

Country factsheet

Korea





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Introduction



This document presents an overview of the cluster policy in Korea. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the OECD Economic Survey: Korea 2018.

The "Economic Surveys" present the major challenges faced by the country, evaluates the short-term outlook, and makes specific policy recommendations.



01

National cluster policy, programmes and initiatives





1. National cluster policy, programmes and initiatives

Policy type:	National cluster policy
Policy name:	Act on Industrial Cluster Activation and Factory Establishment ("Industrial Clustering Act")
POLICY OBJECTIVES	Strengthening cooperation between companies or industry and RTDI actors Increasing competitiveness and boosting scale up of SMEs Fostering R&D activities, technology development and implementation Fostering innovation and strengthening innovation ecosystems Supporting cluster excellence and professionalisation of cluster management Supporting the consolidation of existing cluster organisations Promoting entrepreneurship, start-ups and spin-offs Promoting employment and upgrading skills and competences Strengthening the network of cluster organisations/cross-clustering Cluster analysis and support for policymaking
	The Act on Industrial Cluster Activation and Factory Establishment (or 'Industrial Clustering Act') was enforced on June 9, 2021, providing for the sound development of the national economy through continuous industrial development and balanced regional development by activating the accumulation of industries, supporting the smooth establishment of factories, and systematically managing industrial locations and industrial complexes. The act ensures that organisations/companies are provided with the facilities, opportunities, information, and financial support to develop more clusters and cluster activities, particularly at the regional and local level. The act also makes a requirement the creation of a new industrial development plan every 5 years, on the one hand, and the assessment of cluster activities, on the other hand. Finally, the law/policy describes the designation of so-called 'Knowledge-Based Industrial Clustering Districts'.
POLICY FOCUS	Cross-sectoral Regarding the policy focus, the Industrial Clustering Act also refers to the 'Enforcement Decree of the Industrial Cluster Activation and Factory Establishment Act' (산업집적활성화 및 공장설립에 관한 법률 시행령) from June 9, 2021, which was enforced in parallel with the Industrial Clustering Act, hence indicating its cross-sectoral focus in e.g. the automobile industry, shipbuilding industry, information and communication industry, and other (regional or local) industries.



RESPONSIBLE AUTHORITIES	Both drafting and implementation Provides funding Oversees the implementation
	The Korean Ministry of Trade, Industry and Energy (MOTIE) is the main body responsible for the drafting and implementation. As established in the cluster law/policy, there are various bodies providing funding, including MOTIE, the national and local governments, the Ministry of SMEs and Startups, the Chamber of Commerce and Industry, the Korea Federation of Small and Medium Enterprises, and the Korea Industrial Complex Corporation (KICOX).
BENEFICIARIES	SMEs
~	Cluster organisations
	Research organisations
	Academic institutions
	Start-ups
	Business associations
	Large firms
	Technology centres
	General population
	Policy makers
	The Industrial Clustering Act aims to provide the legal foundation to foster cluster collaboration between a wide range of actors, providing support for both established as well as new cluster activities to activate clusters particularly at the regional and local level.
INSTRUMENTS Financial	Funding collaboration initiatives
	Support to R&D projects, SMEs becoming cluster members, etc.
	Subsidies for cluster infrastructure (e.g. offices, equipment)
	Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)
	Financing start-ups
	Innovation: voucher, support to hire PhDs, cooperation with R&I actors

	Technical assistance	Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.
		Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence
		Support for soft skills development: coaching, management training, upskilling/reskilling
		Support for networking and partnership building (at national and/or international level)
		Others: Guidance on how to implement an industrial complect structural advancement project for project implementers. The law requires that a structural advancement plan is established, including inter alia: 1) analysis of the current status and competitiveness of the targeted industrial complexes, 2) tasks for development strategy, 3) implementation period and implementer of the upgrading project, 4) analysis of the current status and competitiveness of the advancement project, 5) location and area, 6) implementation method, 7) changes to the land use plan, 8) a plan for attracting companies, research institutes, universities, etc., 9) financing plan, 10) measures for maintenance and expansion of the industrial cluster infrastructure, 11) arrangement of promising growth industries and plans for high-tech and high-value-added industries, 12) plan for reinvestment of development profits.
	Explanation	The Industrial Clustering Act provides the legal framework for funding, determining the available funding bodies, funds, and fiscal benefits, with the aim to support the infrastructure, skills, strategy, networking, etc. of businesses and organisations aiming to build, revisalise, or advance industrial clusters.
HISTORY	Period	Unlimited period
F	Ending year (for	-
	policies with limited	
	period)	
	Starting year	2021
	Explanation	The Industrial Clustering Act was enforced in its current version on June 9, 2021. It has no expiration date and follows up on the strengthening of cluster activities in South Korea (particularly also providing for regional and local cluster activities) since the Industrial Complex Cluster Program, which was the national cluster policy from 2005 to 2016.
BUDGET	Overall	n/a
	Annual	n/a
	Source of funding	Various bodies provide funding under this cluster act, including MOTIE (Ministry of Trade, Industry and Energy), the national and local governments, the Ministry of SMEs and Startups, the Chamber of Commerce and Industry, the Korea Federation of Small and Medium Enterprises, and the Korea Industrial Complex Corporation (KICOX). Funding is also provided via the Korea Credit Guarantee Fund under the Credit Guarantee Fund Act, the Technology Guarantee Fund under



