



EUROPEAN CLUSTER
COLLABORATION PLATFORM

Country factsheet

Republic of Korea

An initiative of the European Union





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Introduction



This document presents an overview of the cluster policy in the Republic of Korea (also: South Korea). Given the 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 2020](#). The Economic Surveys present the major challenges faced by the country, evaluates the short-term outlook, and makes specific policy recommendations.

The magnitude of the COVID-19 crisis creates risks for financial stability, especially corporate debt, as some businesses, notably SMEs, are heavily indebted. Some households will also struggle to repay their debt. Employment is shrinking. The recession is driving down employment, particularly for non-regular workers. The government will need to invest further in active labour market policies to ensure an employment-rich and high-productivity recovery.

The ongoing Russian military aggression against Ukraine has also [taken its toll](#) on the Korean economy and industrial ecosystems, highlighting the significance of policy efforts in supporting SMEs and clusters.

In the following, a succinct overview of the cluster policy in the Republic of Korea will be provided. The structure of this factsheet generally encompasses:

- 1) an overview of the national cluster policy in South Korea,
- 2) an assessment of the state of play of the national cluster policy.

01

National cluster policy, programmes and initiatives



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1. National cluster policy, programmes and initiatives

In this section we provide an overview of the existing Korean cluster policies on a national level.

The breakdown is presented in the form of a table, with the first column showcasing information on the aspects which constitute the policy (beginning with 'Policy Objectives', following with 'Policy Focus', etc.) and the second column representing the case of a Korean national cluster policy.

Within the table the text presented in bold (black) depicts standardised categories across country factsheets (56 in total for 2022), which is applied for the comparative purposes. This is followed by a complementary descriptive text to provide more insights about the cluster policy in Korea.

Policy type:	National cluster policy
Policy name:	Act on Industrial Cluster Activation and Factory Establishment ("Industrial Clustering Act")
<p>POLICY OBJECTIVES</p> 	<p>Strengthening cooperation between companies or industry and RTDI actors</p> <p>Increasing competitiveness and boosting scale up of SMEs</p> <p>Fostering R&D activities, technology development and implementation</p> <p>Fostering innovation and strengthening innovation ecosystems</p> <p>Supporting cluster excellence and professionalisation of cluster management</p> <p>Supporting the consolidation of existing cluster organisations</p> <p>Promoting entrepreneurship, start-ups and spin-offs</p> <p>Promoting employment and upgrading skills and competences</p> <p>Strengthening the network of cluster organisations/cross-clustering</p> <p>Cluster analysis and support for policymaking</p>
	<p>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</p>



Policy type:	National cluster policy
Policy name:	Act on Industrial Cluster Activation and Factory Establishment (“Industrial Clustering Act”)
	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 requires 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 	<p>Cross-sectoral</p> <p>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.</p>
RESPONSIBLE AUTHORITIES 	<p>Both drafting and implementation</p> <p>Provides funding</p> <p>Oversees the implementation</p> <p>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).</p>
BENEFICIARIES 	<p>SMEs</p> <p>Cluster organisations</p> <p>Research organisations</p> <p>Academic institutions</p> <p>Start-ups</p> <p>Business associations</p>



Policy type:		National cluster policy
Policy name:		Act on Industrial Cluster Activation and Factory Establishment (“Industrial Clustering Act”)
		<p>Large firms</p> <p>Technology centres</p> <p>General population</p> <p>Policy makers</p>
		<p>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.</p>
INSTRUMENTS 	Financial	<p>Funding collaboration initiatives</p> <p>Support to R&D projects, SMEs becoming cluster members, etc.</p> <p>Subsidies for cluster infrastructure (e.g. offices, equipment)</p> <p>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</p> <p>Financing start-ups</p> <p>Innovation: voucher, support to hire PhDs, cooperation with R&I actors</p>
	Technical assistance	<p>Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc.</p> <p>Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence</p> <p>Support for soft skills development: coaching, management training, upskilling/reskilling</p> <p>Support for networking and partnership building (at national and/or international level)</p> <p>Others: Guidance on how to implement an industrial complex 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</p>



