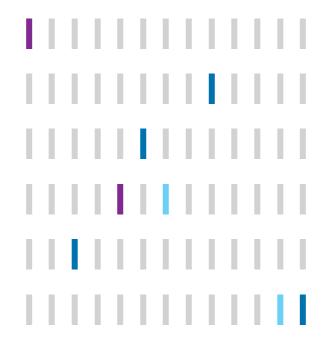


INNOPOLIS KOREA INNOVATION CLUSTER

The Mecca of Innovation, leading global market based on talent and technology









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Open Space for Innovation

INNOPOLIS
KOREA INNOVATION CLUSTER

About INNOPOLIS
History of INNOPOLIS
Overview of INNOPOLIS
Capabilities of INNOPOLIS

INNOPOLIS is an R&D-led innovation cluster that generates a major driving force for national economic growth during the 4th Industrial Revolution.

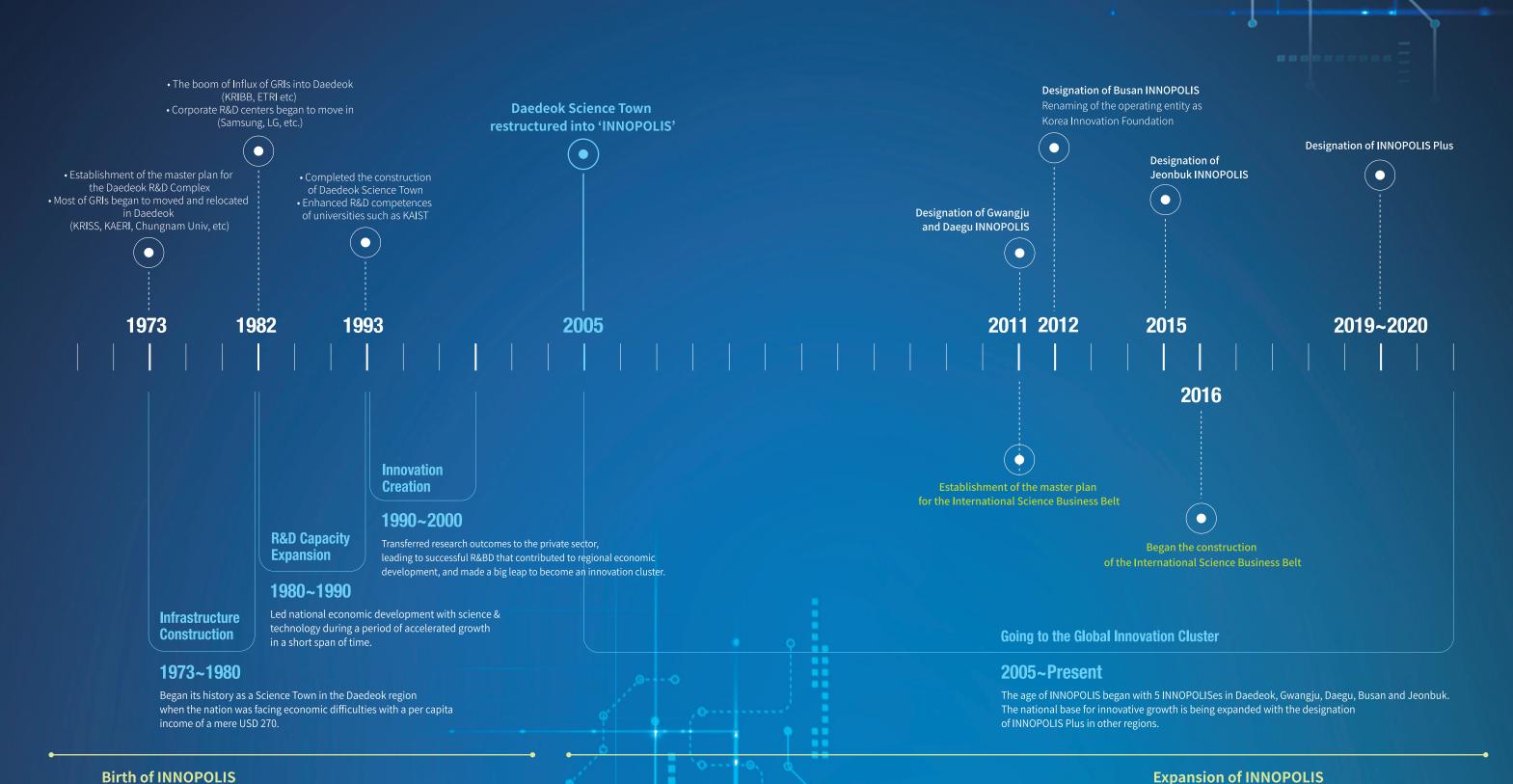
About INNOPOLIS

INNOPOLIS is an R&D-led innovation cluster with a virtuous cycle of R&D-commercialization-reinvestment based on its outstanding infrastructure and collaboration with innovators from the industry-university-institute network, seeking to build a regional R&D-based innovation ecosystem. Universities and government-funded research institutes, such as KAIST and ETRI, and corporate institutes are its residents that form the foundation of the industry-university-institute network.



History of INNOPOLIS

