

## Call for FY 2018 4<sup>th</sup> MOTIE International Energy Joint R&D Project Proposals

The Ministry of Trade, Industry and Energy (MOTIE) hereby announces the launch of the call for FY 2018 4<sup>th</sup> International Energy Joint Research and Development(R&D) Program that is designed to support R&D cooperation among domestic companies, universities and research institutes and their foreign partners. Organizations that intend to participate in this Program are expected to submit their proposals according to the procedures set forth below:

※ Notice : The purpose of this English version of public notice is to provide useful information to foreign organizations who want to submit their applications, which means it is not legally valid document. The Korean version of the project call is the legally valid document.

### 1. Overview

#### 1-1. Purpose

Program	Purpose	Funding areas
International Energy Joint Research and Development(R&D) Program	Through Global Open Innovation, this program seeks for projects that promote international technology cooperation to secure advanced technology early and contribute to the development of national energy technology competitiveness and create new energy market by laying the foundation for overseas market entry.	Areas related to the Mission Innovation's Innovation Challenges

※ This announcement aims to support joint research in related fields to enhance the performance of the Mission Innovation activity, which was established in November 2015

### 1-2. Funding availability

○ Funding size : Approx. 3.6 billion KRW

Classification	type	Summary	Anticipated number of awards
Joint R&D for securing advanced technology <sup>1)</sup>	Bottom-up Approach <sup>3)</sup>	- Funding size : approx. 1 billion KRW per year - Duration : 3 years - Lead Organization : Korean company, university or research institute - Payment of royalty is required - Participation of Korean SME or Mid-tier company is mandatory - Participation of foreign organization(company, university, research institute) is mandatory * co-funding by the foreign participating organization is not mandatory but <b>strongly recommended</b>	Approx. 6
		- Funding size : approx. 1 billion KRW per year - Duration : 3 years - Lead Organization : Korean SME or Mid-tier company - Payment of royalty is required - Participation of Korean SME or Mid-tier company is mandatory - Participation of foreign organization(company, university, research institute) is mandatory * co-funding by the foreign participating organization is not mandatory but <b>strongly recommended</b>	

- 1) 'Joint R&D for securing advanced technology' refers to a project that has an objective to secure advanced technology needed to increase technical competitiveness through Joint R&D.
- 2) 'Joint R&D for penetration into overseas markets' refers to a project that has an objective to make energy technology penetrate and expand into the overseas market through joint R&D.
- 3) 'Bottom-up Approach' refers to a project that applicants can freely propose their own idea for development. R&D subject should remain within the funding areas

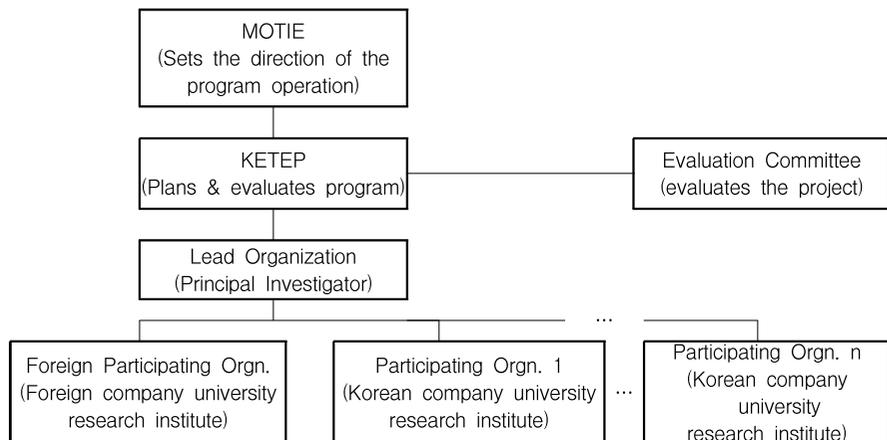
### 2. Project Structure

- The project is proposed and performed cooperatively by the consortium of lead and participating organizations
  - Lead Organization(LO) (includes company) : conducts a research at the leading position and manages the overall project.

- Participating Organization(PO) (includes company) : joins the project and performs a research in cooperation with the lead organization.

\* Notice : Foreign entity(company, university or research institute) should join the project as a participating organization.

- The Principal investigator(PI) in LO means the person in charge of the management of the overall project.



### 3. Guideline for Funding

#### 3-1. Funding Requirements

##### ① The project budget

- The project budget is comprised of government contributions and civilian dues (in cash and in-kind).

