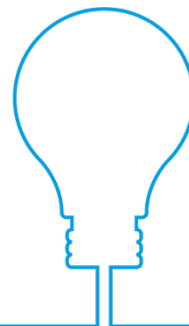




Department for
Business, Energy
& Industrial Strategy

UK-SOUTH KOREA SMART ENERGY INNOVATION COLLABORATION

Competition Guidance Notes



February 2018

UK-SOUTH KOREA SMART ENERGY INNOVATION COLLABORATION

Competition Guidance Notes

UK-South Korea Smart Energy Innovation Collaboration Competition

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smart.innovation@beis.gov.uk

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UK-South Korea Smart Energy Innovation Collaboration Competition - Guidance for UK Applicants

1. The UK-South Korea Smart Energy Innovation Collaboration Competition – Introduction

The UK-South Korea Smart Energy Innovation Collaboration Competition (the Collaboration Competition), allows UK companies and project teams to apply for a share of up to £3.0 million to develop innovative smart energy solutions on a collaborative basis with partner companies or organisations from the Republic of Korea (South Korea).

The aim of this Collaboration Competition is to develop and demonstrate innovative technologies and business models in the field of smart energy, including: demand-side response (DSR), vehicle-to-grid (V2G), flexibility markets, system integration and energy storage systems. Projects that demonstrate novel business models that engage consumers are also encouraged as well as technology development projects.

The Collaboration Competition is expected to accelerate development of innovative smart energy technologies through joint working between project teams which involve partners from both the UK and South Korea. Companies in the UK and South Korea working collaboratively on these innovation projects are expected to identify and secure new trade and investment opportunities in the partner country. By working together on this Collaborative Competition, the UK and South Korea are also helping to the aims of Mission Innovation; specifically the Mission Innovation Smart Grids Challenge.

Funding of between £250,000 to £2,000,000 will be available from the Department for Business, Energy and Industrial Strategy (BEIS) for all the UK partners in a single project. The project partners will also be expected to provide match funding from private sector resources (see section 5 for details). The total BEIS budget for the Competition is up to £3.0 million and a similar total budget is available for project partners in South Korea from the Ministry of Trade, Industry and Energy (MOTIE) and from the Korea Institute of Energy Technology Evaluation and Planning (KETEP).

2. Competition Context, Outputs and Objectives

The Collaboration Competition is funded by the BEIS energy innovation programme (2016-2021). The aim of this 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.

A number of recent reports and analysis have concluded that using smarter networks and different flexibility solutions in the energy system - such as energy storage, demand-side response, demand reduction including energy efficiency and interconnection - can secure savings for the UK, particularly in the medium to long term. For example, modelling carried out for BEIS by Imperial College & the Carbon Trust has estimated that the UK could save £17-40 billion across the electricity system cumulatively from now to 2050 by deploying these flexibility solutions¹.

In the UK, BEIS & the regulator, Ofgem, jointly published a Smart Systems & Flexibility Plan² in July 2017 which sets out actions to be taken forward by government, the regulator & industry to help to 'level the playing field' for these new flexibility approaches and to deliver a smarter, more flexible energy system using non-traditional flexibility solutions, such as energy storage and demand-side response. The Plan indicates that there are still market barriers in place preventing widescale development and uptake of these more novel flexibility solutions. Several of the actions in the Plan specifically identify innovation support as one of the methods to be used to help develop and reduce the cost of flexibility solutions for the UK.

Innovation can help to identify, develop and de-risk alternative 'smart energy solutions' which can bring flexibility and integration to our energy systems in the future in a way which is more cost-effective and supports decarbonisation, while still providing the necessary security of supply (dealing with the 'energy trilemma').

This Collaborative Competition aims to accelerate the speed of development and deployment of smart energy solutions by enabling industry and other organisations based in UK and South Korea to learn from others with similar challenges. In addition, companies from the two collaborating countries will have the opportunity to identify new partners and supply chains and potentially to secure new trade and investment opportunities.

