

# Invest Korea

April 2022

**Karl Johan Lier**

CEO & President of AutoStore

## Redefining Space and Storage

E-Commerce Industry, Foundation of Smart Logistics  
Evolution of Korea's Logistics Industry: Rapid Advance into Smart Logistics  
Gyeonggi Banwol-Sihwa Smart Green Industrial Complex: Korea's First Smart Logistics Platform



# KOREA, GLOBAL LINK to



Success



Innovation



Culture



Talent



**kotra**  
Korea Trade-Investment  
Promotion Agency

INVEST  
KOREA

## **KOTRA** is Korea's national trade and foreign investment promotion agency

With 127 offices in 84 countries, KOTRA functions as a global business platform

We provide comprehensive support for foreign investors, as well as business matchmaking services for foreign buyers and Korean businesses. Furthermore, KOTRA supports business partnerships between global enterprises and promising Korean SMEs, while creating global jobs through its vast trade and investment networks overseas. By staying up to date on the latest information on trade, exhibitions and investment, we're able to offer necessary support to Korean businesses and foreign companies.

# Smart Logistics

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## Foreign Direct Investment

**S. Korea's 2021 outbound FDI at record-high USD 76 bn**

S. Korea's outbound direct investment in 2021 soared 32.8 percent from the year previous to a record-high USD 75.9 billion, led by financial investors and manufacturing companies, according to the Ministry of Economy and Finance on Mar. 23.

By country, the US made up 36 percent of the country's 2021 foreign direct investment (FDI) with USD 27.6 billion, an 81.8 percent on-year surge, the ministry said.

One year into the COVID-19 pandemic, Korean exporters led by chipmakers and electric vehicle (EV) battery producers resumed large-scale facility investments abroad.

The country's outbound FDI in 2021 was more than double the USD 29.5 billion inbound FDI into S. Korea in the same year.

By industry, insurance and other financial services firms were the most active investors with a combined USD 29.3 billion, up 58.5 percent

on-year. Manufacturing companies came next with USD 18.2 billion in FDI, followed by real estate companies with USD 7 billion.

EV makers such as LG Energy Solution Ltd. and SK On Co. were among the companies most aggressive in overseas investments last year, setting up multibillion-dollar joint ventures with General Motors Co. and Ford Motor Co., respectively. POSCO Chemical Co. joined them in building overseas facilities to produce EV materials in the US, jointly with General Motors.

This year, Korean exporters are likely to continue to expand overseas facility investments. For the fourth quarter of 2021 alone, S. Korea's outward FDI totaled USD 30.2 billion, a 62.7 percent jump on-year. Excluding the proceeds from investment exits or fund liquidations, net FDI outflows swelled 82.7 percent on-year to USD 26.1 billion.

## Trade &amp; Commerce

**10 years after KORUS FTA, bilateral trade soars nearly 70 percent**

Trade volume of goods between S. Korea and the United States grew nearly 70 percent, and bilateral investment more than doubled over the past decade since their free trade agreement, Seoul's industry ministry said Mar. 11.

The Korea-U.S. Free Trade Agreement (KORUS FTA) marked its 10th anniversary this month, as the trade deal came into force in March 2012.

The bilateral trade of goods stood at USD 169.1 billion last year, up 67.8 percent from USD 100.8 billion logged in 2011, according to the Ministry of Trade, Industry and Energy. S. Korea's exports to the U.S. surged 70.6 percent

during the cited period to USD 95.9 billion in 2021, data showed.

The free trade agreement also boosted bilateral investment, with the U.S. being the No. 1 destination for S. Korean firms' overseas investment. The U.S. also accounted for the largest share of foreign direct investment made to S. Korea, according to the ministry.

S. Korea's investment in the U.S. more than doubled from around USD 7 billion in 2012 to USD 18.2 billion in 2020, and the U.S.' investment in S. Korea advanced to USD 5.3 billion in 2020 from 3.67 billion, the data showed.

**Exports grow 10 pct in first 20 days of March**

S. Korea's exports rose 10.1 percent in the first 20 days of March from a year earlier on the back of demand for chips and petroleum products, customs data showed Mar. 21.

The country's outbound shipments stood at USD 37.3 billion in the March 1-20 period, compared with USD 33.8 billion a year earlier, according to the data from the Korea Customs Service.

By sector, outbound shipments of memory chips, a key export item, rose 30.8 percent on-year.

Semiconductors accounted for about 20 percent of exports by S. Korea, home to Samsung Electronics Co., the world's largest memory chip maker, and its smaller rival SK hynix Inc. Exports of petroleum products soared 79 percent on-year as oil prices spiked amid the Ukraine crisis.

The Bank of Korea forecast the S. Korean economy will expand 3 percent this year after 4 percent growth last year. The finance ministry expects the Korean economy to grow 3.1 percent in 2022.

## Industry

**S. Korea ranks 10th on global top-selling product list in 2020**

S. Korea had 77 globally top-selling products in 2020, placing 10th in the world, data showed Mar. 14.

The number of S. Korea's top-selling goods was up six from a year earlier, and the country retained the No. 10 spot for two years running, according to the Korea International Trade Association (KITA).

By segment, S. Korean-made chemicals (29 products) and nonferrous metal products (20) accounted for 63.7 percent of the country's export items with top global market shares.

Polarizing sheets used in making liquid crystal displays, laser equipment and 15 other products newly made the list of S. Korea's globally top-selling items, with 11 goods dropping out of the list.

**S. Korean battery makers tout latest technologies, future visions at Seoul exhibition**

Major S. Korean battery makers showcased their latest technologies and visions for future growth during an international battery exhibition in Seoul, held from Mar. 17-19.

SK On Co., LG Energy Solution Ltd. and Samsung SDI Co. were among some 250 battery and battery parts manufacturers and automotive companies around the globe participating in the three-day InterBattery 2022, taking

place in the Convention and Exhibition Center (COEX).

The InterBattery exhibition, first launched in 2013, is an annual business event showcasing various new products and technologies related to the battery industry. This year's session is co-hosted by the Ministry of Trade, Industry and Energy and the Korea Battery Industry Association (KBIA).

## Government &amp; Policy

**Biz lobbies ask President-elect Yoon to create biz-friendly environment**

S. Korea's business lobby groups on Mar. 10 called on President-elect Yoon Suk-yeol to create an environment for companies to make further investments and create more jobs.

Opposition candidate Yoon, 61, was elected S. Korea's next president on Mar. 10 after an unbelievably close race that underlined deep divisions along regional, generational and gender lines, and hands him a daunting task to narrow those chasms.

The country's business lobbies, such as the Federation of Korean Industries (FKI), the Korea Chamber of Commerce and Industry (KCCI), and the Korea International Trade Association (KITA) made the call as they see the new government's leadership is the key to responding to sluggish local consumption, low birthrates and aging population.