		the Technology Guarantee Fund Act, and a credit guarantee foundation established pursuant to Article 9 of the Local Credit Guarantee Foundation Act. No clear data on the amount of funding available.
POLICY	Availability	no policy evaluation
EVALUATION	Results	Due to the recent enforcement of the policy, no evaluation available. It is expected that cluster policy evaluation will be available in the coming years.
POLICY ALIGNMENT WITH THE EU		Digitalisation
PRIORITIES		

02

State of play of cluster policy



2. State of play of cluster policy

The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 1 and which are scored based on their existence:

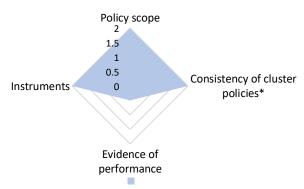
- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- Consistency of cluster policies: assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- Evidence of performance: the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Korea	Maximum
	Korea	score
Policy scope	2	2
Consistency of cluster policies*	2	2
Evidence of performance	0,5	1
Instruments	2	2

^{*} This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies

Cluster policy maturity level



State of play of cluster policy in the country		
Policy evaluation (for terminated	availability of evaluations for terminated policies	
policies)	The Industrial Complex Cluster Program (ICCP) was implemented by the national government, particularly the Ministry of Trade, Industry and Energy (MOTIE) and the Korea Industrial Complex Corporation (KICOX), in three stages from 2005 to 2016. During the first stage (2005-2009), Korean clusters were set up and promoted by designating model innovative clusters and national industrial complexes and boosting collaboration between industry	

and academia. The second stage (2009-2012) focused on builing on and expanding the achievements of the first stage. The third and final stage (2013-2016) focused strongly on carrying out R&D programmes and making clusters self-sustainable, pushing for skills development, business support, and internationalisation of clusters.

An interim evaluation of the ICCP was conducted in 2010, according to which the performance of 7 pilot industrial complexes showed significant growth between 2004 and 2009. The business performance of the pilot complexes in 2009 was compared with the performance of the same complexes in 2004 (the year before the policy was launched). According to KICOX and MOTIE, the results indicate an increase in production by 45.8%, in exports by 33.7%, and in employment by 11.9%, which was three or four times greater than in other complexes. Moreover, the government evaluation found via a 2010 survey that the level of industry-university-institute collaboration more than doubled and that R&D capabilities also increased twofold since the launch of the ICCP.

Policy approach in the country

Policy support for the activities of cluster organisations

Cluster approach used directly by national/regional development agencies

Specific policies to support cooperation projects

Continuity

Since the early 2000s, South Korea has focused on Science and Technology (S&T) innovation, aiming to become a global technology leader. The South Korean national government was the main engine of the country's approach at the beginning of the cluster policy. South Korea employs a relatively centralised cluster and development governance system. This is why the country has focused more on the national cluster policy 'Industrial Complex Cluster Program' (ICCP) rather than regional cluster policies. However, policymakers have aimed to give more autonomy to regional authorities in recent years. Therefore, the present cluster policy now prioritises regional autonomy and the combination of a top-down and bottom-up approach. At the same time, South Korea is working on internationalising its cluster activities in order to strengthen its global competitiveness.

The ICCP was implemented in three phases: The 'early stage cluster development' (2005-2009), the 'growth stage' (2009-2012), and the 'mature stage' of independent growth (2013-2016). In 2021, South Korea enforced several cluster-focused laws to ensure the continuation of support to national cluster activities.

Consistency

> 10 years (but with clear continuity)

South Korea has been implementing its cluster approach since 2005 when it launched the Industrial Complex Cluster Program. Notably, South Korea's interpretation of clusters differs somewhat from the European understanding and gives greater relevance to industrial complexes. These complexes correspond to industrial agglomerations and large science and technology parks. The policy has continued to exist since then without interruption. Moreover, the ICCP has increased the number of clusters over the years. In its pilot phase in April 2005, the cluster policy was launched in 7 industrial complexes. By 2015, South Korea had expanded the implementation of the Industrial Complex Cluster Program to more than 20 industrial complexes across the country. Additionally, the policy fostered the development of 90 Korean-type mini-clusters as of 2019. In 2021, the Korean government enforced several laws promoting the development of clusters, further manifesting its cluster approach. In summary, South Korea's cluster approach has been consistent for more than 10 years, displaying a clear progression and the intent to continue pursuing the cluster approach in the future.

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