The Competition also supports the aims of Mission Innovation; specifically the Mission Innovation Smart Grids Challenge. Through Mission Innovation, 22 countries and the European Union are taking action to double their public clean energy R&D investment over five years. Mission Innovation has identified 7 challenge areas, including a Smart Grids Challenge, to support development of future grids that are powered by affordable, reliable, decentralised renewable electricity systems. *[Add weblink to SG Challenge here & main aims of the SG Challenge]*

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/568982/An_analysis_of_electricity_flexibility_for_Great_Britain.pdf

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633442/upgrading-our-energy-system-july-2017.pdf

This Collaborative Competition is focused specifically on development and demonstration of innovative technologies and business models in the field of smart energy, including: demand-side response (DSR), vehicle-to-grid (V2G), flexibility markets, system integration and energy storage systems. Projects that demonstrate novel business models that engage consumers are also encouraged as well as technology development projects.

The **outputs** from this competition are expected to be:

Successful delivery of a small number (e.g. between 3 - 6) of innovation projects, each project will:

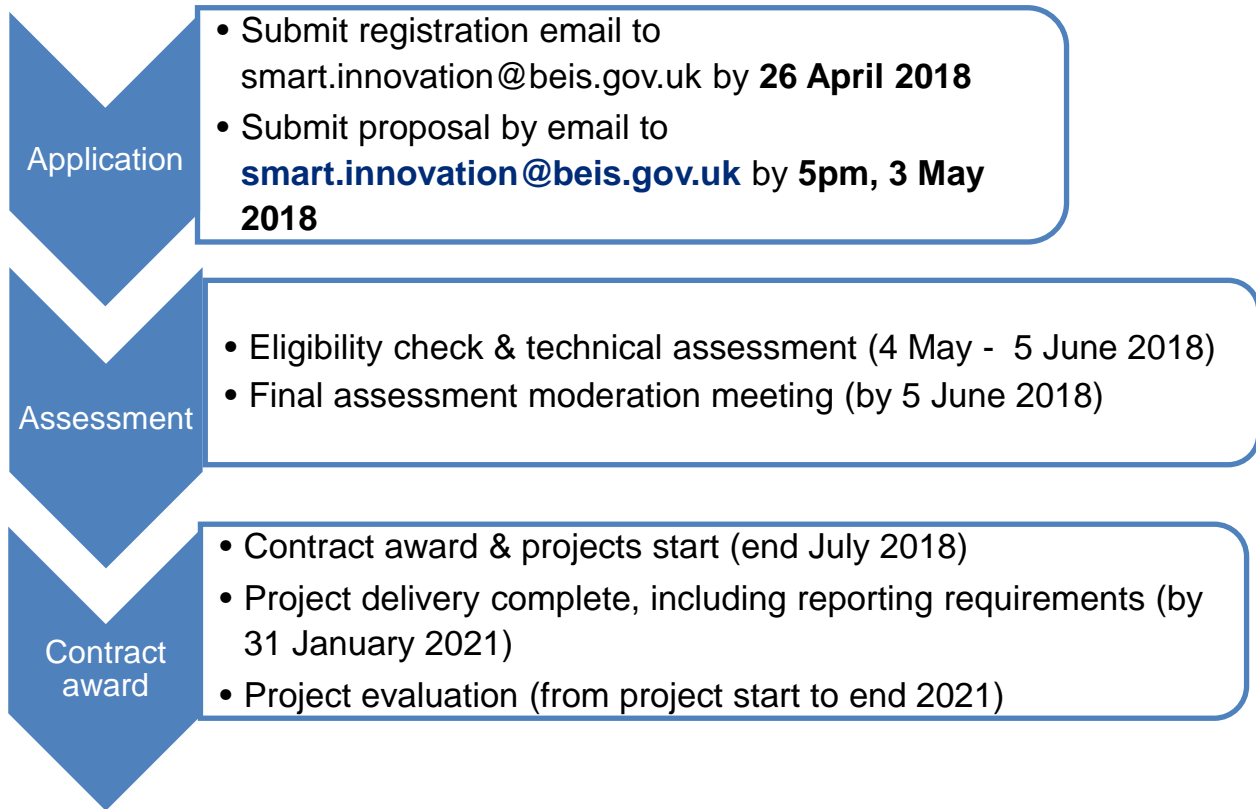
- develop and demonstrate smart energy technologies, such as energy storage and demand-side response; vehicle-to-grid; flexibility markets; and system integration;
- be led and mainly delivered by private sector companies;
- involve businesses (and potentially other organisations, e.g. universities, research organisations) from both the UK and South Korea – with a minimum level of the project work - 30% of total eligible project costs - being carried out by organisations funded by the UK and South Korea,

