – with supporting evidence about the proposed market and route to market – the likely commercial success of the innovation.</p>
Scoring	<p>Highest marks will be awarded to applicants who best demonstrate a clear understanding of the potential market for their technology and have a credible, robust plan for the commercialisation of the energy storage system.</p>

<b>Criterion 4</b>	<b>Likelihood of successful project delivery</b>
Weighting	20%
Guidance	<p>This criterion will be used to assess the expected effectiveness and efficiency of delivery of the feasibility study project and will also consider the project team’s potential capacity and capability to deliver a large-First-of-a-Kind demonstration project. This will be assessed by looking at a range of factors, including:</p> <ul style="list-style-type: none"> <li>• the capacity, experience and capability of the project team;</li> <li>• the completeness and quality of the proposed project delivery plans;</li> <li>• the appropriateness and realism of the project milestones and</li> </ul>

	<p>deliverables;</p> <ul style="list-style-type: none"> <li>• the project’s access to the necessary skills and facilities;</li> <li>• the quality of risk assessment and contingency planning, including consideration of health and safety and other regulatory requirements.</li> </ul>
Scoring	<p>Highest marks will be awarded to applicants that have taken all reasonable steps to maximise the likelihood of successfully delivering the projects aims (whilst recognising the innate technical risk in any innovation project). High scoring applications will, for example:</p> <ul style="list-style-type: none"> <li>• present well thought-out, robust, credible, project plans;</li> <li>• show a realistic and robust approach to risk management;</li> <li>• have a strong delivery team with proven experience of successfully delivering comparable projects;</li> <li>• guarantee access to any necessary specialist facilities, operational knowledge and skills, or other resources required to execute the project;</li> <li>• show the strong commitment of all participating organisations;</li> <li>• not be heavily dependent for success on external factors beyond the project’s direct control.</li> </ul>

<b>Criterion 5</b>	<b>Project financing, including assessment of additionality</b>
Weighting	10%
Guidance	<p>This criterion will be used to assess the:</p> <ul style="list-style-type: none"> <li>- leverage of private sector funding into the project – i.e. the overall proportion of project costs to be funded by private sector funding;</li> <li>- additionality of the project - i.e. whether work on this innovation would be taken forwards without public sector funding; and</li> <li>- the robustness of the project costs – i.e. whether the proposed eligible project costs are realistic and justified in terms of the proposed project plans and sufficient to deliver the deliverables sought.</li> </ul>
Scoring	<p>Highest marks will be awarded to projects that can demonstrate that the proposed public sector contribution to the eligible project costs:</p> <ul style="list-style-type: none"> <li>• will leverage more than the legal minimum level of private sector funding (as determined by the State Aid funding intensity limits)</li> <li>• will represent a good use of public funding by supporting projects which will not otherwise be funded;</li> <li>• will represent good use of public funding by supporting projects whose costs are realistic and justified and are likely to secure the expected project aims and deliverables.</li> </ul>

<b>Criterion 6</b>	<b>Contribution to sector capacity building</b>
Weighting	10%
Guidance	<p>This criterion will be used to assess the impact that the project will have on the wider storage industry and storage industry supply chains in the UK. To assess this criterion, we will consider a number of factors, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• the extent to which the project, if successful, will broaden or strengthen understanding of the benefits, potential applications, challenges and limitations of energy storage systems;</li> <li>• the extent to which learning from the project will be shared.</li> </ul>
Scoring	Highest marks will be awarded to those projects that are likely to result in a strengthening of the energy storage industry and its supply chains in the UK and are likely to secure wider economic benefits.

### 7.3 Scoring Guidance

We will select projects that offer the best value for money based on their assessment against the assessment criteria outlined in section 7.2. The projects will be scored against these six assessment criteria using the following scoring guidance set out in Table 2. Projects will be required to score 3 or above (60%) against each criterion in order to be eligible for funding.

Table 2: Scoring Guidance

<b>Score</b>	<b>Description</b>
1	Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard
2	Partially Satisfactory: Proposal partially meets the required standard, with one or more moderate weaknesses or gaps
3	Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps.
4	Good: Proposal meets the required standard, with moderate levels of assurance
5	Excellent: Proposal fully meets the required standard with high levels of assurance

## 8. Notification

Applicants will be informed by email whether their application has been successful, subject to compliance with the terms and conditions of the Conditional Grant Offer.

BEIS may wish to publicise the results of the scheme which may involve engagement with the media. At the end of the application and assessment process, BEIS may issue a press release or publish a notice on its website. These public documents may, for example, outline the overall results of competitions and describe some of the projects to be funded.

