

# Introduction to KEIT and R&D Planning

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of Industrial Technology

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# 1. Innovative R&D Partner, KEIT (1/4)

- KEIT is a government funding agency under the Ministry of Trade, Industry and Energy(MOTIE) in South Korea



## Mission

Industrial competitiveness through the technology development

➔ Innovative R&D performance

## Vision

A global leader in R&D supporting to enrich the future of mankind

➔ World best R&D funding agency

## Primary Role

Project  
Planning

Evaluation  
Management

Performance  
Management

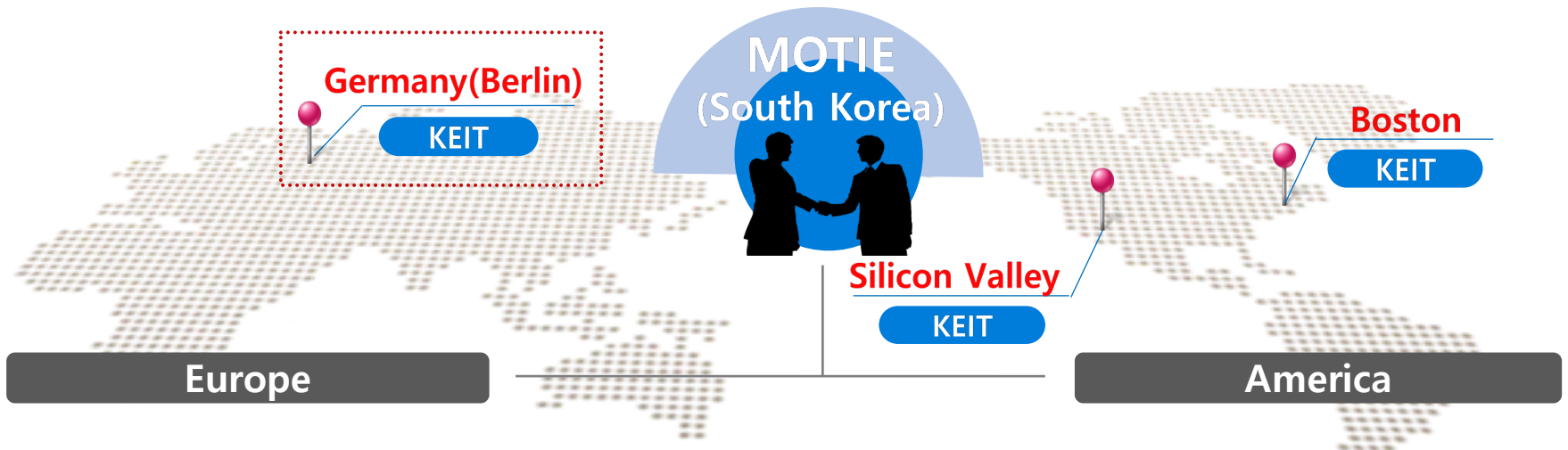
# 1. Innovative R&D Partner, KEIT (2/4)

**International  
R&D  
Collaboration**

## Facilitate Exchange of Information & Experts and Promote R&D

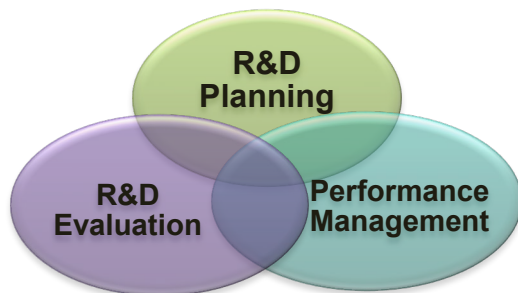
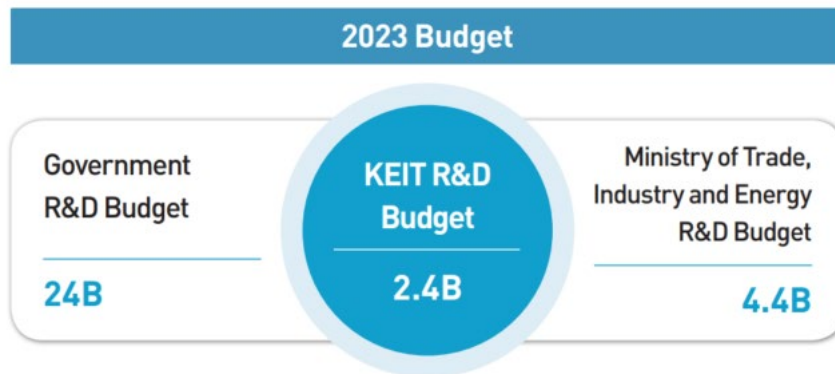
Support international joint R&D and provide recent technology information