Policy type:		National cluster policy
Policy name:		Act on Industrial Cluster Activation and Factory Establishment (“Industrial Clustering Act”)
		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, revitalise, or advance industrial clusters.
HISTORY 	Period	Unlimited period
	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 previous cluster support 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 type:		National cluster policy
Policy name:		Act on Industrial Cluster Activation and Factory Establishment ("Industrial Clustering Act")
POLICY EVALUATION 	Availability	no policy 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 PRIORITIES 		Digitalisation

02

State of play of cluster policy



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2. State of play of cluster policy

This section presents an overview on the state of play of Korean cluster policy in the form of a quantitative and qualitative assessment. The data below illustrates how the country ranks in terms of **maturity of cluster policy at the national level**. The maturity assessment is based on a combination of factors presented in Chapter 1, which receive a score based on the existence or absence of a given element in the cluster policy.

Note: The maturity assessment does not reflect the performance of a country, but only the degree of development of their national cluster policy at the moment of data collection (Q3 2022). The assessment illustrates how the country scores for each of the four criteria (policy scope, continuity of cluster policies, evidence of performance, cluster support instruments) compared to the maximum score that they can reach. Please refer to the **Annex** for the detailed overview of the categories and the scoring system.

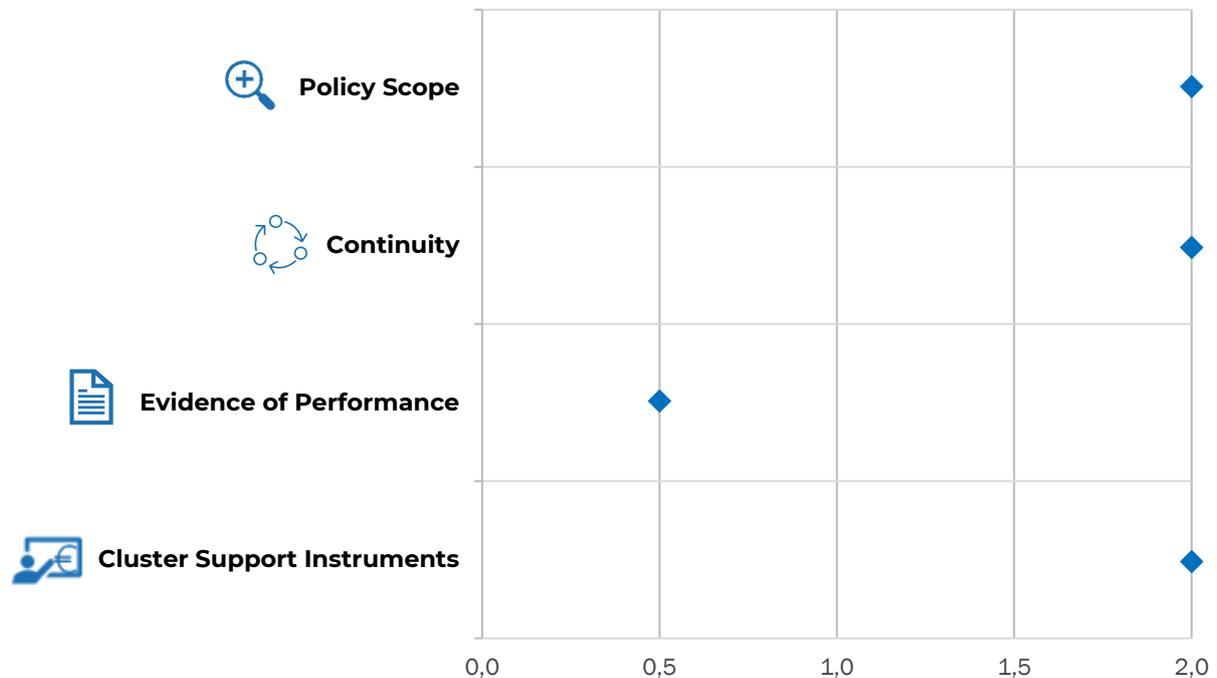
The table below presents an overview of the **maturity assessment for the Republic of Korea** for 2022. The total score is 6,5 points out of 8.