Some organisations may want their activities to remain confidential and you will be given a chance to opt out of any involvement in media relations activity and further case study coverage of projects, should you see this as being absolutely necessary. However, the public description of the project you provide in your application will be made available in the public domain if your application is successful, and you are not able to opt out of the project description being published. In addition, all funded projects must include reporting and dissemination milestones – agreed with BEIS - as part of their project deliverables.

Any organisation that wishes to publicise its project, at any stage, must contact the Competition Project Manager or their Project Monitoring Officer at BEIS before doing so.

## 9. Project monitoring, knowledge sharing and evaluation

There will be a number of reporting requirements on project teams during the course of the project, including after the final payment milestone:

- Reporting: to track project progress and ensure payments are made according to a schedule of milestones to be agreed with selected projects. This reporting will be in confidence to BEIS and its technical advisers and will not be published. Any changes to schedules or project plans will need to be discussed with BEIS and applicants should expect interaction with the team during the project;
- Evaluation of the scheme: Successful applicants will be expected to participate in an evaluation of the scheme during and after final contract payments, to assess the impact of the scheme including value for money;
- Knowledge sharing: effective dissemination and knowledge sharing are important requirements in this Competition – and applicants will be assessed on the scope and scale of their proposed knowledge sharing activities.

## 10. Feedback, re-application and right of appeal

A short summary of key feedback regarding the applications will be provided to all applicants, this feedback will be based on the comments of the project assessors (both BEIS officials and external technical assessors, if used). No additional feedback will be provided and there will be no further discussion on the application.

The feedback from the assessors is intended to be constructive. Comments are not a check list of points which must be answered or argued in a resubmitted application as the assessors may be different and it is your decision as to whether you act on the suggestions made.

## 11. Confidentiality and Freedom of Information

Where any request is made to BEIS under the Freedom of Information Act 2000 (“FOIA”) for the release of information relating to any project or applicant, which would otherwise be reasonably regarded as confidential information, then BEIS will notify you of the request as soon as we become aware of it. An applicant must acknowledge that any lists or schedules provided by it outlining information it deems confidential or commercially sensitive are of indicative value only and that BEIS may nevertheless be obliged to disclose information which the applicant considers confidential.

As part of the application process all applicants are asked to submit a public description of the project. This should be a public facing form of words that adequately describes the project but that does not disclose any information that may impact on Intellectual Property (IP), is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded and the description of the project may be published once the award is confirmed as final.

All assessors used during the assessment of applications will be subject to a confidentiality agreement.

# Annex 1 – Technology Readiness Levels (TRLs)

Technology readiness levels are an indication of the maturity stage of development of particular technology on its way to being developed for a particular application or product. The table below provides a definition of Technology Readiness Levels 1 to 9.

TRL 1 – Basic Research	Scientific research begins to be translated into applied research and development.
TRL 2 – Applied Research	Basic physical principles are observed, practical applications of those characteristics can be 'invented' or identified. At this level, the application is still speculative: there is not experimental proof or detailed analysis to support the conjecture
<b>Applied research and development</b>	
TRL 3 – Critical Function or Proof of Concept Established	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
TRL 4 – Laboratory Testing/Validation of Component(s)/Process(es)	Basic technological components are integrated - Basic technological components are integrated to establish that the pieces will work together.
TRL 5 – Laboratory Testing of Integrated/Semi-Integrated System	The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment.
<b>Demonstration</b>	
TRL 6 – Prototype System Verified	Representative model or prototype system, is tested in a relevant environment.
TRL 7 – Integrated Pilot System Demonstrated	Prototype near or at planned operational system, requiring demonstration of an actual system prototype in an operational environment.
<b>Pre-commercial deployment</b>	
TRL 8 – System Incorporated in Commercial Design	Technology is proven to work - Actual technology completed and qualified through test and demonstration.
TRL 9 – System Proven and Ready for Full Commercial Deployment	Actual application of technology is in its final form - Technology proven through successful operations.

## Annex 2 – Eligible Costs

**Timing:** In addition to the requirements of the EU General Block Exemption Regulation, BEIS will only provide the grant to cover eligible costs incurred and defrayed in the period between acceptance of the BEIS grant and the deadline specified in the grant offer letter for completion of the project.

**Who can incur eligible costs:** The definition of eligible costs includes the applicant's own costs, eligible costs incurred by consortium members and eligible costs incurred by companies sub-contracted to the applicant or consortium members.