"Yoon's election represents the nation's wishes (for the incoming administration) to ride out the prolonged COVID-19 pandemic and bring back justice and common sense to the society," the FKI said in a statement. The FKI also asked Yoon to make the labor market more flexible and ease regulations to help the private sector lead the country's economic growth.

KITA asked the Yoon government to take preemptive measures to respond to the carbon neutral era and protect local exporters amid growing protectionism in major trading partners, such as the U.S. and China, which are in hegemonic competition.

Yoon is expected to seek expansionary fiscal spending to support businesses hit hard by the pandemic and underpin the economic recovery.

**S. Korea aims to commercialize 6G mobile services by 2028: ICT minister**

S. Korea will push to commercialize sixth-generation (6G) services by around 2028, the country's science minister has said.

Science and ICT Minister Lim Hye-sook made the remarks on Mar. 2 during her speech at the Mobile World Congress (MWC) 2022, a mobile technology trade fair under way in Barcelona.

"We are continuing our preparations for the 6G era with the aim of commercializing 6G from 2028 to 2030 ... it will offer a network 50

times faster than the current service and an expanded coverage of up to 10 kilometers above the ground," Lim said.

Lim added that S. Korea has made meaningful progress in 5G network speed and coverage since it became the first country to commercialize 5G services in April 2019.

S. Korea will push ahead to unfold a new age with innovative digital technologies, including metaverse, blockchain, artificial intelligence and cloud, she said.



# E-Commerce Industry, Foundation of Smart Logistics

The e-commerce industry benefits the most from the development of smart logistics and also leads the development of the smart logistics industry at the same time. Smart logistics, which aims to improve delivery speed and accuracy using AI, has dramatically improved e-commerce delivery speed and accuracy. Also, it has attracted more consumers to the e-commerce industry.

Invest Korea will take a look at Korea's e-commerce industry, which is leading the global market.

## Korea at a Glance



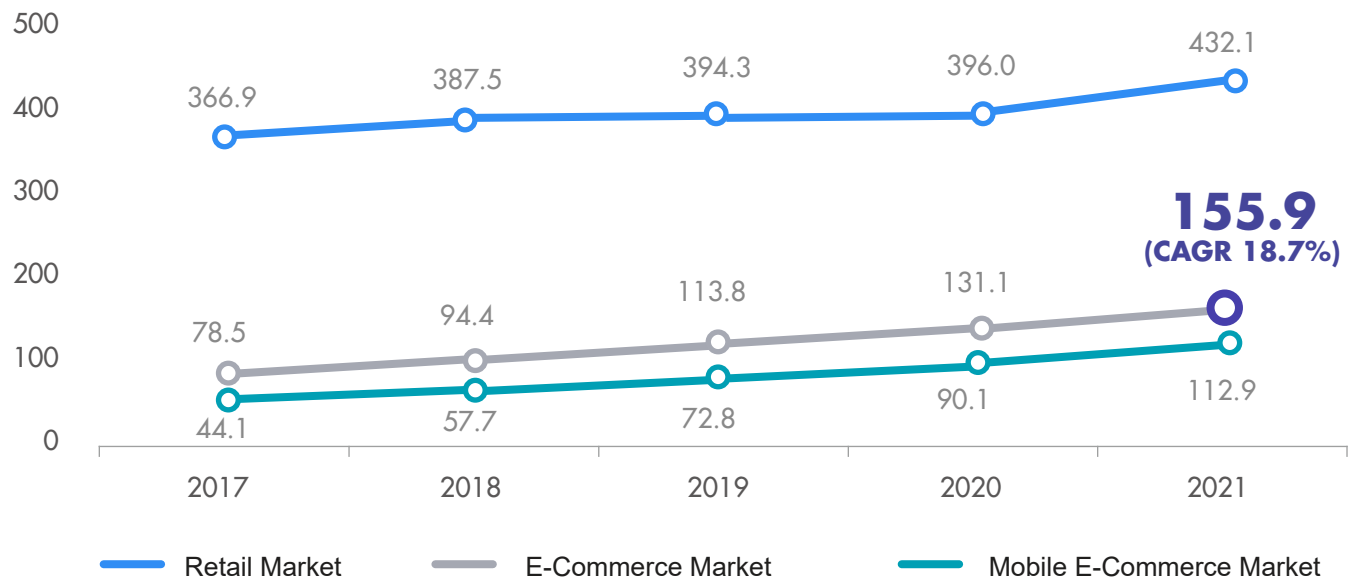
\* Source: Bank of Korea, Statistics Korea, emarketer.com

## Korea's E-Commerce Industry

Paradoxically, social distancing during the pandemic has led the growth of the e-commerce market in Korea. Before the pandemic, e-commerce was regarded as the exclusive property of young people in Korea, but during the pandemic, the middle-aged population's use of e-commerce was expanded and the growth of the e-commerce market was accelerated. In 2022, Korea's e-commerce market possess 32.2% (Source: emarketer.com), ranking third in the world after China (46.3%) and the UK (36.3%).

E-Commerce Market in Korea

(Unit: USD bil.)



## Recent E-Commerce Market Trends in Korea

Starting with group buying-based social commerce, Korea's e-commerce market has evolved into open markets. Gmarket and Auction, led by foreign-invested company eBay Korea, were the leaders of the open market, while Korean platforms such as 11th Street appeared as latecomers.

The Korean e-commerce market, which mainly operated as a B2C (Business to Consumer) market, has recently evolved into a C2C (Consumer to Consumer) market. One-person media based on SNS is developing into a one-person market, and various items such as special offer products and used goods are traded in the C2C market.

The spread of fast delivery services, including so-called “rocket delivery” and “dawn delivery,” is also noteworthy. Fast delivery services started by startups such as Coupang and Kurly are gradually expanding their scope of use, and online retailers are expanding cooperation with the fulfillment industry to improve delivery efficiency.

## Key E-Commerce Platform

All of the top five e-commerce companies are in the open market. Coupang, a leading company, started as a social commerce platform in 2013, and has evolved into an open market company and continued to grow with aggressive investment. SSG, a Korean offline distribution conglomerate, recently acquired Gmarket and Auction, the second and fourth largest companies, from U.S. company eBay, and is gradually expanding its online market share.

Top 5 E-Commerce Sites

					
Operator	Coupang	SSG	Eleven Street	SSG	Interpark
Type	Open Market				
Establishment	2013	2000	2008	2000	1997
Annual Revenue*	USD 11.60 B	USD 1.04 B	USD 0.45 B	USD 1.04 B	USD 0.14 B
Website	<a href="http://www.coupang.com">www.coupang.com</a>	<a href="http://www.gmarket.com">www.gmarket.com</a>	<a href="http://www.auction.com">www.auction.com</a>	<a href="http://www.11st.co.kr">www.11st.co.kr</a>	<a href="http://www.interpark.com">www.interpark.com</a>

\* Selected according to the number of PC site visitors in Feb. 2022 by koreanclick.com

\* Source: Kisline (Annual revenue is not just for the website, but for the operator)

## A Cornerstone of E-Commerce Growth, the Fulfillment Industry

The fulfillment industry collects customer's order information from various marketplaces in real time and links it to its warehouse management system to handle order processing, inventory management, and delivery services. It is based on digital technologies such as cloud and artificial intelligence (AI), which allow information sharing of the entire supply chain.

