

## PART II

# Chapter 14

## **Korea**

*This case study covers Korea's Innovative Cluster Cities programme. It is an important initiative for the country and is linked with three policy streams. The programme seeks to assist a group of large industrial complexes in selected regional centres convert from manufacturing centres to regional innovation systems.*

## 1. Programme(s) and their goals

Korea's Innovative Cluster Cities policy is part of the country's Plan for National Balanced Development. It seeks to transform seven key regional industrial complexes from manufacturing centres into more innovation-oriented regional hubs. The purpose of the innovative cluster policy is to strengthen the industrial complexes, in the first stage seven, which are mainly focused on manufacturing by systematic integration of R&D intensity (infrastructure) and development of networking among academia, industry and research institutions (management tool). It is expected that this pilot experience will be transferred later to several other industrial complexes and expanded to all National Industrial Complexes. The cluster cities selected specialise in fields consistent with national priority industries. The ultimate goal of this policy is to raise Korea's annual per capita income to USD 35 000.

Korea has a number of other policies that support regional specialisation through an infrastructure of various large and small industrial complexes, technology parks and business incubators. A separate track of research specialisation includes a number of different research centres known as Centres of Excellence.

## 2. Context: Situating the programme in the governance framework and policy strategy(ies)

### ***Features of the economy that have an important impact on cluster development generally***

Korea has experienced strong annual growth rates over 5% for several years and foreign direct investment is on the rise. While the Korean industry conglomerates (chaebol) continue to dominate South Korea's economy, their importance has been reduced with several of the largest and least sound having been dismantled. SME sector performance has deteriorated recently (OECD, 2005a). Much of industrial activity is organised around industrial complexes. According to the country's industrial complex agency (KICOX), the 30 manufacturing oriented national industrial complexes under their management account for 30% of production and 43% of exports.

The country has a high level of R&D investment, although most R&D is concentrated in a few regions and is not performing to potential. Korea does not generate as much codified knowledge (patents and publications) as models

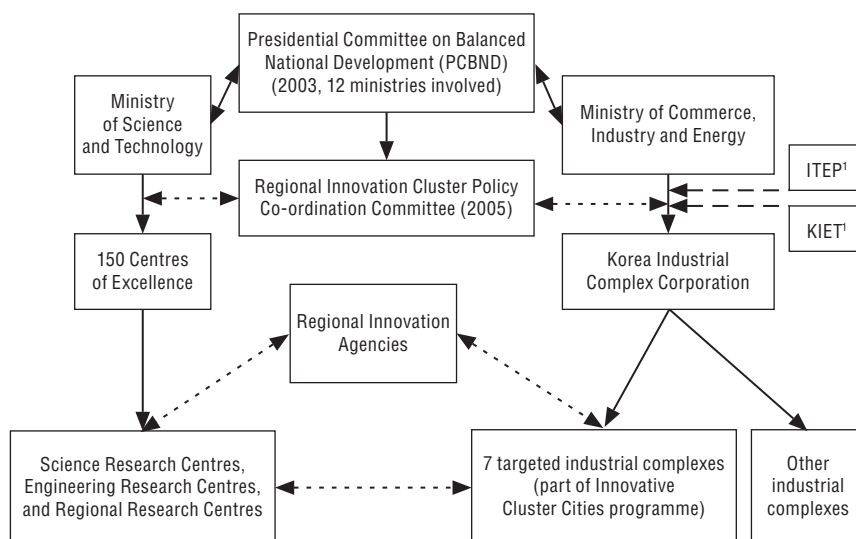
would predict given its level of R&D intensity. Sources of this under-performance include the need to take into greater account the business sector in the design of linkages with research as well as university incentives for R&D (OECD, 2005a). Per the EU Trend Charts, the science-industry links are considered very weak in Korea despite these strong technology and innovation investments (EC, 2005).

### **Historical development/evolution – where the programme came from in the context of other policies**

Korea has a long history of spatial/industrial planning. The industrial complexes that serve as the base for the innovative cities have been in place for decades. By 2003, Korea housed 525 industrial complexes, of both small and large scale. Often these complexes focus on production with R&D out of corporate headquarters in Seoul. Korea had also launched in 2001 a plan to support four industrial clusters in nine cities outside of the Seoul area. The most notable include Daedok Science Town, Osong Health and Medical Science Complex, Songdo Intelligent City and Digital Media City.