Following Korea's remarkable economic growth in the 1970s, the foundation for INNOPOLIS was laid in the 1980s to integrate the R&D resources scattered across the country. An innovation cluster was later formed which contributed to local economic development, and the cluster was formally reorganized into 'INNOPOLIS' in 2005.



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Overview of INNOPOLIS

Five INNOPOLISes were formed starting with Daedeok INNOPOLIS, known for its outstanding national science and technology infrastructure. In order to relentlessly drive forth national growth through innovation, twelve INNOPOLIS Plus locations have been additionally designated

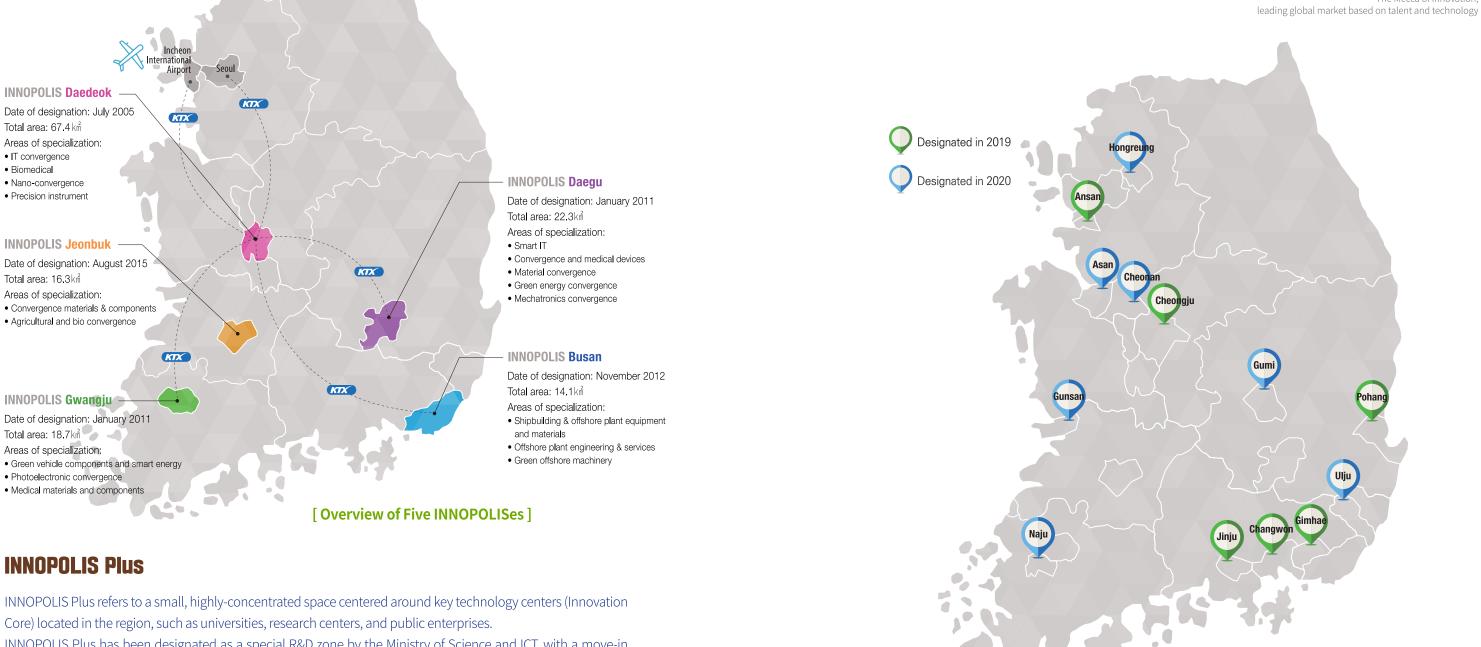


INNOPOLIS MODEL



As the policy on "Clusters of Innovation" grew increasingly critical worldwide, visionaries in Korea also noted the need to reinforce the national innovation competencies, which eventually led to the discussion of designating additional INNOPOLISes. The innovation that was sparked in Daedeok has spread across the country to be fueled in not only the point of origin but also Gwangju, Daegu, Busan, and Jeonbuk.