- Support Korean companies to enter the local markets
- Gather technological information, industry, and policy on a regular basis
- Provide analysis reports
- Build cooperation platforms to develop international R&D cooperation



## 2. KEIT's Budget and R&D Programs (1/2)

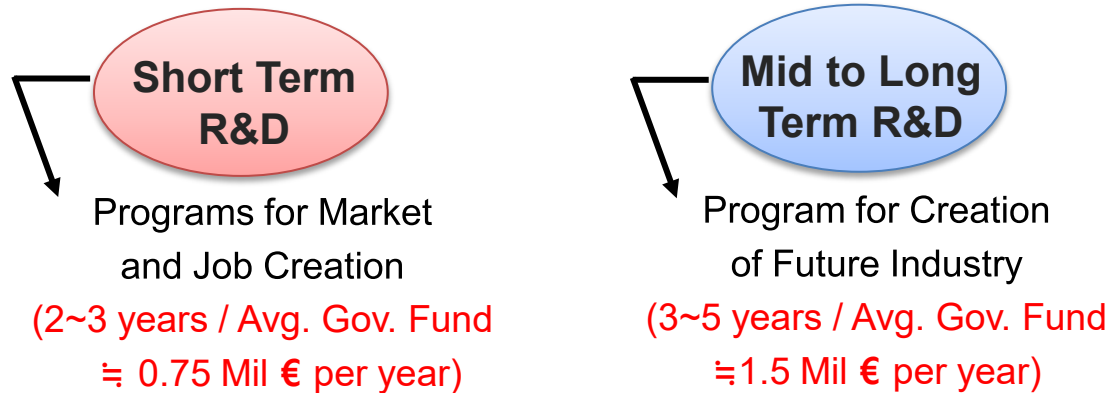
### ■ R&D programs by industry field



Project Sector	Description	2023 Budget (Million USD)	Percentage(%)
Material-components-equipment technology	<ul style="list-style-type: none"> <li>Developing materials-components technology</li> <li>Building technological independence for strategic core materials</li> <li>Developing industrial machinery technology</li> </ul>	1,133	46.8
Transportation technology	<ul style="list-style-type: none"> <li>Developing automotive industry technology</li> <li>Developing shipbuilding, marine and offshore technology</li> <li>Developing and innovating connected automated vehicle technology</li> </ul>	300	12.4
Manufacturing-based technology	<ul style="list-style-type: none"> <li>Developing robot industry technology</li> <li>Developing design industry technology</li> <li>Developing knowledge service technology</li> </ul>	228	9.4
Bio-health technology	<ul style="list-style-type: none"> <li>Developing bio-industrial technology</li> <li>KMDF (Korea Medical Device Development Fund) project</li> <li>KDDF (Korea Drug Development Fund) project</li> </ul>	211	8.7
Smart electronics technology	<ul style="list-style-type: none"> <li>Developing next-generation intelligence semiconductor technology</li> <li>Developing electronic system industrial technology</li> <li>Developing PIM artificial intelligence (AI) semiconductor core technology</li> </ul>	167	6.9
Carbon-neutral technology	<ul style="list-style-type: none"> <li>Developing core technology for carbon neutral industry</li> <li>Developing technology for manufacturing carbon dioxide reactive hardening cement</li> <li>Developing chemical process for carbon-reduction type petroleum-based raw material substitute</li> </ul>	102	4.2
Disaster-safety technology	<ul style="list-style-type: none"> <li>Developing regionally specialized disaster and safety problem solving technology</li> <li>Developing disaster site emergency response technology</li> <li>Developing social complex disaster response technology</li> </ul>	56	2.3
Others	<ul style="list-style-type: none"> <li>Developing and distributing national standard technology</li> <li>ATC+ (Advanced Technology Center plus) program</li> <li>Alchemist project</li> </ul>	225	9.3
<b>Total</b>		<b>2,422</b>	<b>100</b>