### **Description of programme's place in governance framework**

Figure 14.1. **Organisational chart: Korea**



1. ITEP: Korean Institute of Industrial Technology Evaluation and Planning.
2. KIET: Korea Institute for Industrial Economics and Trade.

The Korea Industrial Complex Corporation (KICOX) has been designated the supervising agency of the Innovative Cluster Cities programme by the Ministry of Commerce, Industry and Energy (MOCIE) that implements the

programme. KICOX manages 29 large industrial complexes throughout the country. The kinds of services it provides include: development of an integrated information network, management and operation of the complexes, services (including loans to firms for specific programs), and support for factory development. Implementation and policy achievements are reviewed by other professional organisations such as the Korea Institute of Industrial Technology Evaluation and Planning (ITEP) and the Korea Institute for Industrial Economics and Technology (KIET). The seven targeted industrial complexes are building a stronger industry, research, and university collaboration network by linking local authorities and signing memoranda of understanding with regional research centres.

### ***Institutional frameworks and regional development policy***

Korea is a centralised unitary country where top-down relations tend to prevail and local governments tend to rely on direction from the central government. Decentralisation is still relatively new to Korea and is being implemented in phases. Regions are being given a more active role in their economic development. For example, a number of Regional Innovation Agencies have been created to complement efforts of regional development. Large municipalities like Seoul and Busan have also developed a number of initiatives to promote local and regional economic development.\*

The current President's policy platform has made what is termed balanced national development a top priority to combat the concentration of activity in the capital region of Seoul. This concentration has been a concern of regional policy for years, which seeks to strengthen regional growth poles and revitalise depressed areas. It was recognised that merely restricting entry to the Seoul area was not sufficient to promote economic development in other regions. This policy has been most recently codified in the Five-year Plan for Balanced National Development. The Presidential Committee on Balanced National Development (PCBND) includes representatives from 12 ministries to oversee the Plan's implementation. Regional innovation systems are an explicit part of the Plan. It focuses mainly on regional innovation, delocalising public offers to other regions (including a massive new administrative capital away from Seoul), and quality improvements to metropolitan areas. The timeframe of the Plan and its strategies is illustrated in Table 14.1.

\* For more information on this topic, see several territorial reviews on Korea, Seoul and Busan by the OECD as sourced in the bibliography.

**Table 14.1. Planning phases for Korea's Plan for Balanced National Development**

Plan Period	Objective	Enforcement Strategy
1st Plan 2004-08	Create and expand innovation	<ul style="list-style-type: none"> <li>● Set up regional innovation system</li> <li>● Promote an innovation cluster</li> <li>● Transfer public organisations to local areas</li> </ul>
2nd Plan 2009-13	Establishment of innovation	<ul style="list-style-type: none"> <li>● Promote the next generation growth engine industry as a key sector</li> <li>● Move into the world class innovative cluster</li> <li>● Construct a new administrative capital complex</li> </ul>
3rd Plan 2014-18	Advanced innovation	<ul style="list-style-type: none"> <li>● Enhance the regional innovation system</li> <li>● Compete with world class clusters</li> <li>● Maximise the national growth potential</li> </ul>

Source: [www.pcbnd.go.kr](http://www.pcbnd.go.kr).

### **Role of programme in the context of science and technology (or innovation) policy**

Korea is in its third generation of the national innovation system (Hong, 2005). The first phases in the 1960s and 1970s used a linear approach. In the 1980s and 1990s, the policy supported large firm groups and established links to promote industry, research and university collaboration. The third generation seeks to promote coherence among different policies as well as national and regional economic integration.