The detailed technical deliverables will be different for each project but all the projects will be expected to deliver the following **objectives**:

- Significantly improving the performance and/or reducing the cost of flexibility technologies for the energy system and developing new flexibility solutions which are ready to be commercially deployed within 3 years of completion of the funded project;
- Securing robust, detailed data about the likely extent of and potential for deployment of different flexibility solutions in the UK;
- Securing robust data about the savings in energy system costs or carbon emissions which could be secured from deploying the proposed new smart, flexible energy solutions in the UK compared to existing approaches;
- For UK-based companies, research and other organisations: better information and improved access to potential new markets and investment in South Korea and sustained, beneficial collaboration between UK and South Korean organisations;
- Strengthening supply chains and securing increased training/employment in smart energy technologies.

3. Competition Timetable, Application and Assessment Process

The key dates applicable to the Collaborative Competition are:



Competition Webinar (Save the Date!): Tuesday, 20 March (09:00 – 11:00) – email smart.innovation@beis.gov.uk for further details.

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

Stage 1: Application

Bidders are asked to submit a Registration Email and to complete and submit a Competition application form with supporting information explaining their proposed collaborative innovation project. The notes below explain the details of the application process:

- **Registration Email:** Applicants should submit a registration email to smart.innovation@beis.gov.uk using the title 'UK-South Korea Collaboration 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 is:
 - **Registration deadline is 5pm, 26 April 2018.**

- **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, please submit any queries regarding the competition process to the following email address: smart.innovation@beis.gov.uk. All questions should be submitted by the registration deadline - 19 April 2018; questions submitted after this date may not be answered. We will provide online replies (<https://www.gov.uk/guidance/funding-for-innovative-smart-energy-systems>) to any questions which arise before 19 April and which, in our judgement, are of material significance. All bidders should take these replies into consideration when preparing their own bids and we will evaluate bids on the assumption that they have done so.

- **Submission of Proposal:** The full proposal for the Competition must be submitted by the deadline:
 - **Competition submission deadline is 5pm, 3 May 2018.**
 - **File format and size:** Completed Phase 1 application forms, the completed finance templates and any supporting information should be submitted electronically. The completed finance form should be submitted as a spreadsheet (.xls) file; the completed application form should be submitted in pdf format.

The proposal documents must be emailed to smart.innovation@beis.gov.uk with 'UK-South Korea Collaboration Competition (name of lead UK

applicant)' in the subject line.

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 'UK-South Korea Collaboration Competition (name of lead UK applicant) – email x of y'.

- **Submission Content:** Each proposal must include the following documents:
 - Completed application form, including signed declaration and completed 'reasons for exclusion' forms, which can be viewed in Annex 3 of this Guidance document. The application form is a separate word document which can be downloaded from <https://www.gov.uk/guidance/energy-innovation> or requested from smart.innovation@beis.gov.uk ;
 - Completed pricing schedule/finance form (this is a separate spreadsheet which can be downloaded from <https://www.gov.uk/guidance/energy-innovation> or requested from smart.innovation@beis.gov.uk);
 - Completed high level project Gantt chart or similar project plan;
 - 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. The application form should include a list of any supporting documents.

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.

- **Submission Costs:** You will not be entitled to claim from the Department any costs or expenses that you may incur in preparing your bid, whether or not your proposal is successful.

Stage 2: Assessment

Applications will be assessed against the Project Scope and Eligibility Criteria described in Section 4. **Applications which fail the Eligibility Criteria will not be eligible for funding, so it is essential to ensure that your project meets these criteria before you submit your application.**

The eligible projects will also be assessed against the assessment criteria described in Section 7 to determine a ranking list which will be used to allocate the funding for the Competition. More than one ranking list may be used where the project bids cover a range of different smart energy technology areas. To be eligible to receive funding, a project must also be allocated a minimum total score of 60% against these assessment criteria.