##### ② The government contributions

- The amount of government contributions will vary depending on the type of executing organizations and project in accordance with Article 24 (Funding Criteria) and Article 25 (Civilian Dues) of the Common Operational Regulations

for the Industrial Technology Innovation Programs.

Type of executing organization	Share of government contributions in executing organization's project budget <sup>1)</sup>	
	Securing advanced technology	Penetration into overseas markets
Large company <sup>2)</sup>	50% or less	33% or less
Mid-tier company <sup>3)</sup>	70% or less	50% or less
SME <sup>4)</sup>	75% or less	67% or less
Other	100% or less	100% or less

- 1) 'Executing organization' refers to a LO or PO that has been selected as project awardee.
- 2) 'Large company' refers to a company that does not fall under SMEs under Article 2(1) and (3) of the 「Framework Act on Small and Medium Enterprises」 or mid-tier company under Article 2(1) of the 「Special Act on Promoting the Growth of Mid-Tier Companies and Strengthening the Competitiveness thereof」
- 3) 'Mid-tier company' refers to a company under Article 2(1) of the 「Special Act on Promoting the Growth of Mid-Tier Companies and Strengthening the Competitiveness thereof」 .
- 4) 'SME' refers to a company under Article 2(1) and (3) of the 「Framework Act on Small and Medium Enterprises」 and Article 3 (Scope of SME) of the Enforcement Decree of the same Act.

##### ③ Civilian dues in cash

- A party that participates in a project shall carry out its project using the government contributions allocated to it, and for-profit organizations shall individually bear the cash portion of civilian dues.

Type of executing organization	Share of government contributions in executing organization's project budget <sup>1)</sup>	
	Securing advanced technology	Penetration into overseas markets
Large company	60% or more	
Mid-tier company	50% or more	
SME <sup>4)</sup>	40% or more	
Other	To be borne if necessary	

- Foreign organization(company, university or research institute) is classified as 'Other' in the above Tables.

- It is recommended that the project is co-funded by foreign PO.
- 'Co-fund' refers to budget(cash) funded by foreign organization or overseas country. If necessary, fund in-kind can be added.
- In the case of developing country, if co-fund in cash were impossible, share of cash can be replaced with in-kind.
- In application evaluation process, additional merit points will be graded according to the ratio of co-funding(cash only) to government contribution.

### 3-2. Guideline for Labor Costs

- To expand investment in human resources, the proportion of labor costs should exceed the proposed minimum share in the below table.

Research Area	<ul style="list-style-type: none"> <li>- Enhancing energy efficiency</li> <li>- Capture, storage and usage of Greenhouse gas</li> <li>- Energy storage system</li> <li>- Resources development</li> </ul>	<ul style="list-style-type: none"> <li>- New and Renewable energy</li> <li>- Electric power</li> <li>- Nuclear power</li> </ul>
Minimum Share	33% of total project budget	32% of total project budget

\* 'The proportion of labor costs' refers to the ratio of the sum of labor costs and student labor costs(includes cash and in-kind) to the total project budget.

## 4. Funding Areas and Applicant Eligibility

### 4-1. Funding Areas

- The field of support is the technical field related to the innovation challenge of Mission Innovation (Innovation Challenges).
- ① Smart grid, ② Off-grid power supply, ③ CCUS, ④ Biofuel, ⑤ Sunlight conversion, ⑥ Clean energy material, ⑦ Air-conditioning, ⑧ Hydrogen

\* It is necessary to check separate explanatory materials and descriptions of each technology field at Mission Innovation website ([www.mission-innovation.net](http://www.mission-innovation.net))

### 4-2. Applicant Eligibility

#### Domestic Lead Organization

- Korean company, university, research institute, association, etc. in accordance with article 12(1) of the 「Energy Act」 and Article 8-2 of the Enforcement Decree thereof, Article 11(2) of the 「Industrial Technology Innovation Promotion Act」 and Article 11 of the Enforcement Decree thereof, Article 2(1)-3, 2(1)-4, 2(1)-4-2, 9-2 and 9-4 of the Common Operational Regulations for the Industrial Technology Innovation Programs.
- It is required to meet qualifications for lead organization specified in the proposals or RFP.

#### Participating Organization

- Requiring same qualification for the lead organization specified above
- Every consortium should have at least one foreign organization.