Korea has made substantial investments in STP/innovation policy. The country's strategy is codified in the National S&T Promotion and Development Plan, the latest being for the period 2003-07. It includes a goal of doubling R&D investment from 2001 to 2007. The Ministry of Science and Technology, MOCIE, and the Ministry of Information and Communications finance most of the country's R&D. Through the university and research system there are approximately 150 Centres of Excellence for basic research. The Science Research Centres and the Engineering Research Centres were created in 1989 to focus on innovation and the Regional Research Centres in 1995 to promote collaboration between universities and firms on a regional level. For decades, Korea has also promoted private R&D investment through fiscal incentives and other forms of financial support. To encourage greater foreign investment, foreign R&D centres are given opportunities equal to those of domestic R&D centres.

The Innovative Cluster Cities programme is consistent with this new approach but with a strong regional dimension. The S&T Plan does include a goal of better organising and thus reinforcing regional innovation capacity. Given the concentration of R&D in the capital Seoul and one other region Daejeon, the national government will increase spending considerably elsewhere. It will also develop for each region an annual roadmap for science and technology through at least 2012 so as to strengthen research institutes in the areas of regional strength. Korea has also created a special R&D Zone in Daedeok.

### Role of programme in the context of industrial policy

Korean industrial policy has undergone several waves since the 1960s. In the first wave, the goal was to increase exports in light manufacturing and strengthen infrastructure industries to reduce imports. This goal was supported by the construction of several industrial complexes. In the 1970s, the policy shifted from a focus on light industries to a focus on heavy and chemical industries, requiring the development of additional industrial complexes. In the 1980s, the national policy sought to better distribute economic activity across the country to balance development, by adding mid-scale industrial complexes to other regions and large-scale complexes in regions where land was still available. In the 1990s, the national government recognised the importance of the knowledge economy and began to promote the designation of “advanced science industrial complexes” (Park and Hong, 2005).

Korea has developed its 2010 Industrial Vision to be one of the top four world industrial superpowers, an effort spearheaded by the Ministry of Commerce, Industry and Energy. To achieve that vision, Korea has designated a number of strategic industries with goals in terms of international market share. The Innovative Cluster Cities specialise in some of these targeted national industries.

Table 14.2. **Targeted areas in Korea’s 2010 Industrial Vision**

Basic Industries	Future Strategic Industries	Service Industries
Shipbuilding	Digital electronic industry	Business services
Semiconductors	Electronic medical equipment	e-business
Automobile	Bio industry	
Textiles	Environment industry	
Petrochemicals	Aviation industry	
Steel		
Machinery		
Parts and materials		

Source: [www.mocie.go.kr](http://www.mocie.go.kr).

All local governments must also now identify their strategic industries. The first round of this process took place 2000-03, and a second round in 2004-08. These plans are used to solicit funds from the national government. Another industrial policy used in Korea is that of free economic zones with major tax breaks for large foreign investors to attract FDI. Three opened in 2003: Incheon, Gwangyang and Busan-Jinhae. Finally, there are a number of services for enterprise support, but one of the major gaps has been the lack of services to encourage inter-firm linkages (Jeong and Kim, 2002).

### **Cluster studies conducted**

MOCIE commissioned a study by the KIET on the competitiveness of 38 industrial complexes nationwide from December 2003 to April 2004. From March to May 2004, MOCIE evaluated regional competitiveness and identified innovation tasks by conducting on-site inspections and surveys with KICOX. Based on these studies, MOCIE reported results to the President on 3 June 2004, who confirmed the decision to transform industrial complexes from manufacturing centres into more innovation-oriented regional hubs. Experts from industry, research, and university were convened to form a task force and advisory body (consisting of an average of 30 experts per complex) and design detailed strategies for each complex.

In order to complete the innovative cluster in industrial complexes, Sub-Clusters (each with specialized businesses) have been made and they are promoting the particular strategy. Sub-Clusters, which are in seven targeted industrial complexes, are adjusted to Korea's industrial environment. In particular, plans for mini-clusters were designed by benchmarking models of the University of California San Diego's "CONNECT" in the United States and TAMA in Japan. Mini-clusters are small-scale consultative bodies consisting of industry, research, and university experts in each complex, formed to strengthen mutual networking among clusters.

Thanks to such preliminary processes, the Basic Framework for the Innovative Cluster City programme was established 17 January 2005, an ambitious initiative seeking to revamp the simple production-based industrial complexes. The plan covered detailed strategies such as promoting networking (among industry, research and university), strengthening R&D capabilities, securing capable human resources, improving the working environment, and fostering co-operation with international clusters. Seoul has conducted its own cluster mapping study to identify clusters using a location quotient analysis.