After the assessment 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.

BEIS's decision on project funding for UK applicants is final.

Stage 3: Grant Award

Prior to the issue of the formal grant offer, there will be an opportunity to discuss the grant offer at a meeting with an official from BEIS who will explain the conditions of the grant offer 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 several UK organisations, the lead UK 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. Detailed Competition Scope and Eligibility Criteria

4.1 Competition Scope and Eligibility Criteria

The detailed scope for the Collaboration Competition is outlined below. UK-funded applicants and their proposed projects must fall within this scope to be eligible for funding. The Eligibility Application contains a number of questions, based on the detailed Competition Scope outlined below.

1) Technology readiness

This Competition will support proposals that can develop, demonstrate and trial innovative technologies, applications or business models; the supported technologies and business models should meet the following technology readiness requirements:

- a) Projects are largely expected to support pre-commercial development and demonstration activity between Technology Readiness Levels (TRL) 6 to 8.
- b) During a project funded by this Competition, the supported technologies or business models must advance at least one Technology Readiness Level Funded projects.
- c) The Competition cannot support early stage research (basic or applied) or technologies which are below TRL3 at the start of the project.
- d) The Competition cannot support commercial demonstration activity at TRL9.

Further guidance on TRLs can be found at Annex 1.

2) Technology scope

This Competition will support proposals that can develop, demonstrate and trial innovative technologies, applications or business models in the following two smart energy areas:

- a) demand-side response (DSR), vehicle-to-grid (V2G), flexibility markets, system integration – at least one funded project;
- b) energy storage systems – at least one funded project.

Exclusions: Funding will not be provided for:

- the development of smart meters or related equipment;
- the development of battery or other energy storage technologies which are already widely commercially available in the UK or elsewhere;
- the development of smart energy solutions which are commercially available or are similar to solutions already in commercial operation.

3) Project activity

To be eligible for funding, the project activity must mainly fall within the definition of **experimental development**, as defined within the EU General Block Exemption Regulation³, set out below:

Experimental Development means “acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services. Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real life operating conditions where the primary objective is to make further technical improvements on products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes. Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements”.

Activity which fits within the EU General Block Exemption Regulation definition of Industrial Research may also be permitted as part of a project funded through this Competition, as long as it forms a small proportion of the total project – but please note that grant funding level applicable to experimental development will be applied to all funded projects. The GBER definition of Industrial Research is set out below:

Industrial Research means “the planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services. It comprises the creation of components parts of complex systems, and may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as of pilot lines, when necessary for the industrial research and notably for generic technology validation”.

4) Project timescales

The formal project start and end dates must be agreed with BEIS and the funding body in South Korea before the project starts. Funding obtained from the Competition cannot fund retrospective work on smart energy solutions.

All project work, including final project reports, must be completed by 31 January 2021.

5) Additionality

³ http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

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

6) Grant size

Grant funding of between £250,000 to £2,000,000 is available for all the UK partners in a single project. Funding outside these limits may be considered for exceptional projects.

7) Aid intensity (match funding)

The grant funding levels applied for must be consistent with the relevant GBER aid intensity levels (including consideration of the cumulative effect of other forms of state aid). Section 5 sets out the maximum aid intensity limits for the Competition but applicants should be aware that grant awards may be lower than the maximum limit.

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.

8) Eligible project costs

The project costs must comply with the GBER definition of eligible project costs – these are set out in Annex 2. In addition, UK-funded project partners must ensure that the project costs do not include any of the non-eligible items listed in Annex 2.

The eligible project costs incurred by any single project team member must not exceed 70% of the total project costs; and the eligible project costs of all the project team members from either the UK or South Korea must not exceed 70% of the total eligible project costs.

For the UK-funded partners, the majority of the total eligible costs must be incurred by private sector partners.

9) Project location

The activities for projects funded through this Competition are expected to take place largely in the UK or South Korea.

10) Applicants and project team composition

All projects must be delivered by a project team or consortium not by sole organisations. A single project application must be submitted to BEIS by the lead UK-funded project member – the UK project co-ordinator. In parallel, the South Korean lead organisation must submit a project application to the relevant South Korean funding agency, KETEP.