## 2. KEIT's Budget and R&D Programs (2/2)

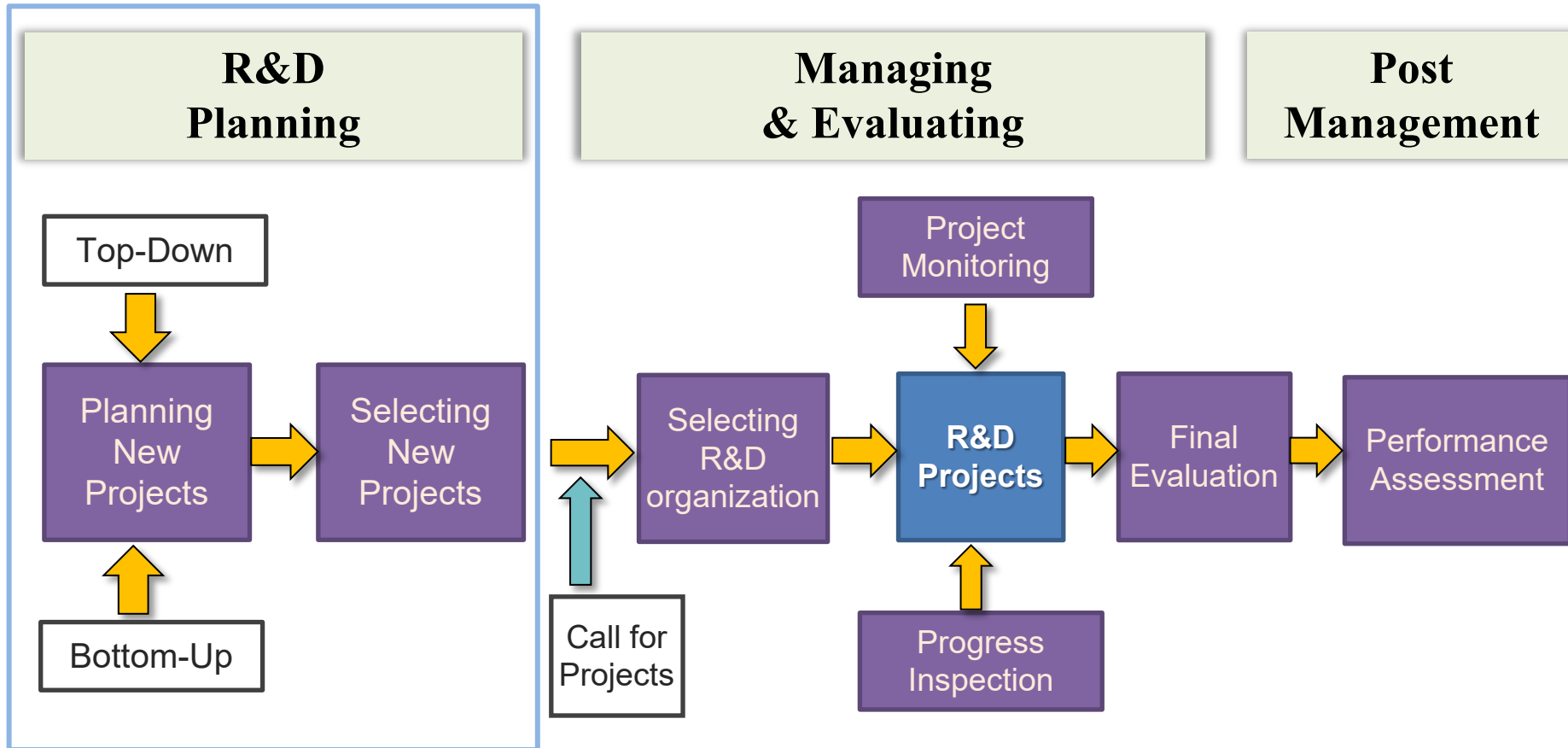
### Industrial Technology R&D Programs



### Industrial Technology R&D System

<b>Mid to Long Term R&amp;D</b>	<b>New Growth Engine Development R&amp;D</b>	<b>Industrial Strategic