### **3. Details on programme budget and timeframe**

The Innovative Cluster City programme for the seven targeted complexes was initiated in April 2005. The programme will be carried out over a four-year period, from 2005 to 2008. The 2005 budget amounted to KRW 29.7 billion, increasing to KRW 46.2 billion (a 55.8% increase) in 2006 (see Table 14.3).

The 2005 budget was used in joint projects (KRW 1.7 billion) and support for the seven complexes in the amount of KRW 4 billion each (see Table 14.4). The joint projects included e-cluster network establishment, international exchange and co-operation, project evaluation and management. Support for the complexes included the operation of task force and consultative bodies (of industry, research and university), technology projects and R&D infrastructure establishment.

Table 14.3. **Multi-year budget for Korea's Innovative Cluster Cities**  
KRW 0.1 billion

	2005	2006	2007	2008
Total estimated need	200	1 771	1 880	1 720
Allotted budget	297	462.5	520 (estimated amount)	–

Source: Government of Korea, Ministry of Commerce, Industry and Energy.

Table 14.4. **Budget breakout 2005, Korea's Innovative Cluster Cities**

Main projects	Total (KRW million)
Joint projects	
1. Cluster Integration Network	500
2. International exchange	600
3. Project evaluation and management	600
Subtotal	1 700
Programmes per unit	
Task Force Management	
1. Labour costs	1 946
2. Operational costs	1 650
Subtotal	3 596
Expanding R&D capabilities	
1. Operating consultative body of industry, research, and university,	1 720
2. Support for Technology Projects of the industry, research, and university	20 286
3. Building R&D infrastructure	2 400
Subtotal	24 406
<b>Total</b>	<b>29 702</b>

Source: Government of Korea, Ministry of Commerce, Industry and Energy.

With the exception of corporate matching funds for the category “technology projects of the industry, research, and university”, the project was almost entirely financed by the government. For example, business consulting costs for the technology projects were entirely covered by the government, whereas co-R&D activities received government support only up to 75%.

### **Spending on related programmes**

For reference, the budget for the Daeduk Science Town project, carried out by the Ministry of Science and Technology (MOST), was KRW 10 billion in 2005 and KRW 25 billion in 2006. Korea plans to increase the public R&D budget in the provincial cities from 27% in 2003 to 40% of R&D spending in 2007. The National Balanced Development Plan budget is the equivalent of approximately USD 100 billion over a five-year period.



## 4. Targets and scope

### **Targets and selection criteria**

The seven Candidate sites for the Innovative Cluster City programme were limited to complexes with over 100 companies and two regional complexes that focused on strategic industries in the region. The seven complexes were chosen in terms of competitiveness, influence on the regional economy, concentration on a main industry, policy consistency and investment expectancy.

Details for selection criteria are:

1. Competitiveness: industry development level and innovation capacity.
2. Influence on the regional economy: contribution to the regional economy.
3. Concentration on main industry.
4. Consistency with policy: consistency with the policies of the central and regional governments.
5. Investment expectancy: well-equipped infrastructure for cluster and leading company.

The overall cluster focus by city is illustrated in Table 14.5. Within these seven industrial complexes, over 40 mini-clusters were identified based on industrial categories and related technologies.

Table 14.5. **Cluster focus by city: Korea**

City	Cluster focus
Gumi	Digital electronics industrial cluster
Changwon	Advanced appliance cluster (strong presence of heavy industry already)
Ulsan	Automotive components cluster
Banwol Sihwa	Advanced component material cluster
Gwangju	Photonics industry cluster
Gunsan	Automobile appliances components cluster
Wonju	Advanced medical industry cluster

Source: <http://english.e-cluster.net/>.

### **Cluster selection process**

The clusters were selected by the national government based on the criteria described above. Cluster participants have been located in proximity but may or may not have worked together.

### **Number of cluster participants**

As of 21 April 2006, the number of participants in the Innovative Cluster City programme is 2 632, which includes 1 859 companies, 606 universities and research centres, and 167 supporting institutions. Table 14.6 shows the number of participant per complex.