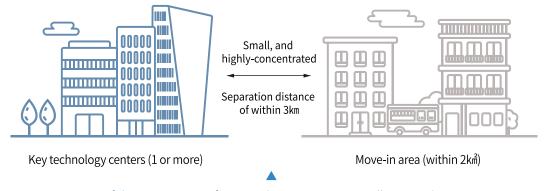


INNOPOLIS Plus

INNOPOLIS Plus refers to a small, highly-concentrated space centered around key technology centers (Innovation Core) located in the region, such as universities, research centers, and public enterprises.

INNOPOLIS Plus has been designated as a special R&D zone by the Ministry of Science and ICT, with a move-in area for the business operations of corporations and other organizations.

*Key technology centers: Educational (universities), research (government-funded research institutes), public (public enterprises), and other (research institutes) entities that possess outstanding R&D and R&BD capabilities



Successful concentration of outstanding institutes & small essential spaces

[INNOPOLIS Plus Overview]

Designated in 2019

Category	Space	Specialized areas
Ansan	1.73km²	ICT components & materials
Gimhae	1.13km²	Biomedical · medical devices
Jinju	$2.17 \mathrm{km}^2$	Aerospace components · materials
Changwon	0.65km²	Intelligent electronics-based machinery convergence
Pohang	2.72km²	New high-tech materials
Cheongju	2.20km²	Smart IT components · systems

Designated in 2020

Category	Space	Specialized areas
Gumi	2.57km²	Smart manufacturing systems
Hongneung	1.36km²	Digital healthcare
Ulju	3.01km²	Futuristic cells
Naju	1.69km²	Intelligent solar light · energy storage
Gunsan	2.70km²	Eco-friendly EV components and materials
Cheonan · Asan	1.32km²	Next-generation automobile components

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Capabilities of INNOPOLIS

INNOPOLIS serves as the central engine for future industries, with its high-tech infrastructure and industry-university-institute network, by encouraging creative talents to start their own businesses and enabling the transfer of superior technology to capable companies.

INNOPOLIS accounts for approximately 40% of the national science and technology resources such as researchers with PhDs.



41,131 persons

105,930 persons nationwide



published in overseas SCI journals

11,927 papers

63,311 papers nationwide



85.671 billion

KRW **189.7** billion nationwide



R&D budget

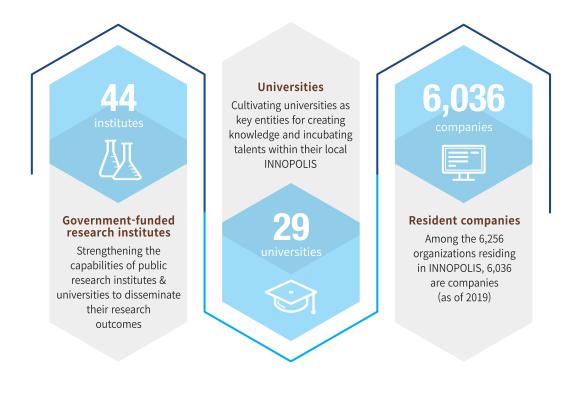
10.657,200 trillion

KRW **69.405,500** trillion nationwide

The INNOPOLIS, Korea's Public Tech-transfer Powerhouse with Intensive R&D Investment and Qualified Manpower

'Continuously developing innovation cluster'

The INNOPOLIS is leading regional economic growth as continoulsy developing innovation cluster composed of 44 government-funded research institutes, 29 universities, 6,036 companies.



With 6,256 resident institutes leading talent incubation and technological development and resident companies recording productivity levels that are 10 times that of companies elsewhere, INNOPOLIS serves as the national base for innovation growth.

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The Mecca of Innovation, leading global market based on talent and technology

Korea Innovation Foundation

Driving the Growth of Regional Innovation



The Korea Innovation Foundation is responsible for facilitating the commercialization of R&D outputs, supporting tech start-ups, developing key infrastructure, and managing the major facilities of the five INNOPOLISes as well as INNOPOLIS Pluses across the country.