E-commerce companies in Korea deliver about 60 percent (Source: Eugene Investment) of e-commerce transactions, excluding non-serviceable items such as service and fresh food, using full-film services.



# Economic Indicators

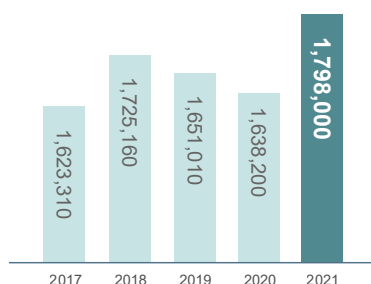
Here's a look at Korea's major economic indicators that provide an overview of the country's recent economic developments.

## Source:

International Monetary Fund (IMF), Bank of Korea (BOK), Korea International Trade Association (KITA), Ministry of Trade, Industry and Energy (MOTIE)

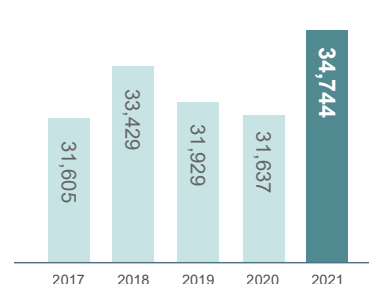
## GDP

(Unit: USD millions)



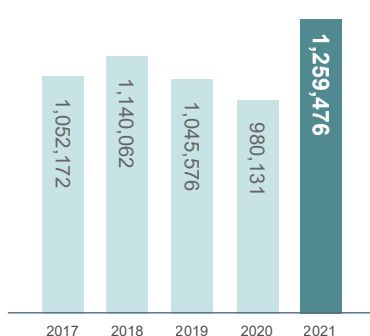
## Per capita GDP

(Unit: USD)



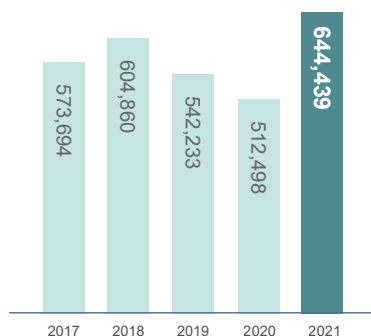
## Trade volume

(Unit: USD millions)



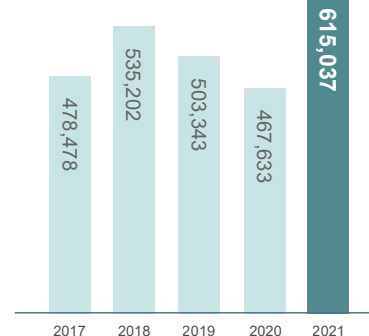
## Exports

(Unit: USD millions)



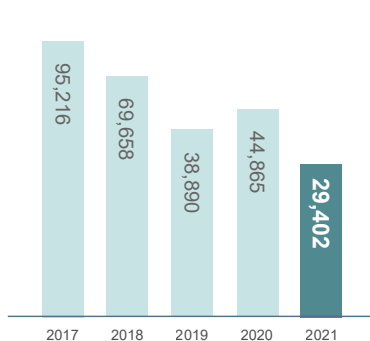
## Imports

(Unit: USD millions)



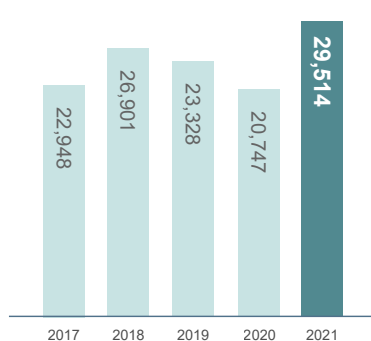
## Trade balance

(Unit: USD millions)



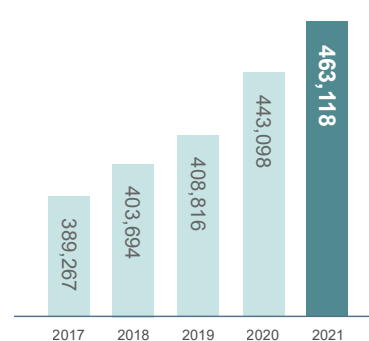
## FDI

(Unit: USD millions)



## Foreign exchange reserves

(Unit: USD millions)



# One-on-One with Karl Johan Lier

*CEO & President of AutoStore*

# Redefining Space and Storage

*Invest Korea talks to Karl Johan Lier, CEO & President of AutoStore, to learn more about the company's operations in Korea and his insights on doing business here.*

**A**utoStore, founded in 1996, is a warehouse robot technology company that invented and continues to pioneer cube storage automation, the densest order-fulfillment solution in existence. The company's focus is to marry software and hardware with human abilities to create the future of warehousing.

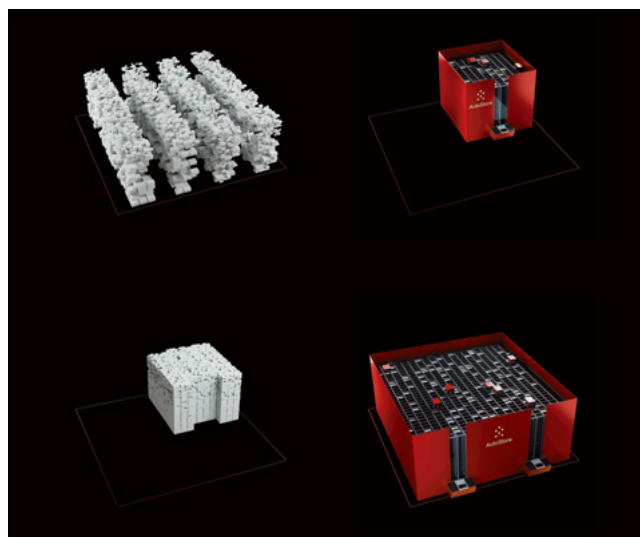
The company is headquartered in Nedre Vats, Norway, and has global offices in the U.S., UK, Germany, France, Spain, Italy, Austria, South Korea, and Japan. AutoStore operates over 750 systems in over 40 countries in a wide range of industries. All sales are distributed, designed, installed, and serviced by a network of qualified system integrators it calls "partners."

Hailing from Norway, Karl Johan Lier was appointed Chief Executive Officer & President of AutoStore in January 2017. Prior to this, Mr. Lier held the position as CEO & President of Hatteland (2008-January 2017), Nordic Managing Director at Arrow Electronics (April 2000-April 2008) and Chief Financial Officer at Hatteland (July 1993-March 2000). He holds a master's degree in both finance and accounting from the Norwegian School of Economics and Business Administration (NHH).