Table 14.6. **Innovative Cluster City participants**

Region	Company		University		Research centre		Supporting institutions		Total
	Employee	Ratio (%)	Employee	Ratio (%)	Employee	Ratio (%)	Employee	Ratio (%)	
Changwon	391	78	57	11	33	7	23	5	504
Gumi	405	69	134	23	13	2	35	6	587
Ulsan	157	81	14	7	16	8	6	3	193
Banwol Sihwa	582	74	101	13	44	6	59	8	786
Gwangju	154	80	18	9	13	7	7	4	192
Gunsan	52	76	9	13	1	1	6	9	68
Wonju	118	39	152	50	1	0	31	10	302
<b>Total</b>	<b>1 859</b>	<b>71</b>	<b>485</b>	<b>18</b>	<b>121</b>	<b>5</b>	<b>167</b>	<b>6</b>	<b>2 632</b>

Source: Government of Korea, Ministry of Commerce, Industry and Energy.

### **Cluster institutional status, governance and linkages**

There is a task force for each Innovative Cluster City complex, composed of 14 to 44 people (194 people in total). The task forces consist of employees from KICOX and local authorities as well as new recruits. They are divided into sub-units: Head of Task Force, Planning and Evaluation Team, Industry and University Co-operation Team, Technology Support Team, Management Team, and Enterprise Support Team. They are linked via consultative channels of MOCIE, the Presidential Committee on Balanced National Development, and the Regional Innovation Cluster Policy Co-ordination Committee. They are also linked via business support organisations and they discuss and modulate business support policies in each of the seven targeted industrial complexes.

### **Administrative boundaries**

The selection criteria and public support in general are based on pre-existing administrative boundaries given the location of industrial complexes but do not always take into account functional economic regions. The industrial clusters are also building up strong relationships with global cluster organisations abroad, such as SEEDA in England and TAMA in Japan.

## **5. Instruments**

Korea's policies to support industrial complexes tend to use instruments such as firm subsidies and investment in hard infrastructure. There has also been increasing emphasis on bringing research, industry and universities together to better capitalise on R&D investments. In general, initiatives in Korea are public instead of private-led. Please refer to the Annex 14.A1 for more details on the specific Innovative Cluster Cities plans.

- *Identification and benchmarking*: Korea benchmarks the performance of its national industrial clusters on an international basis, and these Cluster Cities are an important component of national performance.

- *Engagement of actors*: Industrial complexes are seeking to improve linkages among business and universities as well as with regional entities. A couple of cluster plans specify collaborative initiatives between universities and firms. The final objective of the programme is to formulate and develop mechanisms for interchange and co-operation among small and medium-sized enterprises in an industrial complex.
- *Government service delivery*: The system of organising industrial production in spatially concentrated zones, such as industrial complexes, serves to facilitate government service delivery, notably infrastructure.
- *Skilled HR*: Workforce development and education are part of Korea's general policies. For example, there is a project to strengthen innovation resources for universities located in the regions (the NURI project) that is supported by Ministry of Education. Several of the specific cluster plans include training initiatives.
- *Entrepreneurship and innovation*: The development of regional innovation systems is the priority of this policy. The cluster plans place the greatest accent on developing incubators and other services to support entrepreneurship as well as the development of technical expertise centres within the clusters.
- *Resource allocation and investment (including branding)*: The promotion of these innovative cluster cities to foreign investment is an expected component of the overall initiative to support balanced regional development.

## 6. Programme evaluation and monitoring

### ***Nature of evaluation mechanism and definition of success***

Programme evaluation and monitoring activities are conducted by two independent expert groups: ITEP and KIET. ITEP evaluates the management and implementation of the program while KIET assesses the accomplishments of the programme.

### ***Results of evaluations, if any***

The first round of evaluations was carried out in April 2006. However, it was at a stage too early to discuss production, exports, and other economic results. The programme is nevertheless encouraging competition among the different complexes by allocating budgets according to the primary evaluation results. During the second round of evaluations in 2007, the evaluation system and criteria will be developed and adjusted, establishing the "Korean cluster evaluation system".