History of Korea Innovation Foundation

Established as the manageme	ent office of	Daedeok Science	Town 1979
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Established as a non-profit foundation 1994

Enforcement of the Special Act on the Promotion of INNOPOLIS 2005

Establishment of the INNOPOLIS Support Center

Change of competent government department from Ministry of Science and Technology 2008

→ Ministry of Knowledge Economy

Renamed as the Korea Innovation Foundation 2012

Change of competent government department to Ministry of Science, ICT & Future Planning 2013

Change of competent government department to Ministry of Science and ICT 2017

Designated as a quasi-government organization 2018

 $\ensuremath{\mbox{\%}}\xspace \ensuremath{\mbox{Change}}\xspace \ensuremath{\mbox{of}}\xspace \ensuremath{\mbox{competent}}\xspace \ensuremath{\mbox{government}}\xspace \ensuremath{\mbox{department:}}\xspace \ensuremath{\mbox{due}}\xspace \ensuremath{\mbox{due}}\xspace \ensuremath{\mbox{of}}\xspace \ensuremath{\mbox{change}}\xspace \ensuremath{\mbox{due}}\xspace \ensuremath{\mbox{due}}\xspace \ensuremath{\mbox{due}}\xspace \ensuremath{\mbox{change}}\xspace \ensuremath{\mbox{due}}\xspace \en$

Korea Innovation Foundation

The Korea Innovation Foundation works to develop talents, the key to innovation, and provides support to present research outcomes to the industrial sector in order to create economic value. It has positioned itself as the blue chip of the regional economy by overseeing the innovative growth cycle of INNOPOLIS.



The Daedeok INNOPOLIS Support Center was renamed as the Korea Innovation Foundation following the designation of INNOPOLIS Gwangju and Daegu in 2011.

The Foundation manages and supports each INNOPOLIS in their R&BD efforts and promotes the establishment of new startups.

Fostering the INNOPOLIS Innovation
Ecosystem and promoting
the commercialization of public technology
to contribute to national economic
development through job creation, etc.

[Strategic goals & Strategic tasks]

Create a consumer-centered
R&D environment

Establish the Innovative Growth
Ecosystem

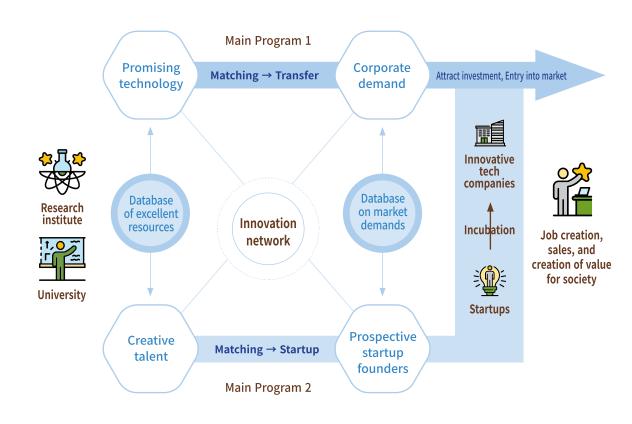
Achieve social values through
mutual cooperation

Establish fair and transparent
management innovation system

The Korea Innovation Foundation seeks to promote commercialization of public technology and regional innovative growth.

It also seeks to contribute to the development of national economy and realization of social values by creating new jobs.

[Structure of INNOPOLIS Development & Management]



INNOPOLIS Research-based Spin-off Company

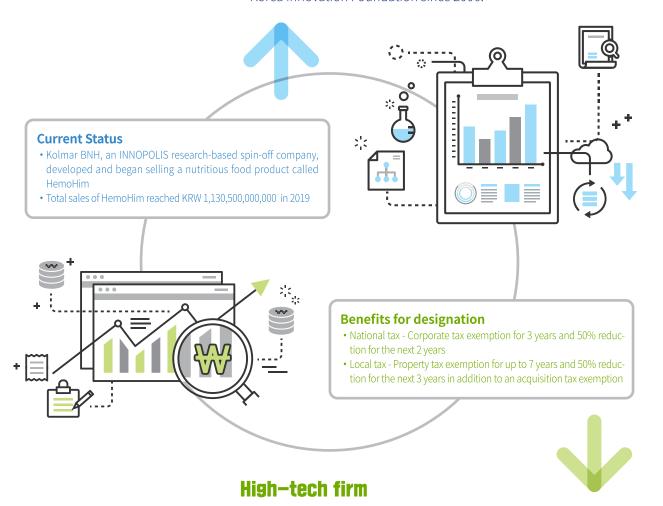
Public research institutes that develop groundbreaking technology are rewarded accordingly. Companies and research institutes cooperate with one another to provide motivation for researchers to develop new technology.