Read on to learn more about the company's operations in Korea and Mr. Lier's insights on doing business here.

**Please tell us a little bit about yourself. What brought you to Korea?**

Korea is one of the biggest economies in the world with a wide variety of manufacturing industries and is



ShrinkSystem (Photo courtesy of AutoStore)

also one of the world's highest-ranked e-commerce shopping producers and consumers. This naturally contributes to a large logistics infrastructure with a high demand for advanced intralogistics processes and technologies, in which AutoStore is best positioned to service this as a key industry player and driver of innovation.

AutoStore provides a unique automatic storage and retrieval system called cube storage, which is recognized as the most innovative intralogistics solution in the market. The idea came up in the mid-90's and commercialization of this idea first took place in 2005. Since then, the business has grown exponentially year-on-year, being noted for its innovation and sustainability driven solutions.

## What kind of company is AutoStore, and what is its history?

At the beginning of the 1990s, the Hatteland Group built a large warehouse to store electronic components. When shelves were filled to capacity in the first month, Hatteland's Technical Director Ingvar Hognaland thought, "Why do we store things like dominos, when we could store them like a Rubik's Cube? Let's get rid of the air! Stop the 'air housing' and start warehousing."

That became the birth of cube storage automation and AutoStore. AutoStore was founded in 1996 and has been a warehouse robot technology company since the very beginning. Continuing to pioneer cube storage automation, AutoStore has the densest order-fulfilment solution in existence. Our focus is to marry software and hardware with human abilities to create the future of warehousing.

Today, AutoStore is a global company, with over 750 systems in more than 40 countries in a wide range of industries. All sales are distributed, designed, installed, and serviced by a network of qualified system integrators we call "partners". The company headquarters is located in Nedre Vats, Norway, with offices in Oslo (Norway), the U.S., UK, Germany, France, Spain, Italy, Austria, Korea, and Japan.

## Why did AutoStore establish a branch in Korea?

The market size and demand for innovative technology make Korea one of the key countries in our strategy. Since 2013, we have served the Korean market



MFC Solution at Peterhans Handwerkercenter (Photo courtesy of AutoStore)

through partners and recognized the further potential for market development.

With rapid changes in the e-commerce landscape in the last years, we have decided to strengthen our market presence by opening our own office in Korea targeting to establish proactive and stable activities alongside our partners.

## What are the advantages of doing business in Korea?

I think that the level of the Korean e-commerce market is extremely well developed, and is leading the world in a number of areas.

In Korea, the online-to-offline ratio is 30 percent, the highest in the world, and the domestic demand for e-commerce automation is increasing. From this point of view, now is the perfect time for Korean companies to introduce logistics automation systems. This is because, as the number of e-commerce orders increases, labor intensity increases, while labor costs are also gradually increasing.

Along with the growth of e-commerce, many domestic companies are strengthening their e-commerce and fulfillment services. However, the demand for automated warehouses (ASRS) is still in its infancy, with most of the investment being focused on shipping-related sorting and transfer systems. Now is the time where companies experiencing automation complications or require urgent parts to secure delivery competitiveness, are starting to consider ways to better their storage and warehousing operations.

We believe that shifting some of the growing demand for manpower to automated systems will allow workers to work in a safer and better environment. Factories take a long time to automate, but logistics must move quickly to keep up with rapidly changing market conditions.

## What are some characteristics of Korea's automation/manufacturing industry, and what kinds of strategies did AutoStore utilize to target the Korean market?

In Korea, as in any other advanced economy, e-commerce is growing at an unseen speed, and the fast market transition is at hand. There are many new ideas and businesses catching consumers' eyes. Yet many of them fail to see at an early stage the importance of intralogistics as a core competence for sustainable revenue and profit growth as an e-commerce company. Still, very few warehouses are automated—in fact, only 15 percent of warehouses



globally—and this number will continue to grow for years to come driven by these megatrends.

**What kind of opportunities does Korea's new policy schemes such as the Green New Deal, Digital New Deal, or ESG offer for your company?**

The general direction of ESG, Green and Digitalization are topics that AutoStore closely relates to. These trends and policies will lead the companies to investigate the direction of safer and healthier work environments for warehouses, energy efficient processes and smarter warehouse and fulfillment systems.

Companies have many ways of integrating these topics to their daily business, and AutoStore offers a clear solution in a big way. With AutoStore, customers can operate complex warehouse processes in a much smaller footprint that eliminates many work hazards and physical strains originating from long picking distances. This also enables workers to have the desired items consolidated in one area in 10 to 20 times of a shorter period of time.

One of our latest customers in Korea called Fassto has obtained pre-approval for a "Smart Logistics Center," issued by the Ministry of Land, Infrastructure and Transport, based on an AI automation system in which AutoStore plays a central role. This is only the first case, and more AutoStore-based "Smart Logistics Centers" are on the way.

In the aspect of energy efficiency, our robots use so little energy that 10 R5 robots will use same energy as one vacuum cleaner. Also, robots do not need lights, cooling or heating. For this reason, many of our customers mention a whopping 40 to 60 percent savings in electricity bills.



**Korea is one of the biggest economies in the world with a wide variety of manufacturing industries and is also one the world's highest-ranked e-commerce shopping producers and consumers.**



System at Peterhans Handwerkercenter (Photo courtesy of AutoStore)

**What Korean companies/agencies do you work with to strengthen your business partnerships?**

AutoStore currently operates across a range of warehouses from varying industries such as grocery, apparel, sports apparel, machinery, parts, and so on. We work currently work with a mix of brilliant and well known Korean partners such as LG CNS, Samsung SDS and Asetec.

**What are AutoStore's future goals for Korea and Asia as a whole?**

Korea and Asia as a whole are important growth areas for AutoStore. Asia is the region with the lowest automation penetration today, and we believe Asia will be the fastest growing market going forward.

In addition to our existing partnerships in the region, we have ramped up the APAC expansion in 2021. By adding local resources as well as Samsung, Asetec, and SoftBank Robotics to our partner network, we provide a strong platform for growth and expansion.

**By Grace Park**

*Executive Consultant*

*Investment Public Relations Team*

*Korea Trade-Investment Promotion Agency (KOTRA)*



# Evolution of Korea's Logistics Industry: Rapid Advance into Smart Logistics

## Current Status of Korea's Smart Logistics Industry

There are varying opinions about the origin of Korea's smart logistics. Generally, it can be originated to 'rocket delivery' by Coupang which began in 2014 with the slogan 'Wow the Customer!', benchmarking Amazon's 'Fulfillment Delivery Service'.

Coupang has emerged as First Mover in the distribution/logistics market by continuously investing in logistics infrastructure (logistics information system, automation facilities, establishment of logistics center, etc.) and pursuing customer-oriented strategies. Since then,

various companies followed in its footsteps, expanding smart logistics.