Technology Development R&amp;D</b>	<b>Public R&amp;D</b>
<b>Short Term R&amp;D</b>	<b>Global Professional Technology Development R&amp;D</b>		<b>Commercialization Linked R&amp;D</b>

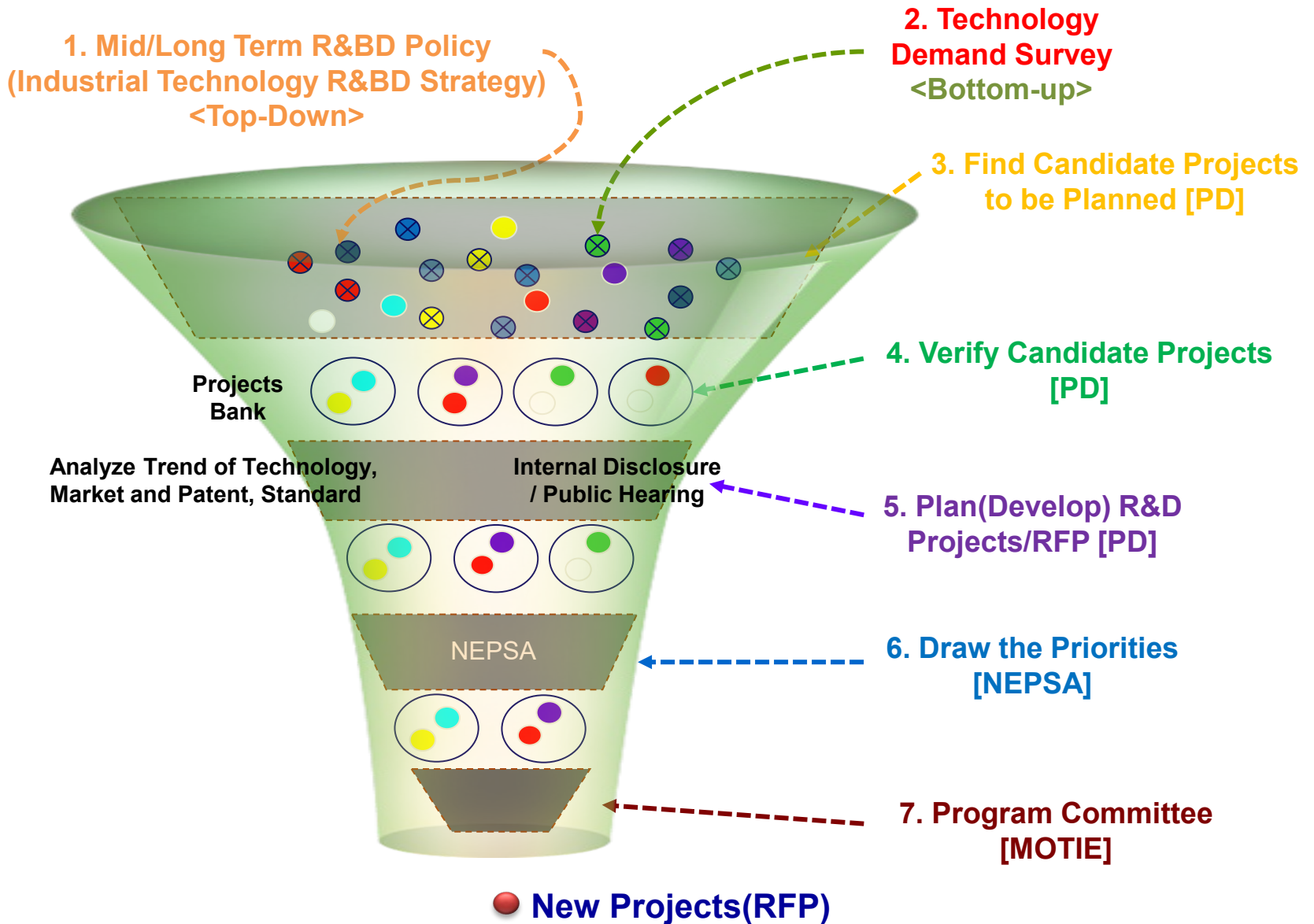
### 3. R&D Process - Planning (1/3)