One assessment of Korea's industrial parks (techno parks) noted a few areas for improvement that are relevant for the current set of initiatives. First, they recommend a comprehensive national master plan to integrate all

innovation cluster related policies. Second, they suggest that policies should strengthen “soft” support and secondary functions (value chain) including specialised services such as information, consulting and financing. A third recommendation concerns the need to bring in business-oriented leadership in these arrangements. A final conclusion is to help techno parks be more outward focused, instead of only inward, in terms of resources (Hong *et al.*, 2003).

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## ANNEX 14.A1

Table 14.A1.1. **Projects for Innovative Cluster Cities**

City	Cluster Focus	Innovation task/Cluster promotion
Gumi	Digital Electronics	<ul style="list-style-type: none"> <li>● Spread technical human resource training program: model – Youngjin College (Compose and manage educational- industrial co-operation system with enterprises within the complex and nearby universities; Induce early spreading of the model Gyungbuk University and Youngjin College)</li> <li>● Create accumulated area for digital electronics and information technology: Regional promotion business (Support business incubation and construct co-research equipments)</li> <li>● Recommending establishment of Gumi Industry Support Examination Analysis Evaluation Center</li> <li>● Promoting establishment of Electronics Components Materials Innovation Center</li> <li>● Promoting construction of Geumhyeong Innovation Technology Support Center</li> <li>● Supporting bottleneck technology of the small and medium enterprises</li> <li>● Promoting construction of Gumi General Support Center</li> <li>● Managing IT field forums with technical advice from University professors</li> <li>● Publicizing human resource applications and school training equipments</li> <li>● Accumulating of small and medium venture enterprise of display and mobile in Gumi Complex No. 4</li> </ul>
Changwon	Advanced Appliance Cluster	<ul style="list-style-type: none"> <li>● Promote development of the core appliances technology of the next generation (Focus on the core technology field such as NC engineering work, ultra-high manufacturing technology, etc.)</li> <li>● Construct innovated network of appliance components enterprises mainly from small and medium enterprises (Fixed R&amp;D through conferencing with universities/research labs/large enterprises)</li> <li>● Provide general service such as human resource training, market information, etc.</li> <li>● Construct immediate solution system for bottleneck (Ultra high speed technology clinic)</li> <li>● Supporting enterprise-initiated technical human resource training such as Employment Reservation System</li> <li>● Expanding support service for small and medium enterprises</li> <li>● Creating Inno-core Park based on foundation of R&amp;D and manufacture of preproduction</li> <li>● Accumulating information, S/W, various equipment possessed by Regional Innovation Organisation</li> <li>● Employing and train technical equipment co-ordinator (Intermediate educational-industrial co-operation, technology guide)</li> <li>● Training technical ability through inviting foreign technical experts</li> <li>● Support human resource of small and medium enterprises in studying abroad</li> </ul>
Ulsan	Automotive Components	<ul style="list-style-type: none"> <li>● Strengthen co-R&amp;D between universities, research labs and components manufacturers (Organize Technology Research Association to strengthen co-operation in Educational-Industrial R&amp;D, M&amp;A; Consulting, technology transfer and business incubation establishment; Activate between various components manufacturing enterprises)</li> <li>● Construct General Support System to modulise automotive components through formation business of Auto Valley: Automotive Components Complex (160 000 pyong), Modulisation Complex (250 000 pyong), Co-construction of Equipments (Automotive Components Innovation Center)</li> <li>● Settle co-operative Labour and Management relationship</li> </ul>

Table 14.A1.1. **Projects for Innovative Cluster Cities** (cont.)