The Korean smart logistics market is rapidly growing due to increasing demand for cost effective logistics and supply chain solutions from various industries. The rising expectations from customers and logistics cost management are playing an important role in shaping the future of the logistics market. Technological development in artificial intelligence, IoT, and blockchain are changing the market ecosystem. Increasing data volume of the growing E-commerce market and digital transformation are expected to serve as a crucial factor in driving the growth of the smart logistics market.

## Trends of Investment in Smart Logistics Facilities by Korean Companies

The domestic delivery market has continued to grow at fast pace, recording an average annual growth rate of 10 percent, driven by the rapid growth of e-Commerce (delivery usage per person in 2020 was 65.1 times per year, and 122 times per person per year in the economically active population). The demand for it has also skyrocketed due to expansion of non-face-to-face activities, stimulated by the COVID-19 pandemic, and is likely to grow rapidly in the future. The movement to introduce

smart logistics also has been accelerated to maximize logistics efficiency like cost-cutting by establishing automation facilities on logistics sites through new technologies including AI and ICT.

Looking back on the trends of automation equipment application in Korean logistics centers over the past 10 years, Multi Stacker Crane (MSC) and Multi Shuttle System (MSS)—smart automation storage system—have been actively introduced in response to the need for highly-efficient logistics centers to accurately and swiftly handle increased volume of goods and small-quantity low-frequency multi-items.

## Korean Smart Equipment Application Cases and Trends in Major Logistics Centers

Automation Level	Step	Step 1	Step 2	Step 3	Step 4	Step 5
	Level	System Automation	Semi-Automation (Low Level)	Semi-Automation (High Level)	Full-Automation (Advanced Level)	Unmanned W/H (Intelligent Level)
Key Equipment	Information	ERP, WMS	WMS, WCS <sup>1</sup>	WMS, WCS Real-time Monitoring System	WMS(AI), WES <sup>2</sup>	WMS(AI), RMS <sup>8</sup>
	Picking	Manual Picking	DPS <sup>3</sup> , DAS	DPS, DAS <sup>4</sup> , SPS <sup>5</sup>	DPS, SPS, RPS <sup>6</sup> , MPS <sup>7</sup>	SPS, RPS, MPS
	Storage	Pallet Rack Pallet AS/RS	Pallet AS/RS Box AS/RS	Pallet AS/RS Box AS/RS HPSC <sup>9</sup> , MSS	Pallet AS/RS Box AS/RS HPSC, MSS Self Rack with AMR <sup>10</sup>	Pallet AS/RS Box AS/RS HPSC Self Rack with AMR
	Sorting	Manual Conveyor	Slide Shoe, Tilt Tray	Slide Shoe, Cross Belt	Cross Belt, AMR	Cross Belt, AMR
Application Cases		Dongsuh Foods, Daehan Flour, JW Pharmaceutical, POSCO, Hankook Tire, KT&G, Lotte Chilsung Beverage, Woongjin	Amore Pacific, Emart, SK Chemical, Dongwha Pharm, Samsung Fine Chemicals, Pulmuone, Shinsegae International, Lotte Confectionery, GC Pharma	Emart 24, DAISO, Lotte Mart, Lotte Super, SK Innovation, OurHome, Shinsegae Food, Emart Mall, BGF Retail	Dongwon Industries, SK Networks, Lotte Chilsung Beverage, E-Land, UNIQLO, Hyundai Department Store	Automation market of Intelligent Level, centered on Wholesale distribution & Online is expected
Industry		Food/Pharmaceutical/Steel/Tire	Chemical/Pharmaceutical/Food/Retail	Wholesale Distribution/Online	Wholesale Distribution/Apparel/Online	
Period		2010		2020		2030

\*Note) 1. WCS (Warehouse Control System) 2. WES (Warehouse Execution System) 3. DPS (Digital Picking System) 4. DAS (Digital Assorting System) 5. SPS (Smart Picking System), 6. RPS (Robot Picking System) 7. MPS (Mixed Palletizing System) 8. RMS (Robot Management System) 9. HPSC (High Performance Stacker Crane), MSS (Multi Shuttle System) 10. AMR (Automated Mobile Robot)

\*Source: Paradigm Shift in Logistics Center Establishment, SFA, Park Jung-hyun, 2022, Partial modification of contents



Also, Smart Picking System (SPS) of the Goods to Person (GTP) mode has been introduced since 2015 in earnest to make the picking process, which accounts for more than 50 percent of operating cost of logistics centers (Tompkins et al. 2003), more efficient. Recently, Robot Picking System (RPS) and Mixed Palletizing System (MPS)—more advanced method of smart picking system converged with robots—are under consideration.

All in all, the distribution and logistics centers are expected to actively adopt various smart logistics automation equipment to improve productivity and resolve the shortage of manpower.

### Korean New Deal Policy and Smart Logistics Industry Promotion Policy

The Korean government put forward the ‘Korean

New Deal’ (July 14, 2020) as a national development policy—equivalent to the US’s New Deal Policy—as a way to overcome the crisis and lead the global economy in the post-COVID-19 era, when it was faced with serious economic depression and structural transformation brought about by COVID-19 while it was working towards an economic paradigm shift and dealing with low growth and deepening polarization. In addition, the government announced the ‘National Logistics Basic Plan (2021-2030)’ on July 1, 2021 as a new blueprint for the development of the logistics industry in the coming decade in a rapidly and drastically changing logistics environment in the post-COVID-19 era.

This can be seen as a plan which considers the aging population, decreasing productive population, urban concentration, smart urbanization, growing middle-class, and increasing importance of quality of life.

### National Logistics Basic Plan (2021-2030) Vision and Strategy

Category	Contents
Vision	Logistics Industry: Leap into world’s leading logistics country through creation of win-win ecosystem and smart-digital innovative growth
Goal	<ul style="list-style-type: none"> <li>• Advanced and Digitalized,</li> <li>• People-centered/Decent jobs</li> <li>• Shared/Connected convergence infrastructure</li> <li>• Secure the industry’s response capability to the future</li> <li>• Sustainable environment</li> <li>• Secure global competitiveness</li> </ul>
Strategy	<ul style="list-style-type: none"> <li>• Strategy 1. Establish the advanced smart technology-based logistics system and work towards digital transition</li> <li>• Strategy 2. Establish shared/connected infrastructure and network for seamless logistics services</li> <li>• Strategy 3. Prepare people-centered decent jobs and create high-quality logistics services from the perspective of demand</li> <li>• Strategy 4. Create sustainable logistics industry environment</li> <li>• Strategy 5. Strengthen the competitiveness and improve the fundamentals of the logistics industry in order to respond to new demand</li> <li>• Strategy 6. Strategic expansion to overseas market in line with changes in global economic map</li> </ul>

\*Source: Notice by the Ministry of Land, Infrastructure, and Transport (No. 2021 – 968), July 1, 2021.