Project teams for this Competition must include:

- One or more UK-based⁴ organisations, led by an SME or large enterprise; and
- One or more South Korean organisations, led by an SME or large enterprise from South Korea;
- At least one SME or research organisation.

UK project team members can be:

- UK-based (see footnote 4) private sector companies - both SMEs (as defined by the EU⁵) and large enterprises can apply for funding as part of a consortium with other UK-based private sector companies or in a consortium with academic, research, public, third sector or community organisations;
- UK academic, research, public, third sector or community organisations – these organisations must work as part of a project consortium with UK-based private sector organisations – they cannot be the sole UK applicants to this competition.

The majority of the UK-funded project costs must be incurred by private sector partners. The project co-ordinator for the UK-funded activities must be a registered private sector company with the necessary skills, experience and capacity to effectively lead the proposed project.

4.2 General Competition conditions

Applicants(s) must be financially viable and undertakings must not be subject to an outstanding order from the European 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 ‘reasons for exclusion’ 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.

⁴ In accordance with Article 1(5) of the General Block Exemption Regulation 2014, the UK-based applicants are not required to have their headquarters in the UK nor to be predominantly established in the UK but they must have an establishment or branch in the UK before grant payments can be made.

⁵ http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

5. Funding levels and State Aid requirements

This Competition will be operated in accordance with the terms of the revised General Block Exemption Regulation governing State Aid (Commission Regulation (EU) No. 651/2014), which came into force on 1st July 2014 (GBER) – specifically Article 25 (Aid for research and development projects)⁶.

5.1 Grant intensity guidelines

The Competition will be delivered as a grant programme within the terms of the GBER, specifically, Article 25 (Aid for research and development projects) will apply and this will define the type of innovation activities which can be funded and will limit the amount of funding which can be provided to each participant in a funded project.

The Competition will fund experimental development as defined in the GBER and outlined below:

Experimental Development means “acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services. Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real life operating conditions where the primary objective is to make further technical improvements on products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes. Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements”.

The funding levels applied for must be consistent with the appropriate GBER aid intensity levels in Article 25 which are summarised in Table 1 - although these are maximum spending levels and BEIS may decide to provide less than the maximum in order to strengthen leverage and value for money, depending on the specific project requirements:

⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0651&from=EN>.

Table 1: Maximum public funding for projects in the Collaboration Competition

Research Category	Type & size of applicant	Maximum amount of public sector funding towards eligible Project Costs
Experimental Development - Companies in Collaborations (i.e. consortium made up of either several businesses, including at least one SME; or business(es) and at least one research organisation) Note: Certain conditions must be fulfilled for collaboration (See Article 25(6) of the Block Exemption Regulation, set out at section 5.3 below)	Small enterprise	60%
	Medium enterprise	50%
	Large enterprise	40%
Experimental Development – Universities or Research Organisations in Collaborations	Universities or research organisations (defined as collaborative fundamental research projects in GBER Article 2 (84)) 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 recipient⁷. 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.

5.2 Public funding

When considering levels of aid intensity (described above in section 5.1), 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 their situations or circumstances during the project.

⁷ 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.

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 relevant permitted GBER aid intensity levels.

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 Article 25 regulation, additional public funding (up to 15%) can be awarded to participants in collaborative projects (not feasibility studies) as long as they meet one of the following conditions:

“(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. Assessment Process and Criteria

6.1 Assessment Process

All UK applications will be considered against the detailed Competition scope (described in section 4) and in parallel against the assessment areas outlined below which are based on the Competition’s objectives and the likelihood of effective project delivery.

To be eligible to receive funding, a project must also be allocated a minimum total score of 70% against these assessment criteria.

The applications from the UK project team members will be assessed by at least four UK assessors (these will include at least one BEIS assessor and independent assessors). The South Korean applications will be assessed in parallel by South Korean assessors. A moderation meeting will be held at the end of the assessment process to agree the overall combined scores for each of the project and to determine an overall ranking list which will be used by BEIS, MOTIE and KETEP to allocate the funding for the Competition.

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 different smart energy solutions categories 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. 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 factors that will be taken into account in assessing each aspect of a proposal.