City	Cluster Focus	Innovation task/Cluster promotion
Banwol Skhwa	Advanced Component Material	<ul style="list-style-type: none"> <li>● Create mini cluster of component material of advanced fields – Promote advanced component material cluster such as Nano Material Analysis Support Center, precision photonics cluster based on advanced enterprises and Korea Polytechnic University – Increase individual new product development ability from R&amp;D to mass-manufacturing through connection of component material industry and manufacturing equipment industry</li> <li>● Construct component material network (Construct human training-centred educational-industrial cluster by connecting with Hanyang University, Saenggiwon, Gyeonggi TP)</li> <li>● Increase locations for advanced enterprises</li> <li>● Environmentally friendly eco-industrial complex</li> <li>● Establishing Model Design Center in Korea Polytechnic University</li> <li>● Establishing Model Nano Analysis Support Center in Korea Polytechnic University</li> <li>● Establishing Precision Photonics Model Center in Korea Polytechnic University</li> <li>● Developing and manage Intern Training Program</li> <li>● Providing location by creating model compound rental complex</li> <li>● Establishing Model Regional Innovation Center in Korea Polytechnic University</li> </ul>
Gwangju	Photonics Industry	<ul style="list-style-type: none"> <li>● Construct photonics technology development network <ul style="list-style-type: none"> <li>❖ Global standard examination, certification and evaluation system enforced by Korea Photonics Technology Institute</li> <li>❖ Found LED relevant special school subject to educate expert human resource (in Jeonnam University)</li> <li>❖ Educational-industrial infra shared (TIC, RRC, etc.) by attracting educational-industrial organisations to the complex (Jeonnam University, Chosun University, etc.)</li> <li>❖ Support in technology development and manufacturing improvement for each enterprise through “Private Technology Treatment” system</li> </ul> </li> <li>● Secure spontaneous ability of components manufacturing enterprises by supporting business incubation establishment</li> <li>● Possess technology to attract leading enterprises</li> <li>● Contracted with Chosun University Educational-industrial Co-operation Association in moving into the complex</li> <li>● Attracted Korea Institute of Industrial Technology, Gwangju Institute</li> <li>● Composing Photonics Industry Association for inspecting and evaluating photonics industry</li> <li>● Photonics Internet Research Association, Advanced Component Industry Research Association</li> <li>● Introduced 543 items of 327 types of research equipments</li> <li>● Developed LED field with establishment of LED Valley in the cluster</li> <li>● Founded LED relevant school subject in Jeonnam University</li> <li>● Began composing and distributing Gunsan National Industrial Complex</li> <li>● Composition in progress of automobiles components industry accumulated complex</li> <li>● Constructing Automotive Components Industrial Innovation Center</li> <li>● Constructing guesthouse</li> <li>● Organized and managing Investment Promotion Division Organisation</li> <li>● Amending Gunsan Investment Promotion Regulations</li> </ul>
Wonju	Advanced Medical Industry	<ul style="list-style-type: none"> <li>● Attract leading enterprises and create new business – Co-operate with ODM and global enterprises such as GE, etc. – Develop Donghwa Agriculture Industry Complex to be designated as a complex exclusive for foreigners – Develop core technology of medical appliances for both western and Chinese medicine, fusing silver industry and IT industry – Amend medical law regarding promotion for Tele-Med industry and develop medical appliances for both western and Chinese medicine</li> <li>● Construct manufacturing foundation for medical appliances</li> <li>● Construct medical appliances support network such as Wonju Medical Industry Foundation, etc.</li> <li>● Completed construction of Medical Appliances Production Manufacturing Facilities</li> <li>● Constructed and managing advanced Medical Appliances Techno Tower</li> <li>● Constructing leased factory for attracting medical appliances enterprises.</li> <li>● Preparing equipments for Medical Engineering Education Center and training expert human resource</li> <li>● Constructing Advanced Medical Appliance Venture Center Promoting establishment of Medical Appliances Manufacturing Technology Research Labs and Medical Appliances (Examination Organisation)</li> </ul>

Source: Government of Korea, Ministry of Commerce, Industry and Energy.

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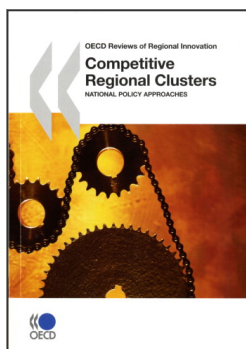
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**From:**  
**Competitive Regional Clusters**  
National Policy Approaches

**Access the complete publication at:**  
<https://doi.org/10.1787/9789264031838-en>

**Please cite this chapter as:**

OECD (2007), "Korea", in *Competitive Regional Clusters: National Policy Approaches*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264031838-17-en>

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