In the case of Strategy 1, 「Establish high-tech smart technology-based logistical system and work towards digital transition」, it will be pursued to create a highly efficient, visible, seamless, and unmanned logistical environment through automation and robotization of all logistical process including transport, storage, unloading, and packaging on the logistics site, which used to be manually done, thereby establishing ultra-connected and intelligent logistics.

### Prospects for Korea's Smart Logistics Market

Aside from numerous tasks regarding economic efficiency, expandability, and flexibility for the smart logistics industry, a rapid digital transition on the logistics site is inevitably required by transition due to low-growth society, urban concentration, dropping birth rate and growing aging population, and growing importance on the quality of life brought by the COVID-19 pandemic.

The system where the national government gives the 'Smart Logistics Center Certification' to logistics facilities equipped with excellent efficiency, safety, and environment-friendliness through deployment of advanced and automated facilities, equipment, and systems, and provides them with administrative and financial benefits, has been in place since April 2021. The certification enables low interest-rate loans needed for the

construction of logistics centers or purchase of advanced and automated equipment, as well as the government's support for up to 2%p of interest cost. For such benefits, it attracts increasing attention from relevant companies, and is expected to play out as a positive factor in expanding investment in smart logistics infrastructure.

The continued growth of the e-Commerce market, changes in the market that require quick delivery, shortage of manpower on the logistics site, and increasing demand for the work environment and safety are likely to accelerate the transition to smart logistics. In addition, the automation market growth of the intelligence level is expected, led by the wholesale distribution and online sectors.

**By Chan-Seok Park**

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*\* The opinions expressed in this article are the author's own and do not reflect the views of KOTRA.*





# Willog, a Cold Chain Data Management Solution Provider

## About the Company

Willog is a cold chain management solution provider that develops and services cold chain data management solutions ensuring seamless management of the entire cold chain transportation process. Willog started developing cold chain solutions under its former name Seohyun, and is expanding its business by establishing an overseas office in the United States (Jan. 2021) and founding Willog in Korea (May 2021).

- Established in May 2021
- Number of employees: 27
- Participated in CES 2021 in Jan. 2021 for its launch in the global market
- Secured investment in first series A round in Aug. (IGIS Investment Partners, Shinhan Capital, Aju IB Investment)
- Selected in 'TIPS', a technology start-up support program operated by the Ministry of SMEs and Startups, in Oct.
- Secured investment in second series A round in Jan. 2022 (Hanwha Investment & Securities)



## Background

Businesses until now have considered cold chain management as additional costs. The perception limited them to merely “maintaining” permissible temperature ranges with minimal devices. Providers of cold chain facilities and devices also focused solely on reducing unit costs to stay price-competitive. They mostly resort to OEM in China and are reluctant to invest in software development.

Willog representatives Sunghoon Bae and Jihyun Yun have business experience in the food industry. Such experience has enabled them to notice that the temperature of finished products is not properly managed as they are delivered to consumers. Since products are mostly shipped by delivery service providers, they are often transported without maintaining the temperature or have the temperature manipulated. Having witnessed this reality, Willog representatives acknowledged the importance of properly “managing,” rather than merely “maintaining” a cold chain and decided to develop solutions together.

## About the Product and Technology

OTQ (One Time Qr-code), the cold chain monitoring device developed by Willog, is capable of generating and storing QR codes capturing the product condition in a pre-defined timeframe. Just by scanning the QR code with a smartphone camera, users can monitor the condition and history of transported products from the smartphone and the control software.

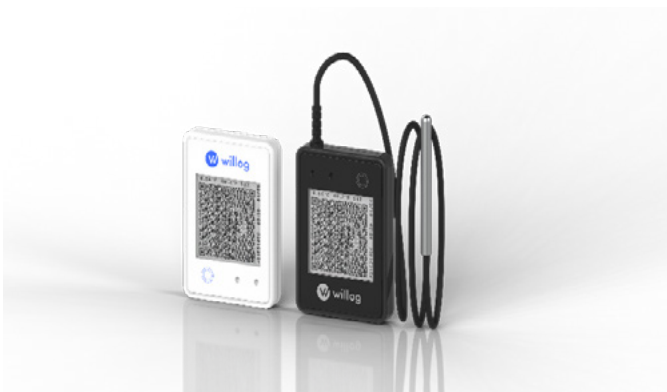


Photo 1: Willog's OTQ device

In addition to providing visualized data on the transportation route and product condition of each product, Willog's control software is the only “cold chain data management solution” allowing users to manage the entire process including return handling and the issuance and storage of proof of delivery reports. The cloud-based solution ensures easy data access to all stakeholders including shippers, deliverers, and receivers. As the data is easy for anyone to understand, the solution helps users to tackle and prevent the recurrence of issues.

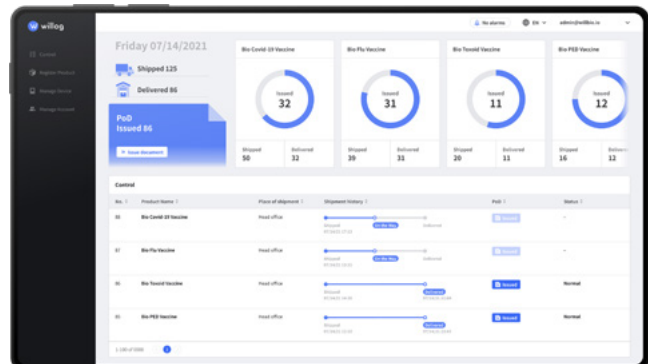


Photo 2: Willog control software dashboard

The QR code-based logistics status monitoring solution, which is central to OTQ's technology, is patent-registered, and Willog owns a total of 17 intellectual property rights including design patents, technology patents, PCTs and copyrights.

Businesses can properly “manage” their cold chains with Willog's “cold chain data management solution,” thereby detecting and tackling issues more effectively and efficiently while preventing their recurrence. Furthermore, the solution guarantees business continuity and growth by reducing inventory and preventing costs associated with disposal and return.

## Competitive Edge and Business Strategy

Existing temperature recording devices known as data loggers or temperature recorders are mostly focused on collecting temperature data and hardware performance. In the temperature collection process, the devices often experience disruption in data transmission or data

loss due to device malfunctioning or loss as they are vulnerable to the network environment. Since the device operation and data monitoring processes require human intervention, the devices are much prone to human errors. These less-than-perfect factors inevitably deteriorate the quality of cold chain management.

The proper management of a cold chain requires more than mere devices. Users should be able to seamlessly monitor the entire cold chain process and swiftly respond to temperature deviation or return requests based on the collected data. Anyone should access data and easily use the system without a separate training or a program. Unless these conditions are met, a solution cannot be called a cold chain management solution. That is why Willog prides itself as the provider of the only “cold chain data management solution.” Willog’s cold chain data management solution enables businesses to go beyond simply collecting and monitoring data so they can swiftly tackle issues, identify the process or environment with repetitive issues and devise preventive measures for saving time and money.