6.2 Assessment Criteria

Criterion 1	Innovative cost reduction and performance improvement
Weighting	20%
Guidance	<p>This criterion will assess:</p> <ul style="list-style-type: none"> - the size of any cost reduction in the smart energy technology or service to be delivered in the project; - the extent of performance improvements in the smart energy technology or service to be delivered in the project; <p>The level of innovation in the proposed solution will also be considered – applicants will be asked to identify any similar existing smart energy solutions and to explain the innovation in their approach.</p>
Scoring	Highest marks will be awarded to innovative smart energy solutions which are expected to secure the greatest cost reduction and/or performance improvement in the proposed project.

Criterion 2	Potential impact
Weighting	20%
Guidance	<p>This criterion will assess:</p> <ul style="list-style-type: none"> - the potential energy system cost savings and the extent of carbon emission reductions which could be secured by 2030 through deployment of the proposed smart energy solution relative to existing solutions.
Scoring	Highest marks will be awarded to applicants with smart energy solutions which offer robust evidence of the greatest opportunity for cost savings and/or carbon emission reductions in the UK.

Criterion 3	Likelihood of future uptake
Weighting	30%
Guidance	<p>This criterion will assess the routes to commercialisation and exploitation for the proposed smart energy solution in the UK and internationally. Project teams will be asked to:</p> <ul style="list-style-type: none"> - identify and quantify the expected markets and market share for their smart energy product or service, over the next 5 years, in the UK, South Korea and elsewhere; - identify any further development which is required prior to commercialisation; - set out proposed routes to commercialise and exploit their product or service; - identify supply chains needed to move to commercialisation and any key supply chain gaps,
Scoring	Highest marks will be awarded to those project teams with the most robust plans for further commercialisation and exploitation of the proposed smart energy solution and the greatest potential market uptake opportunities.

Criterion 4	Project delivery and dissemination
Weighting	20%
Guidance	<p>This criterion will assess the project team's potential capacity and capability to deliver a successful smart energy innovation project, including dissemination activity. This will be assessed by looking at a range of factors, including:</p> <ul style="list-style-type: none"> • the capacity, experience, capability and diversity of the project team; • the completeness and quality of the proposed project delivery

	<ul style="list-style-type: none"> plans for the proposed smart energy project; the appropriateness and realism of the project milestones and deliverables; the project's access to the necessary skills and facilities; the quality of risk assessment and contingency planning, including consideration of health and safety and other regulatory requirements; the scale and scope of proposed dissemination and knowledge transfer activities.
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"> present well thought-out, robust, credible, project plans; show a realistic and robust approach to risk management; have a strong and diverse delivery team with proven experience of successfully delivering comparable projects; guarantee access to any necessary specialist facilities, operational knowledge and skills, or other resources required to execute the project; show the strong commitment of all participating organisations; not be heavily dependent for success on external factors beyond the project's direct control; have clear dissemination and knowledge-transfer plans and resources to deliver them.

Criterion 5	Project financing
Weighting	10%
Guidance	<p>This criterion will assess the:</p> <ul style="list-style-type: none"> robustness of the proposed project costs – i.e. whether the proposed eligible project costs are realistic and justified in terms of the proposed project plans <u>and</u> sufficient to deliver the deliverables sought. level of private sector funding which will be leveraged by the public sector grants.
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"> 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; will represent good value for money, for example, by including less

	public sector contribution than the maximum permitted.
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6.3 Scoring Guidance

We will select projects that offer the best value for money based on their assessment against the assessment criteria outlined in section 6.2. The projects will be scored against these assessment criteria using the following scoring guidance set out in Table 3. Projects must score a **minimum of 70%** (based on total score) in order to be eligible for funding.

Table 3: Scoring Guidance

Score	Description
1-2	Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard
3-5	Partially Satisfactory: Proposal partially meets the required standard, with one or more moderate weaknesses or gaps
6-7	Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps
8-9	Good: Proposal meets the required standard, with moderate levels of assurance
10	Excellent: Proposal fully meets the required standard with high levels of assurance

7. Project plans, finances and financial viability

7.1 Project Plans

All projects must submit a project plan (Gantt chart, or equivalent) as part of their application; the plan must detail the project timeline, the various work packages and the project milestones and deliverables.