**Use of contractors:** BEIS would not normally expect to see contractors in key posts, e.g. CEO, FD, etc within the applicant company or consortium members. Exceptionally, where BEIS is willing to fund a project which includes contractors in key posts, the day rate attributable to the project must be agreed with BEIS at the outset and cannot be varied without written agreement.

**Non-sterling costs:** Costs must be denominated in GB pounds. If relevant, applicants should indicate where conversion has been made to GB pounds from other currencies and indicate the conversion rate and assumptions used.

### List of Eligible Costs

Under Article 25(4) of the EU Block Exemption Regulation<sup>8</sup>, eligible costs for Feasibility Studies are defined as “the costs of the study”.

### List of Non-eligible Costs

Under no circumstances can the grant be claimed or used:

- a) For activities of a political or exclusively religious nature;
- b) In respect of costs reimbursed or to be reimbursed by funding from other public authorities or from the private sector;
- c) In connection with the receipt of contributions in kind (a contribution in goods or services as opposed to money);
- d) To cover interest payments (including service charge payments for finance leases);

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<sup>8</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0651&from=EN>

- e) For the giving of gifts to individuals, other than promotional items with a value no more than £10 a year to any one individual;
- f) For entertaining (entertaining for this purpose means anything that would be a taxable benefit to the person being entertained, according to current UK tax regulations);
- g) To pay statutory fines, criminal fines or penalties; or
- h) In respect of VAT that you able to claim from HM Revenue and Customs.
- i) Contractors in key roles - BEIS would not normally expect to see contractors in key posts, e.g. CEO, FD, etc. Exceptionally, where BEIS is willing to fund a project which includes contractors in key posts, the day rate attributable to the project must be agreed with BEIS at the outset and cannot be varied without written agreement.

## Annex 3 – Reasons for Exclusion

If you cannot answer 'no' to every question in the table below it is very unlikely that your application will be accepted, and you should contact us for advice before completing the Competition Application form.

<b>Has your organisation or any directors or partner or any other person who has powers of representation, decision or control been convicted of any of the following offences?</b>	<b>Answer</b>
(a) conspiracy within the meaning of <a href="#">section 1</a> or 1A of the Criminal Law Act 1977 or article 9 or 9A of the Criminal Attempts and Conspiracy (Northern Ireland) Order 1983 where that conspiracy relates to participation in a criminal organisation as defined in Article 2 of Council Framework Decision 2008/841/JHA;	
(b) corruption within the meaning of <a href="#">section 1</a> (2) of the Public Bodies Corrupt Practices Act 1889 or <a href="#">section 1</a> of the Prevention of Corruption Act 1906; where the offence relates to active corruption;	
(c) the offence of bribery, where the offence relates to active corruption;	
(d) bribery within the meaning of section 1 or 6 of the Bribery Act 2010;	
(e) fraud, where the offence relates to fraud affecting the European Communities' financial interests as defined by Article 1 of the Convention on the protection of the financial interests of the European Communities, within the meaning of:	
(i) the offence of cheating the Revenue;	
(ii) the offence of conspiracy to defraud;	
(iii) fraud or theft within the meaning of the <a href="#">Theft Act 1968</a> , the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;	
(iv) fraudulent trading within the meaning of <a href="#">section 458</a> of the Companies Act 1985, article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006;	
(v) fraudulent evasion within the meaning of section 170 of the <a href="#">Customs and Excise Management Act 1979</a> or <a href="#">section 72 of the Value Added Tax Act 1994</a> ;	
(vi) an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993;	

(vii) destroying, defacing or concealing of documents or procuring the execution of a valuable security within the meaning of section 20 of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969;	
(viii) fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006; or	
(ix) making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of the Fraud Act 2006;	
(f) money laundering within the meaning of section 340(11) of the Proceeds of Crime Act 2002;	
(g) an offence in connection with the proceeds of criminal conduct within the meaning of section 93A, 93B or 93C of the Criminal Justice Act 1988 or article 45, 46 or 47 of the Proceeds of Crime (Northern Ireland) Order 1996; or	
(h) an offence in connection with the proceeds of drug trafficking within the meaning of section 49, 50 or 51 of the Drug Trafficking Act 1994; or	
(i) any other offence within the meaning of Article 45(1) of Directive 2004/18/EC as defined by the national law of any relevant State.	

Information on the latest innovation calls can be found here:

<https://www.gov.uk/guidance/energy-innovation>



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**Department of Business, Energy and Industrial Strategy**

3 Whitehall Place, London SW1A 2AW

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