#### Overseas Participating Organizations

- For institutions located in Mission Innovation Countries\* as of the date of announcement and if there are official newcomers by the deadline, it will be effective as well.
- (MI Member) United Kingdom, United States, China, Japan, Australia, Brazil, Canada, Chile, Denmark, France, Germany, India, Mexico, Indonesia, Italy, Norway, Saudi Arabia, Sweden, UAE, Netherlands, Finland, Austria

\* 22 countries as of announcement date

(among Mission Innovation all 24 member countries but except for Korea and EU)

### 4-3. Other

#### What is mentioned below will be disqualified.

- In a case where as of the due date of submission, an LO, PO, the head of an LO, representative of a PO, or a PI of a proposed project is placed under any restrictions on participation in national research and development programs.

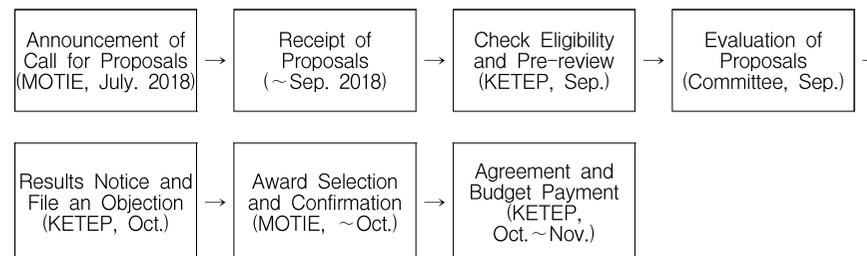
- In a case where as of the due date of submission, proposal and related documents are not submitted or not written using the form provided.
- In a case where a submitted proposal or document is false, fictitious or fraudulent;
- In a case where SME or mid-tier company does not participate the project as LO in the Collaborative R&D for penetration into overseas markets;
- In a case where no company participates in the project

**□ What is mentioned below can be disqualified.**

- In a case where a LO fails to meet the eligibility requirements or details of the proposed project are found inappropriate in terms of purposes, R&D characteristics, or requirements set forth in this Call for Proposals;
- In a case where the target technology of the proposed project is found to be 'already-developed', or identical or similar to the already-funded project of the applicant organization;
- To check redundancy in advance, please visit [www.ntis.go.kr](http://www.ntis.go.kr) (Home) > R&D Information Search > Projects.
- In a case where as of the due date of submission, any of the participants of the proposed project (LO, POs or PI) fails to fulfill their obligations (that is, submission of various required reports, payment of royalties, submission of a report on royalties payment plan, a closing balance of government contributions and payment of a budget subject to restitution);
- The proportion of labor costs do not exceed the minimum share proposed in this Call for Proposals.

## 5. Evaluation Procedure and Criteria

### 5-1. Evaluation Procedure



- File an Objection: KETEP objection system allows the applicant(LO) to make an objection once, only if there were the critical fault in the process of evaluation.
- Proposals will be an evaluation with a presentation by PI of the project. Powerpoint can be used for presentation and use of other S/W to be inquired before the presentation.
- The aforementioned schedule is subject to change.

### 5-2. Evaluation Method

**□ Evaluation criteria**

- Evaluation criteria for proposals are "technology level and research capabilities" and "economic feasibility and Possibility of commercialization".
- Proposal receiving 70 points or above is a candidate for an award. Final selection of awardee depends on the government's budget available.

**□ Criteria regarding Additional Merit Points**

- Additional merit points cannot exceed 5.
- **(Case-1)** Not applicable to foreign PO

- (Case-2) The ratio of co-funding\*

The ratio of co-funding(%)	>10 & ≤50	>50 & ≤80	> 80
merit points	1.5	2	2.5

\* 'The ratio of co-funding' refers to the ratio of the overseas fund to the sum of Korean governmental contribution to foreign PO(%). The resources of the fund include government, public or private sector.

## 6. Applicable law and regulations

- Legal grounds : Articles 12 and 13 of the 「Energy Act」 and Articles 9 ~ 11 of the Enforcement Decree thereof, Articles 27 and 29 of the 「Industrial Technology Innovation Promotion Act」 and Article 39 of the Enforcement Decree thereof.
- Relevant regulations (visit [www.ketep.re.kr](http://www.ketep.re.kr) for regulations and forms)
  - The Common Operational Regulations for the Industrial Technology Innovation Programs (MOTIE Public Notice No. 2018-90)
  - The Comprehensive Regulations on Collection, Use and Management of Royalties (MOTIE Public Notice No. 2018-80)
  - The Regulations on Appropriation, Use and Management, and Settlement of Project Budget (MOTIE Public Notice No. 2018-89)
  - The Regulations on Management of Project Security (MOTIE Public Notice No. 2018-88)
  - The Regulations on Research Integrity and Ethics (MOTIE Public Notice No. 2015-262)
  - The Guideline for Evaluation of International Collaborative Research and Development Programs (International R&D Collaborative Program - MOTIE Rules No. 61)