7.2 Project Costs

In addition to completing the Application Form, all applicants must complete the Competition Finance Form detailing their expected expenditure and spending profile for the project. This Finance Form can be downloaded from <https://www.gov.uk/guidance/energy-innovation> or requested from 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 so delivery and costs should not vary significantly from this without prior agreement of the Department.

7.3 Financial viability checks

BEIS will undertake financial viability checks on all successful UK 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 outputs. 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.

7.4 Grant Use

Grants provided will only cover eligible costs within the meaning of Article 25(3) of the General Block Exemption Regulation and as defined in Annex 2 (which includes additional lists of non-eligible costs).

8. Notification and Information Sharing

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.

BEIS may share information from applications with other UK Government departments; or with Ofgem.

BEIS will share the project application information with the Competition funding providers in South Korea (MOTIE and KETEP), subject to any specific confidentiality requests made by UK project partners.

Confidentiality request: 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 financial forecasting and to ensure that 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; however, for these Collaboration Competition projects, monitoring information will also be shared with the Competition funding providers in South Korea (MOTIE and KETEP), subject to any specific confidentiality requests made by UK project partners. Any changes to schedules or project plans will need to be discussed with BEIS and applicants should expect significant interaction with the team during the project;
- **Evaluation of the scheme:** successful applicants will be expected to co-operate with BEIS in an evaluation of the scheme during and after final grant 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. Feedback 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.
Applied research and development	
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.
Demonstration	
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.
Pre-commercial deployment	
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

General Requirements

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 or the project start date specified in the grant offer letter 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(3) of the EU General Block Exemption Regulation⁸, eligible costs are defined as the following:

- a) Personnel costs: researchers, technicians and other supporting staff to the extent employed on the project;
- b) Costs of instruments and equipment to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible;

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

- c) Costs for of buildings and land, to the extent and for the duration period used for the project. With regard to buildings, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible. For land, costs of commercial transfer or actually incurred capital costs are eligible;
- d) Costs of contractual research, knowledge and patents bought or licensed from outside sources at arm's length conditions, as well as costs of consultancy and equivalent services used exclusively for the project;
- e) Additional overheads and other operating expenses, including costs of materials, supplies and similar products, incurred directly as a result of the project.

List of Non-eligible Costs

Under no circumstances can the grant be claimed or used:

The following costs must be excluded from Eligible Expenditure:

- I. Payment that supports for lobbying or activity intended to influence or attempt to influence Parliament, Government or political parties, or attempting to influence the awarding or renewal of contracts and grants, or attempting to influence legislative or regulatory action;
- II. using grant funding to petition for additional funding;
- III. input VAT reclaimable by the Grant Recipient from HMRC; and
- IV. payments for activities of a political or exclusively religious nature.
- V. Goods or services that the Grant Recipient has a statutory duty to provide;
- VI. Payments reimbursed or to be reimbursed by other public or private sector grants
- VII. Contributions in kind (i.e. a contribution in goods or services, as opposed to money);
- VIII. Depreciation, amortisation or impairment of fixed assets owned by the Grant Recipient beyond the extent and period for which they are used for the Grant Funded Activities;
- IX. The acquisition or improvement of fixed assets by the Grant Recipient (unless the grant is explicitly for capital use – this will be stipulated in the Grant Offer Letter);

Annex 2 – Eligible Costs

- X. Interest payments (including service charge payments for finance leases);
- XI. Gifts to individuals other than promotional items with a value of no more than £10 a year to any one individual;
- XII. Entertaining (entertaining for this purpose means anything that would be a taxable benefit to the person being entertained, according to current UK tax regulations);
- XIII. Statutory fines, criminal fines or penalties; or
- XIV. Liabilities incurred before the issue of this funding agreement unless agreed in writing by the Funder.

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.

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?	Answer
(a) conspiracy within the meaning of section 1 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 section 1 (2) of the Public Bodies Corrupt Practices Act 1889 or section 1 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 Theft Act 1968 , the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;	
(iv) fraudulent trading within the meaning of section 458 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 Customs and Excise Management Act 1979 or section 72 of the Value Added Tax Act 1994 ;	
(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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