[Research-based Spin-off Company & High-tech Research Company]

INNOPOLIS Research-based Spin-off Company

A firm in which a public research institute, such as a university and a government-funded research institute, can invest their technology to become a shareholder

A firm that provides 'shares' rather than 'capital' in order to acquire technology. This is a key project that has been implemented by the Korea Innovation Foundation since 2006.



A firm that produces and sells products in areas where technological integration and innovation occur at a rapid pace and in astounding magnitudes (biotechnology, etc.)

Support of **Startups**

Platforms are provided to enable citizens to invest small sums in INNOPOLIS companies so that they are fostered by the people.

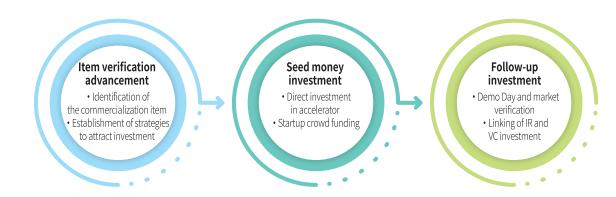


Accelerating & attracting investment

Discover and cultivate accelerators specializing in investment & incubation of local startups
 Create a virtuous cycle of technology financing (investment → growth → return → reinvestment)

- Incubate university technology holdings companies within INNOPOLISes & strengthen follow-up investment supportchnology startup investment activities of regional VC and angel cooperatives
- Support the technology startup investment activities of local VC firms and angel cooperatives
- Raise and manage INNOPOLIS funds amounting to KRW 370.2 billion (since 2006)

[Investment process for each stage]



Provision of Training and Workspace for Prospective Startup Founders

INNOPOLIS Campus Project

Provide entrepreneurship education & startup support for college students with universities in INNOPOLIS

Talents are discovered by training prospective startup founders along with universities.

In addition to offering space and intangible training, prospective entrepreneurs are provided with opportunities to network with mentors.

Space for startup networking

Provide space for (prospective) startup founders preparing to establish a tech startup

Stage 1. Basic startup training

- Discover prospective startup founders
- Provide entrepreneurship education
- Organize an official curriculum for college students (graduate students)

Entrepreneurs with startup potential

Stage 2. Practical startup program

- Discover & verify ideas
- Support business model planning
- Support the setup of startup team (tech + management)Those seeking to establish a startup

Startup seekers

Universities(15 participating universities) + KIF + professional organizations

Startup & follow-up support

- Support for prototype development & patent acquisition
- Analyze tech/market/products
- Marketing, investment support, and introduction to angel investors

Co-working space (5 INNOPOLISes)

Biz Connect Center (Sejong, Cheonan, Cheongju

Industry-universityinstitute network A space for industry-university-institutegovernment cooperation and networking designed to transfer research outcomes to the industrial sector

Open space

An open space where anyone with ideas can come and prepare for a startup launch and share concerns with mentors

Support growth for businesses

Providing counselling and consulting according to user needs, support for commercialization, and a workspace & meeting rooms for individuals and collaborative teams

Tech Biz Center (5 INNOPOLISes)

- One-stop service for R&BD for companies and startups residing in each of the 5 INNOPOLISes
- Discover & resolve difficulties faced by businesses
- Create a pleasant research & residential environment



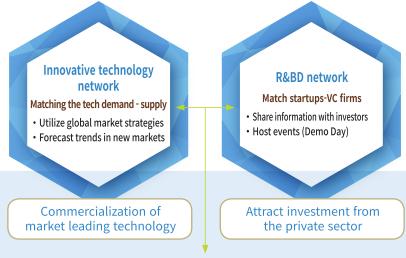
Support for Corporate Growth through Open Innovation

Discover and commercialize technology with networks and programs for each stage of the technology life cycle and contribute to the growth of companies.

Network Creation for Open Innovation

22 networks in operation in 5 INNOPOLISes

(2,097 persons networking annually)



Exchange information

Transfer and commercialize technology

Discover prospective public technologies and transfer them to companies, make investments, and support R&BD

R&BD for technology transfer

BM establishment-type R&BD Investment alignment-type R&BD

• Support commercialization throughout the entire technology life cycle, including verification of technical feasibility, test analysis and assessment, tech packaging, prototype development, domestic/international certifications, mass production technology development, marketing, etc.

