



## **Introduction of Korean industrial R&D program for Foreign Entities**

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### **Introduction**

The Korean government has set up various joint R&D funding programs for companies, research institutes and universities. Foreign entities in Korea are allowed to apply for these funds. However, not many foreign entities do so due to the lack of information and all sorts of tangible and intangible barriers. As an introduction to the programs of KEIT, this article will describe the competitiveness of Korean R&D investment environment and some R&D.

### **Competitiveness of Korean R&D investment environment**

Many foreign entities in Korea have their own R&D centers. Many global leaders like Microsoft, Motorola, IBM, DuPont, 3M, Oracle, Siemens and Robert Bosch have chosen Korea as one of their main R&D centers since the country is known as the gateway of the North-East Asian market. Korea is centered between China and Japan which the three nations represent 22% of the global GDP. In addition, Korea has been the production base for many years, so they have accumulated know-how in the mass production and automated manufacturing. With this external strength of the Korean environment and combining with the foreign core technologies, both the Korean and foreign companies can optimize the synergy effect. Furthermore, Korea deals with numerous industrial areas from automotive, airplane, ship building to semiconductors, and they are especially strong in the IT sector compared to the neighboring countries. The internet usage is high, the infrastructure and the environment of the high speed telecommunication network is well established with abundant manpower. This makes the country to have a comparative advantage to build an R&D center in Korea. Therefore, the Korean government is trying to persuade foreign entities to take part in the joint R&D program. One of the organizations which are in charge of providing this subsidy is called Korea Evaluation Institute of Industrial Technology (KEIT). Following is some brief introduction of what KEIT is offering to the foreign entities.

### **R&D programs available for the Foreign Entities**

KEIT is one of the organizations under the Ministry of Trade, Industry and Energy (MOTIE). This organization performs comprehensive planning and evaluation for the diffusion of a technological base through the pursuit of domestic and international synergy. Its role is to support researchers to take part in national R&D with innovative and challenging tasks and to act as a catalyst to expand technology infrastructure.

### **KEIT's R&D Programs**

KEIT is conducting three major R&D programs which are Industrial Core Technology Development Program, Material & Components Technology Development Program and Global Competitive Technology Development Program. Especially, the latter program allows foreign entities to take part in the project, so further details can be found from the below table.



### 3 Major R&D programs available from KEIT

Program	Purpose	Program detail
<b>1. Industrial Core Technology Development Program</b>	Develop and secure the world leading technologies in the market	<ul style="list-style-type: none"> <li>• Scale: Total approximately 0.5 bil. EURO</li> <li>• Industry: Creative, materials &amp; Components, system, etc. Industrial core technologies</li> <li>• Target: University, research institutes and companies</li> <li>• Condition: 3 ~ 7years</li> </ul>
<b>2. Materials &amp; Components Technology Development Program</b>	For the continuous development of domestic material & component industries, this program supports projects which have promising opportunity to take part in the offshore procurement and global market and supports development of essential materials & components that can secure the competitiveness and innovativeness of its industrial sectors	<ul style="list-style-type: none"> <li>• Scale: Total approximately 0.2 bil. EURO</li> <li>• Target: Research specialized companies</li> <li>• Condition: Maximum 7 ~ 9 years in core material development, maximum of 3 ~ 5 years in convergence material development</li> </ul>
<b>3. Global Competitive Technology Development Program</b> (※Detailed information indicated in below )	Nurture global specialized company by supporting the development of core technologies for small and medium sized enterprises (SMEs)	<ul style="list-style-type: none"> <li>• Scale: Total approximately 0.1 bil. EURO</li> <li>• Target: Project leader should be a SME but no restriction in participating member</li> </ul>