## 7. Application and Submission Information

- To apply to this call, applicants\* should register online through GENIE system at <http://genie.ketep.re.kr>, KETEP's project management system. A submission number will be issued after online registration(including uploading files of full proposals). Full proposals that are same with uploaded files should be submitted with printed online filing receipt. Proposals with required documents shall be submitted by person or by post until 18:00 KST on the due date listed above to be eligible to submit Full Proposals.
- \* Only LO shall register online and submit full proposals on behalf of the consortium.
- Where to get the form: download the attached file of this announcement at <http://www.ketep.re.kr> or <http://genie.ketep.re.kr>
- Where to register online and upload files: <http://genie.ketep.re.kr>(by only LO)
  - \* PI of LO log-in the GENIE system(<http://genie.ketep.re.kr>) and register online. PI shall sign up the GENIE system before online registration.
  - \* KETEP evaluate the up-loaded proposals. No modification is permitted after online registration.
  - \* KETEP strongly encourages to register online at least 24 hours before the deadline(September 14 18:00). Because the GENIE system will be very busy and cause network problem on the due date.
  - \* All submitted documents will not be returned.

## 8. Required Documents

No	Documents	Remarks
1	Online filing receipt	LO
2	A proposal in Korean	LO
3	Evidentiary documents demonstrating qualifications to be given merit points as of the due date of submission	LO
4	Confirmation note for application eligibility	LO, PO
5	Agreement or MOU signed between LO and domestic/foreign PO or a copy of Consortium Agreement or a letter of confirmation on participation in the Consortium (In the form of LOI)	LO, PO
6	A Letter of Consent to Use of Personal Information of a PI and participating organization's officer in charge	LO, PO
7	Certificate for business registration or National tax registration	LO, PO
8	A copy of the Certificate for Industrial R&D Center (applicable in a Korean enterprise)	LO
9	Proof of employment for PI	LO, PO
10	Accounting audit report of the past 2 years (only applicable to company)	LO, PO

## 9. Notes

### Notes for application

- In a case where the project is "not royalty collection", the share of government contributions can be 100% of the project budget and deliverable generated from this Program shall be open to the public.
- In a case where the project is "royalty collection", the for-profit organization shall take part in the project as LO or PO.
- Budget or period of the selected project can be adjusted by evaluation and the government's budget.
- The project in execution may terminate by annual evaluation, and the amount of project budget to be disbursed to them may vary by government's policy, budget, project evaluation or etc.
- KETEP may conduct on-the-spot inspection of candidates for the award. KETEP can rescind the selection through "re-evaluation".

### Notes for proposal

- The applicant should clearly identify the quantitative objectives since these are used as evaluation criteria.
- "Quantitative Technical Objectives": The applicant should provide an explicit, quantitative target to the baseline technology and qualification process.
- "Quantitative Outcome Objectives": The applicant should quantitatively provide the expected outcomes in accordance with performance indices of the Program.
- The foreign organization should submit the proposal in English respectively.
- Cover page of the proposal should include the signature or official seal of representative and the signature of a PI of a foreign organization.
- For Collaborative R&D for "securing advanced technology", it is recommended that the project should include personal exchange program that Korean and foreign investigators of consortium stay in the cooperated country at least a month every year.
- For Collaborative R&D for "penetration into overseas markets", it is recommended that the project should include a PR plan such as business conference, exchange meeting for commercialization of R&D products.

### Cost appropriation and settlement for the budget of the foreign organization

- The criteria established by the foreign organization and the country can be applied to cost appropriation for the budget of the foreign organization.
- The settlement for the budget of foreign organization can apply the settlement method of governmental R&D fund in its own country or can be substituted with self-settlement
- The representative of the foreign organization should immediately submit a report on self-settlement to LO or KETEP after settling its own projects.
- If necessary, LO or KETEP may additionally request accountant's report by external CPA of its own country or written evidence using a separate form.

## 10. Contacts and Information Sessions

### **Contacts : International Cooperation Division, KETEP**

- Information related to this Call for Proposals are posted on KETEP homepage ([www.ketep.re.kr](http://www.ketep.re.kr)) or GENIE system(<http://genie.ketep.re.kr>). If you have any question about this Call for Proposals, you can contact with KETEP by phone or e-mail. It may easier to communicate with KETEP through emails or through Korea LO.
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