Support market development

Support INNOPOLIS companies to promote products, determine market demand, and develop markets through cooperation with relevant organizations

1. Promote products

Examination of distribution channels by professionals

Select outstanding products

Exhibit and promote products from startups

2. Determine market demand

Host trade shows to promote products

Discover potential customers to market the product

Make entry into large distribution markets

3. Support marketing

Support entry into the public procurement market

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International Science Business Belt

The International Science Business Belt, a global science-based cluster that encompasses base and functional districts, is a strategic base where scientists can concentrate on research and conceive new ideas.

Base district As the main scientific research network, the International Science Business Belt pursues technology development and commercialization.



IBS(Institute for Basic Science)

- IBS performs basic research through the implementation of RAON
- "Creation of a favorable environment for research & business" centering on industrial and residential areas
- Key research institute of the Science Belt that conducts world-class research on basic science



RAON

- The world's first equipment capable of producing 2 types of rare isotopes (ISOL & IF)
- · High-tech basic science research, including cancer treatments discovery of new substances new and renewable energy

Functional district Conducts applied and development research & R&BD in connection with base districts



Sejong SB Plaza

• A facility to cultivate the Sejong functional district into a leading district for the dissemination of basic research outcomes from the base districts



Cheongju SB Plaza

• A key facility in the Cheongju functional district that supports universities and companies to commercialize basic research outcomes from the Science Belt



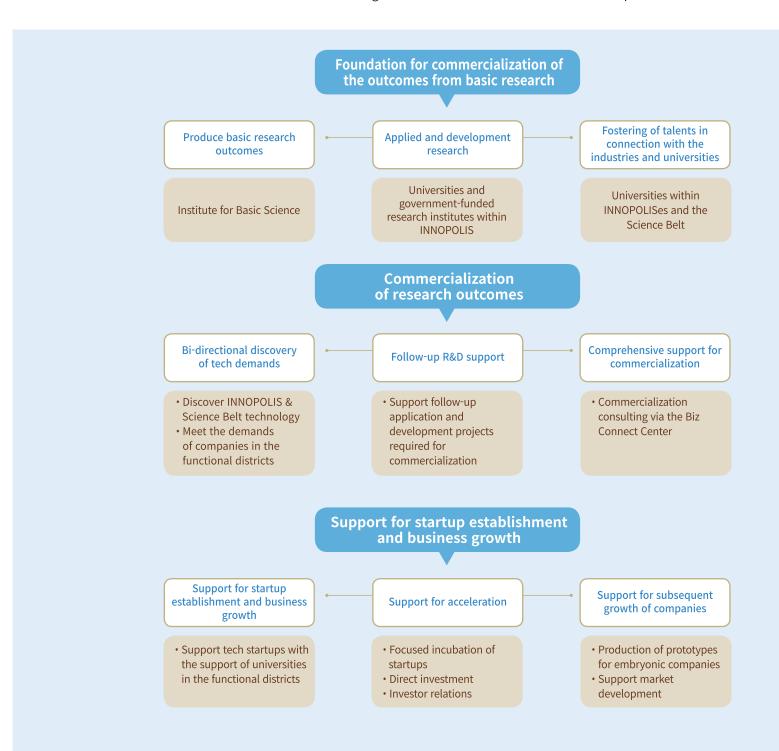
Cheonan SB Plaza

• A key commercialization facility in Cheonan that transfers basic research outcomes from the Science Belt to companies through applied and development research

The city, composed of base and functional districts, is a strategic base where scientists can concentrate on research and conceive new ideas.

Functional district support project

Creating an ecosystem based on a virtuous cycle of commercialization of the outcomes from basic research through a functional district commercialization platform



INNOPOLIS KOREA INNOVATION CLUSTER 25 24

Achievements of **Korea Innovation Foundation**

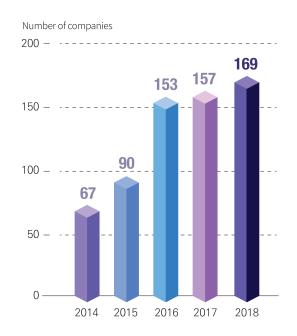
INNOPOLIS companies are connected with a vast number of 'innovators' to drive forth their growth. Achievements of INNOPOLIS companies through mutual cooperation will be the key driving force behind economic growth during the 4th Industrial Revolution.