REPUBLIC OF KOREA	MATURITY ASSESSMENT	Max score	Actual score
POLICY SCOPE	Absence of cluster policy	0	
	Broad policy	0,5	
	Sectoral policy	1	
	National and/or regional cluster policy	2	2
CONTINUITY	No cluster-specific policy available	0	
	Cluster policy established recently	0,5	
	Cluster policy established between over 2 and 10 years	1	
	Cluster policy established over 10 years ago	2	2
EVIDENCE OF PERFORMANCE	No evaluation and / or monitoring available	0	
	Existence of evaluations of past policies	0,5	0,5
	Existence of monitoring or an ongoing / interim evaluation	1	
	Existence of monitoring and ex-ante or ongoing / interim evaluation	2	
CLUSTER SUPPORT INSTRUMENTS	No instruments for cluster development	0	
	Financial support for cluster development in the broader and / or sectoral policy	0,5	
	Financial or technical support for cluster development in dedicated cluster policy	1	
	Financial and technical support for cluster development in dedicated cluster policy	2	2
TOTAL (8)			6,5



Drawing from the table above that showcases the scored points in South Korea's cluster policy, the Figure below portrays the **degree of maturity** across four categories related to the national level cluster policy.

Figure 1: Maturity of cluster policy – Republic of Korea



Source: ECCP (2022)

The text below provides a **qualitative description** of the state of play of the cluster policy in South Korea, which is complementary to the maturity assessment presented above.

Policy scope

South Korea has been implementing its cluster approach since 2005 when it launched the Industrial Complex Cluster Program (ICCP). 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. 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.

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.



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 ICCP in 2005. The policy has continued to exist since then without interruption. 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. 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.

Evidence of Performance

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 building 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.

Cluster Support Instruments

The Korean Clusters are offered different financial and technical support instruments on a national level. As part of the financial support instruments related to clusters, the Korean government provides help, e.g., by financing start-ups and collaboration initiatives and by supporting market entries or R&D Projects. Regarding technical support, the Korean Government also provides infrastructure such as coworking spaces, offices, incubation and accelerator spaces, research centres and technology parks. In addition, there is support in developing several hard and soft skills. Summarized, the Korean Government offers extensive support, financial as well as technical.

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Annex

Criterion of maturity assessment	Description	Scoring (points between 0 and 2)
Policy scope	assessment whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies, e.g. foreign trade policies, labour and social policies or specific sectoral policies, e.g. industrial policy tourism policies, agriculture policies	<p>absence of cluster policy = 0</p> <p>existence of broader policies = 0,5</p> <p>existence of specific sectoral policies = 1</p> <p>existence of targeted cluster policies = 2</p>
Continuity of cluster policies	assessment of the duration and experience of the country in carrying out cluster policies. This criterion assesses only existence of targeted cluster policies and not broader policies or sectoral policies	<p>absence of policies supporting cluster development = 0</p> <p>cluster policy established recently (within the last 2 years) = 0,5</p> <p>cluster policy established between over 2 and 10 years = 1</p> <p>cluster policy established over 10 years ago = 2</p>
Evidence of performance	assessment whether there are evaluations of past and ongoing policies and a monitoring system in place. The existence of monitoring and evaluation mechanisms determines the degree of policy development in the country	<p>no evaluation and / or monitoring available = 0</p> <p>existence of evaluations of past policies, e.g., ex-ante = 0,5</p> <p>existence of monitoring or an ongoing / interim evaluation = 1</p> <p>existence of monitoring and ex-ante or ongoing / interim evaluation = 2</p>
Cluster Support Instruments	assessment whether the policies provide any instruments to support the policy implementation, being these financial and/or technical support	<p>no instruments for cluster development = 0</p> <p>financial support for cluster development in the broader and / or sectoral policy = 0,5</p> <p>financial or technical support for cluster development in dedicated cluster policy = 1</p> <p>financial and technical support for cluster development in dedicated cluster policy = 2</p>

Source: ECCP (2022)