#### Program Directors(23 PDs)

- PDs : Specialists for managing whole R&D process(Planning–Evaluation–Commercialization) of projects in each technology area (Adv. Machinery, Robot, Display, Biotech, etc.)

### 3. R&D Process - Planning (2/3)





### 3. R&D Process - Planning (3/3)

#### Industrial R&D Strategy

#### Project Planning (RFP)

Identify areas(strategical/politically relevant) to be funded

Narrow down to projects level (Reflecting domestic/overseas tech. demands)

Rigorous verification & Public Hearing

Finalize Projects (RFP, Request For Proposal)

#### Managing & Evaluating

Announce Programs and Planned RFP through homepage, newspaper etc.

Selecting researchers(R&D consortium) and Contracting with KEIT

Conduct Mid-term Evaluation(yearly) and Decide whether to go or stop

Conduct Final Evaluation

#### Post Management

Follow-up & Survey for implementation/Impact of Projects

## 4. R&D Project Planning for 2025

### ■ Global Demand Survey for Technology

- Purpose : To utilize the survey result for Korean R&D programs planning by looking into various technology demands of R&D fields
- Planning Process of R&D Programs led by PDs



(ex) Robot, Display, Knowledge service, Smart Electronics, Medical Device

### ■ Project planning schedule for new project 2025

Establishment of R&BD Strategy	~ April of the Previous Year (~4.2024)
<b>Technology Demand Survey</b>	~ <b>June of the Previous Year (3~6.2024)</b>
R&D Projects Planning	~ Nov. of the Previous Year (6~11.2024)
Verify and Announce New Projects	~ Dec. of the Previous Year (11~12.2024)

# [Ref. 1] Template for Technology Demand Survey

[Attachment 1]

## Technology Demand Survey for Industrial Technology R&D Program(FY 2023)

*(the survey should be preferably about 3 pages)*

**1. Applicant Category.**

<b>PD Survey Category</b>	<b>(PD Category) Related Technology Theme</b> ex. (Carbon-nano) Carbon fiber composite manufacturing and application technology.
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**2. Technology Overview.**

<b>Technology Title</b>				
<b>Applicant's Information</b>		(Name)	(E-mail)	(Office) (Cell)
<b>Proposing Organization's Name and Country</b>		ex. Seoul National University. South Korea(o), (Specify a region & country). Asia( Japan ), Europe( Germany ). America( US ). Others( )		
<b>R&amp;D Type</b>	<b>Fundamental Technology Development</b>	<input type="checkbox"/>	<b>Innovative Product Development</b>	<input type="checkbox"/>

**3. R&D Objectives and Core Technology.**

<b>R&amp;D Objectives</b>	
<b>Core Technology Components</b>	

**4. Need for Support/Grand and Competitiveness factor.**

<b>Need for International Cooperation R&amp;D</b>	<input type="checkbox"/> <input type="checkbox"/> * Specify a need for government support from market, technical perspectives.
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<b>Competitiveness factor</b>	<input type="checkbox"/> <input type="checkbox"/> * Specify the level of technology, maturity, and successful commercialization cases of proposing Organization(applicant).
<b>Industrial R&amp;D Trend and applicable industrial field</b>	<input type="checkbox"/> * focus on Korea and local industry environment and trend.

**5. Expected Effects.**

<input type="checkbox"/> <input type="checkbox"/> * Specify intended technological, industrial, social effects and impacts.
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# Thank you!