Establishment of startups

(Number of companies)

[Cultivation of university startups]

Cultivation of 'innovative startup founders' through systematic and practical startup process training for young, prospective startup founders.

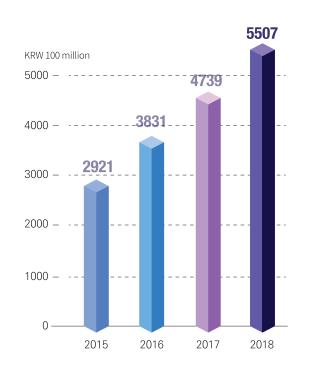


Creation of profits

[Fostering INNOPOLOIS Research-based Spin-off Companies]

The Korea Innovation Foundation drives regional economic development and national innovation growth by providing support throughout the entire business life cycle, with INNOPOLIS research-based spin-off companies achieving a survival rate of 93.3% and annual revenue of KRW 550.7 billion.

- * Total revenue of INNOPOLIS companies, including INNOPOLIS research-bases spin-off companies, amounts to a total of KRW 47 trillion.
- * Achieved USD 6.06 million in exports by entering into the global market and attracting overseas investment (as of 2018)

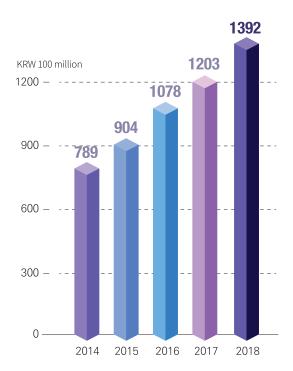


Revenue of companies that participated in INNOPOLIS research projects

(in KRW 100 million)

[Company growth]

The Korea Innovation Foundation makes tangible achievements that are actually felt by participating companies by supporting various commercialization projects.

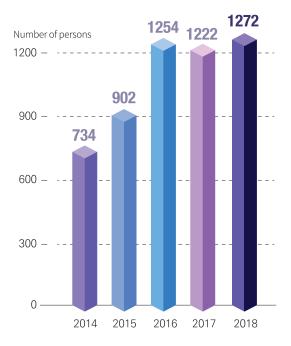


New hires by companies participating in INNOPOLIS projects

(Number of persons)

[Job creation]

Making the leap to create jobs in the science and technology sector by facilitating growth through innovation in R&D.



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Support for INNOPOLIS Companies to Make Entry into the Global Market

Sharing achievements and know-how with the international community and working to advance science and technology worldwide.

Entry into the global market

Strengthening the overseas cooperation network and expanding INNOPOLIS companies' entry into the global market.

Global marketing Platform model

Providing tailored support for INNOPOLIS companies wishing to enter the global markets through global accelerators specializing in key overseas markets, such as the US, China, Southeast Asia, etc.

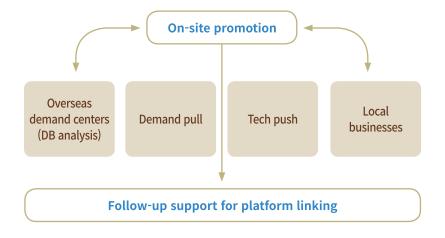
Support projects

Platform support project

- Discover and meet overseas R&BD demands
- Discover INNOPOLIS companies, and diagnose and analyze their global competitiveness
- Develop BM & provide consulting
- Provide business opportunities & overseas R&BD solutions

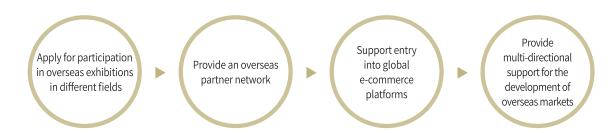
Global accelerating

- IR support, investor discovery/matching, global Demo Day
- Liaise between companies and legal, accounting, patent, marketing experts
- Assist companies in moving into overseas office spaces & co-working spaces



Support overseas market development

Support participation in overseas exhibitions



The Korea Innovation Foundation implements reinforced overseas marketing strategies tailored to each INNOPOLIS and industry for the resident companies, etc. to go global. One such strategy is to have the INNOPOLIS research-based spin-off companies among others to promote their products and technologies at the joint booth set up at international trade shows and others. By doing so, the outstanding technological prowess of Korea is demonstrated on the world stage.