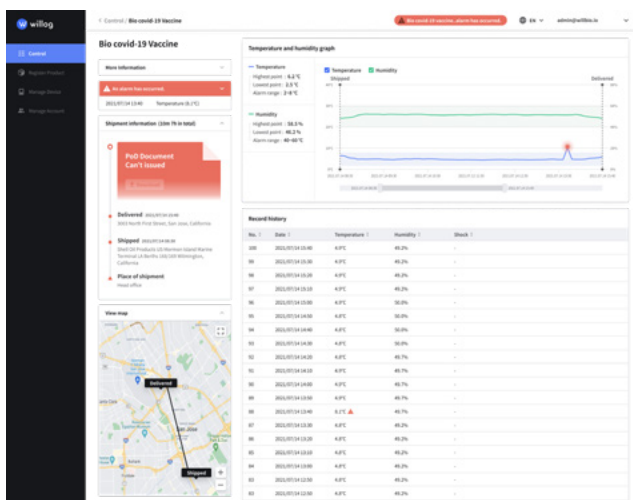


Photo 3: Willog's control software, Temperature deviation tackling

Willog's key competitive lies in the fact that its solution provides the perfect solution to the “regulation on the transportation of biological products” that applies the highest standards of cold chain management. Currently, Willog is focused on providing diagnoses and optimization options that will help businesses in the pharmaceutical

industry abide by regulations, reduce business risks and appropriately respond to the revised regulations.

## Future Plans

Willog is currently concentrating in building a cold chain management solution to help pharmaceutical businesses cope with the “regulation on biological products,” but it plans to expand business to marine container transportation and food industries. Willog is also committed to finding business opportunities around the world based on its US office. At the moment, it is actively communicating with numerous potential business partners.

In addition to business expansion, Willog plans to constantly invest in R&D to refine its solution. It is impossible to manage cold chains without collecting and using data across all domains. To that end, the solution must interface with related systems including ERP and WMS. While Willog's solution is interfaced with the systems of some businesses, Willog is preparing to provide interface services to more partners by refining the solution. Moreover, Willog aims to provide insight based on its extensive data and further refine the solution by investing in big data and machine learning for process automation.

Willog's short-term goal is to provide a new direction for cold chain management so that businesses can minimize cold chain-related risks and build a virtuous business cycle. In the long-term, Willog based on its slogan “the Standard of Trust” envisions a future where the name Willog serves as a “certificate” that guarantees safety. To that end, it is working towards applying advanced technologies such as block chain.

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*\* The opinions expressed in this article are the author's own and do not reflect the views of KOTRA.*



# Invest KOREA Market Place

Invest Korea Market Place (IKMP) is an online business matching platform available on Invest KOREA's website with information on approximately 300 Korean companies seeking to partner with foreign investors. This month, Invest Korea introduces some outstanding companies in Korea's smart logistics industry.

## COMPANY A



LEGO type shuttle



Mini loader

Investment Requirement		Company Profile	
<b>Amount</b>	USD 2.5 million	<b>Patents and Certificates</b>	9 patents and 7 software and designs
<b>Investment Structure</b>	FI (Minority)	<b>Financial Performance</b>	(Sales in 2019) USD 0.63 million

### Investment Highlights

- **Logistics automation system:** The logistics storage/picking automation system is a key factor that can determine the competitiveness of a logistics company in the rapidly growing commerce market. Developed by this company for the first time in Korea, this system can increase a company's productivity in storing and selecting (sorting) a multi-variety of small/light products, and provides a logistics automation system optimized for the smart factory. The system is technically equal or superior to world-class competitors' systems.
- **E-Commerce market:** The size of the non-face-to-face e-commerce market is growing explosively all over the world due to the constraints on physical contact caused by COVID-19. It is expected that the overseas e-commerce market will grow at an annual average rate of 20.9%, rising from USD 1.3 trillion in 2014 to USD 4.9 trillion in 2021.

## COMPANY B

①Barcode/OCR reading + RFID recognition by analyzing displayed images with AI



② Analyzes the 3D shape of displayed products through 2D lidar scanning and calculates the loading rate/product quantity.

Investment Requirement		Company Profile	
<b>Amount</b>	USD 3 million	<b>Patents and Certificates</b>	12 patents, designs, and trademarks at home and abroad
<b>Investment Structure</b>	Equity investment, Joint Venture	<b>Financial Performance</b>	(Sales in 2020) USD 0.32 million

### Investment Highlights

- **Inventory management automation system:** The company has developed the world's first all-in-one patented inventory management system operated by a rail and wire mechanism. Its functions include periodic inventory scan (including the inventory shortage rate, inventory quantity, barcode label recognition), search for incorrectly displayed inventory, 3D inventory search, and remote actual inventory check. The system sequentially scans a displayed inventory and is automatically docked and charged. The system re-charges within just 30 minutes and can run for more than 5 hours when fully charged. The system tracks its movement trajectory, creates movement coordinates, maps and saves inventory data, and tracks the location of individual inventory almost in real time.
- **Inventory management market:** Global annual losses caused by inappropriate inventory management amount to KRW 120 trillion in the warehouse management sector and KRW 1,000 trillion in the retail industry. Cargo and parcel delivery traffic has increased rapidly due to the rapid growth of e-commerce all around the world resulting from the development of the Internet and the COVID-19 pandemic.

For more information please e-mail [ikmp@kotra.or.kr](mailto:ikmp@kotra.or.kr), or visit the Invest KOREA Market Place page on [www.investkorea.org](http://www.investkorea.org).





# **Gyeonggi Banwol-Sihwa Smart Green Industrial Complex: Korea's First Smart Logistics Platform**



**W**ith the support of the Ministry of Trade, Industry and Energy and the Gyeonggi Provincial Government, the Banwol-Sihwa National Industrial Complex located in Ansan, Gyeonggi-do is transforming into Gyeonggi Banwol-Sihwa Smart Green Industrial Complex that will lead cutting-edge industries.

The Smart Green Industrial Complex has been established to upgrade the existing businesses and public facilities in the National Industrial Complex and make them digital, energy-independent and environmentally-friendly. To that end, the Gyeonggi Banwol-Sihwa Smart Green Industrial Complex Project Group implementing the Smart Logistics Platform Project (led by Hanaro TNS) has launched the nation's first smart logistics platform in August 2021.

The Smart Logistics Platform Project is providing free-of-charge integrated logistics ERP services to residents to help them process orders, shipment, inventory management and closing through a one-stop platform. Logistics big data analysis and cargo loading simulation features are also available.

In addition, the Cutting-edge Logistics Demonstration Center plans to provide a high-efficiency cutting-edge logistics storage service to residents by servicing 5G-based automated guided vehicles (AGVs) and multi shuttles by interfacing the system with the smart logistics platform.

In addition, the Cutting-edge Logistics Demonstration Center plans to provide a high-efficiency cutting-edge logistics storage service to residents by servicing 5G-based automated guided vehicles (AGVs) and multi shuttles by interfacing the system with the smart logistics platform.