### Global Competitiveness Technology Development Program

Purpose of the program	Size	Date
<b>1. Advanced Technology Center</b> Supporting research specialized companies in order to secure the competitiveness of the core technologies	Approximately 0.4 mil. EURO/YR, within 5 years	Request for proposal (RFP) (Jan) Submission (Feb) Evaluation (Feb ~ May) Contract (May ~ June)
<b>2. Cooperation among the textile stream</b> Supporting joint R&D project among the consortium of textile & fashion industries which are willing to cooperate from planning to marketing stage	(Textile) Approximately 0.8 mil. EURO/ YR, within 2 ~ 3years (Fashion) Approximately 0.2 mil. EURO/YR, within 1 ~ 2years (Maturation) Approximately 0.2 mil. EURO/YR, within 1 ~ 2 years	
<b>3. Acceleration of daily supplies industry</b> Supporting R&D project of high value added technologies for daily supplies in order to enter global market with competitive brand power	Approximately 0.2 mil. EURO/YR, within 2 ~ 3 years	RFP (Mar) Submission (Apr) Evaluation (Apr ~ May) Contract (May ~ June)
<b>4. Personal transportation</b> Supporting R&D project of improving and optimizing the efficiency and safety of the Electric wheelchair, electric stroller, and so on	Approximately 0.4 mil. EURO/YR within 1 year	RFP (Jan) Submission (Feb) Evaluation (Feb ~ May) Contract (May ~ June)
<b>5. Leading edge research equipment</b> Improvement in competitiveness of domestic research equipment industries by supporting	Approximately 0.8 mil. EURO/ YR, within 5 years	



the R&D project of developing the large research equipment which has a great ripple effect on technology and industrial demand		
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## Other Available programs

KEIT is also providing R&D support programs for 13 industrial engine initiatives that the Korean government has announced in 2014.

No.	Program title	Introduction
1	Design R&D innovation program	R&D funds for the SMEs which have the innovative technologies and design capabilities in order to strengthen their competitiveness in global market
2	New growth industrial equipment development program	In order to obtain the global competitiveness of future industry, the Korean government supports companies to mass produce new growth engine products from the early stage
3	Aerospace materials development program	R&D Funds for technology development of materials and components in the aerospace sector which could be supplied to global aerospace market
4	Nano-material demand-focused technology development program	Accelerating Nano industries by supporting demand focused technology development of nano-material
5	Quality of life technology development program	Development of technologies, products and services for disabled and elderly which can improve the society
6	Core-medical device commercializing technology development program	Core technology development of the medical devices in order to obtain competitiveness in the global market
7	Industry converge in promotion program	Promoting SMEs to develop new industry convergence products in order to strengthen basis for growth
8	Nano-convergence 2020 program	Further development and commercialization of the fundamental nano technologies, in order to lead and create new market
9	Standardization of industrial technology & certification support program	Programs for strengthening the national industrial competitiveness by leading the international standardization in the products, technologies, test method, big data and qualifying facilities and so on
10	Second cell technology development program	Developing technologies and obtaining certification of medium and large size lithium secondary battery to deal with CO2 reduction and universal environment regulation
11	System semiconductor commercialization program	Foster the development of system semiconductor as the new growth engine and commercialization of the technology in the mobile phone, home electronic appliance and automotive sectors
12	Bio-chemical material industrialization technology development program	Funding program for total periodic R&D support from raw material production to the prototype manufacturing of Bio-chemical material
13	Post-genome technology development program	Funding program for developing customized treatment, diagnosis & prevention technology, and obtaining the international level of genome study resources for the realization of customized medical service
14	Advanced sensors promotion program	Funding program for accelerating the development of advanced sensors in the core industry, in order to strengthen the competitiveness of the next generation new growth engine
15	Medical device production-export complex utilizing program	Funding program for securing certifications for the oversea market in the medical device sector in order to strengthen the competitiveness of local SMEs
16	Medical device development center utilizing	Strengthening the international competitiveness of domestic



	program	medical device technology by developing customized prototype and finding solutions for bottleneck technology while utilizing the infrastructure of the medical device development center (Osong, Daegu)
17	3D printing material technology development program	Reflecting the market demand of materials and technology development prospect of the 3D printing equipment, R&D support programs for developing technologies connecting the materials and equipment together in order to strengthen the global competitiveness of the local company
18	LED lighting system technology development program	Support program to create new industry in the global LED lightings system by Converging 3D LED lights and IT together to reduce the energy and lead the global market.
19	ICT clinical trial support center development program	Secure competitiveness of clinical testing industry by establishing ICT converging clinical testing center and developing related technologies
20	Smart factory enhancement technology development program	Technology development for establishing the smart factory by combining ICT with the existing manufacturing industry in order to intellectualize the equipment and process of manufacturing. Furthermore, send and share the production information among the factories
21	Future Flagship program	Support program for developing a new industry which could potentially create a new ecosystem of the domestic industry in the future
22	Graphene Technology Development program	In order to lead the global market, provide R&D support programs for the commercialization of graphene technology by developing various applications and nurture the graphene industry value chain

## Source

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