[Application for participation in overseas exhibitions]

Category	Program	Industry	Region	Date (2019)
1	Arab Health	Medical equipment	Dubai	01/27~01/31
2	MWC	Mobile telecom	Barcelona	02/26~03/01
3	ASPA Malaysia	Machinery parts	Kuala Lumpur	07/17~07/19
4	IFA Global Markets	Consumer electronics	Berlin	09/08~09/11
5	Vitafoods Asia	Bio	Singapore	09/25~09/26
6	SLUSH	All areas	Helsinki	11/18~11/22
7	Power Gen	Energy	New Orleans	11/19~11/21

[Online exhibition hall for INNOPOLIS companies]

Information on products made by INNOPOLIS companies are on available online in the form of videos, e-brochures and others through online exhibition halls created for overseas exhibitions for each exhibition and industry sector.

Support is provided for INNOPOLIS companies to boost their exports through reinforced B2B efforts and permanent operation of exhibition halls in the new era of non-contact communication.

| How to access INNOPOLIS online exhibitions |

Korea Innovation Foundation English homepage https://www.innopolis.or.kr/eng ▶ Online booth tab

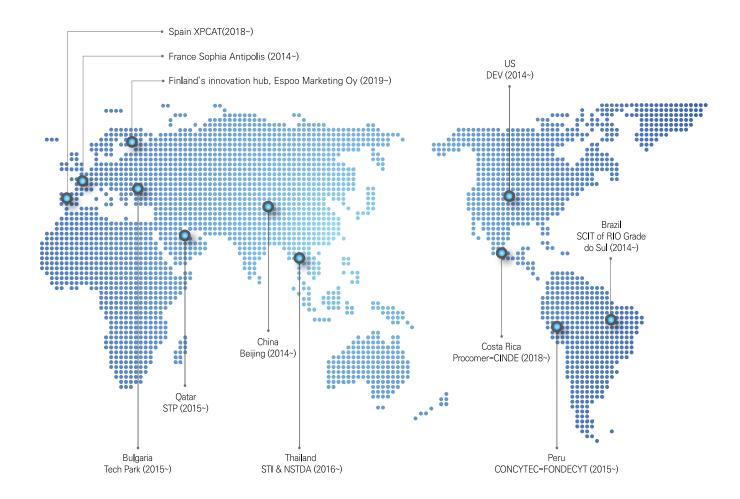
Global Cooperation

Korea Innovation Foundation is a full member of IASP and ASPA. KIF promotes global R&BD and actively supports INNOPOLIS companies' entry into global markets by strengthening its cooperative network with overseas science towns and relevant organizations.

Strengthening global cooperation

| Supports INNOPOLIS companies to enter into markets based on their respective needs by utilizing its network of partners.

Global Network



[Overview of MOUs]

We are seeking to elevate the international status of Korea to a world-class level and create global social value by creating science parks with characteristics unique to those of Korea and transferring our operational know-how.

387 persons from 70 countries (as of 2019) worldwide have completed the STP training course since 2008.

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Key objectives

- Build Korean-style science parks & transferring operational know-how
- Provide customized solutions for countries currently executing their own STP development plan
- Build a network of professionals
- Provide support to STP action officers and promote economic growth

Participants

• STP-related government agencies & science park personnel from developing

How participants are selected

• Selected among those nominated by embassies in Korea and foreign diplomatic offices (relevant organizations) and applicants

Place of training

Korea Innovation Foundation

Curriculum

Theoretical lectures

- STP creation & development policies
- STP operations & support activities
- History & structure of INNOPOLIS Daedeok
- Relationship between Korea's economic development and scientific and technological development, etc.

Case studies

• STP master plan design & STP operations/management ideas mentoring

Simulation workshop

• Simulation exercises & assessment of an actual master plan on the finances, infrastructure, human resources, etc. for STP implementation

Onsite studies & cultural experiences

Onsite STP operations studies at government research institutes, startup incuba-

tion centers, etc. within INNOPOLIS

Experience of Korean culture

 $\ensuremath{\ensuremath{\%}}$ Refer to the 'STP' tab on KIF's English website for details

※ Email: stp@innopolis.or.kr

The world is currently faced with unforeseen issues due to the COVID-19 pandemic.
The Korea Innovation Foundation has hosted an online workshop with the theme of
'COVID-19 and Sustainable Innovation Community' in the midst of the crisis and
seeks to take another step forward to implement a system for international collaboration and
cooperation with 276 participants from 40 countries worldwide.



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