## About the Industrial Complex

- Name: Gyeonggi Banwol-Sihwa Smart Green Industrial Complex
- Location: Around Banwol National Industrial Complex, Sihwa National Industrial Complex, and Sihwa MTV
- Concept: An industrial complex with digital, energy-independent and environmentally-friendly residents, industrial cluster infrastructure, industrial infrastructure and public facilities.
- Current status: Around 20,000 residents producing KRW 24.5 trillion, exporting USD 13 billion and employing 247,000 workers.

\*As of the end of 2021 (statistics may subsequently be updated)

\*Contact: Korea Industrial Complex Corporation (+82-070-8895-7581, presto3124@kicox.or.kr)

## About the Location

Road	Railway	Port	Airport
Seohaean Expressway (connecting Incheon, Ansan, Gunsan and Mokpo), Singil- Ansan Expressway, Siheung- Ansan Expressway	Seoul Metropolitan Subway No. 4, Suin-Bundang Line, daily operation of cargo train (connecting Yeongdeungpo and Ansan)	Incheon Port (unloading capacity of 39,081,000 tons, berthing capacity of 62 vessels)	80 km from Incheon International Airport and 50 km from Gimpo International Airport
			

## Key Highlights

- **Gyeonggi Banwol-Sihwa Smart Logistics Platform Project**
- **Project led by:** Hanaro TNS
- **Project period:** 2020 to 2022
- **Objective:** Building and operating a smart logistics platform to build digital SOC in the industrial complex, optimize the logistics and save the logistics costs of residents.
- **Description**
  - (Logistics platform establishment and operation) Building and operating a smart logistics platform for providing a logistics service encompassing facilities control, integrated control, management of inventory, shipment and order processing, resources sharing and supply chain management.
  - (Upgrading to a cutting-edge joint logistics center) Introducing cutting-edge ICT systems to the existing aged joint logistics center for building a logistics platform hub and facilitating its effective use.
- **User process**
  - (Portal address) myslp.kr
  - (Eligibility) Residents of Banwol and Sihwa Industrial Complexes and businesses in Banwol and Sihwa operating manufacturing, logistics or distribution businesses.
  - (User process) ① Application submission → ② Document screening → ③ Cargo and business verification → ④ Final selection and signing of contract
- **Benefits**
  - (Smart Logistics Platform) Integrated logistics management service (provided free-of-charge during the project period)
    - \* Systems: ① Smart logistics portal system ② Smart logistics information system ③ Big data analysis system ④ Digital twin system ⑤ Logistics resources sharing platform ⑥ Vehicle control system (IoT-based)
  - (Cutting-edge Logistics Demonstration Center) Storage service provided with high-efficiency cutting-edge logistics facilities (multi shuttles and AGVs), smart warehouse, field trip to logistics facilities
    - \* Apply on the Smart Logistics Platform website
- **Contact:** myslp@htns.com

\* Source: Korea Industrial Complex Corporation





# What are the FDI notification procedures when a foreigner invests in Korea by establishing a corporation or by participating in capital increase with consideration of a domestic company?

*Every month, Invest Korea provides answers to some frequently asked questions submitted by foreign-invested companies in Korea and potential investors.*

Q.

**What are the FDI notification procedures when a foreigner invests in Korea by establishing a corporation or by participating in capital increase with consideration of a domestic company?**

A.

A foreigner who intends to invest by establishing a corporation or participating in capital increase with consideration of a domestic corporation can notify foreign investment through acquisition of new shares.



## 1. Notification of FDI through acquisition of stocks, etc. (new stocks)

- **Basic requirements:** The investment amount shall be not less than KRW 100 million, and at least 10 percent of voting stocks shall be held after the acquisition of new stocks.
- **Organizations receiving notification (delegated agencies):** KOTRA, foreign exchange banks in Korea, etc.
- **Time of notification:** Prior to remittance of investment funds
- **Application form:** Foreign Investment by Acquisition of Stocks (or Contribution)  
[ ] Notification Form [ ] Application for Authorization  
(Enforcement Rules of the Foreign Investment Promotion Act [Form 1])
- **Documents required for FDI notification**
  - Two copies of the foreign investment notification form: Choose either a Korean form or an English form to fill out
  - A power of attorney: Only required in case of reporting by an agent
  - Documents certifying the foreigner's nationality (Individuals: a certificate of citizenship issued by the relevant government or authorities, a passport, etc.; Corporations: a certified copy of corporate registration, a copy of a certificate of business, etc.)
- **Issuance of a certificate of notification:** A delegated authority will issue a certificate of notification without delay to the notifying party upon the receipt of an FDI notification.

## 2. Remittance of investment funds by a foreign investor

- A foreign investor intending to invest in Korea by establishing a corporation can receive a temporary account needed for the remittance of investment funds at a bank after completing a report on foreign investment.
- In case of a medium-or large-sized investment, the amount of remittance for the first transfer is limited (KRW 100 million), but as much funds as needed can be remitted afterwards.  
<An example of a remittance statement>
- **Remitter:** ABC (a UK resident)  
(The remitter should be the same as the foreign investor on the FDI notification form.)
- **Beneficiary:** The name of the foreign investor (a temporary bank account number under the name of the foreign investor in case he/she establishes a corporation) or the name of a foreign-invested company (Techno Fiber Korea Co. Ltd.) (in case of participation in capital increase with consideration of an existing corporation)
- **Beneficiary bank :** Korea Exchange Bank, Yangjaenam BR/IKP Office
  - Address: IKP B/D, 4th Floor 300-6 Yomgok-Dong, Seocho-Gu, Seoul, Korea
  - Swift code: KOEXKRSE

- **Remarks:** This fund will be used for the establishment (or for capital increase) of Techno Fiber Korea Co. Ltd. in Korea.

### 3. Registration of incorporation of a foreign-invested company (registration of capital increase in case of capital increase with consideration)

- **Type of corporation:** A stock company, a limited company, etc.
- **Trade name:** Whether the same trade name exists should be checked (at the Registrar of Supreme Court Internet Register Office: <http://www.iros.go.kr>).
- **Office address to be secured**
- **Executive officers (regardless of nationality or residency in Korea)**
  - Directors: Inside directors (representative director), outside directors, and other directors not engaged in regular business (At least three directors are required for a stock company but one or two directors may be acceptable for a stock company whose capital is less than KRW 1 billion.)
  - Auditors (not required for a stock company whose capital is less than KRW 1 billion)
- **A certificate of personal address of the representative director**
- **Notification of foreign investment (the investor, investment amount, business area, etc. should be confirmed)**
- **Appointment of a legal officer, attorney, or accountant (can be arranged upon request from a foreign investor)**

### 4. Filing for registration of a foreign-invested company

*If you have further questions please contact*



+82-1600-7119

*or visit*



**[www.investkorea.org](http://www.investkorea.org)**

# Korea 101: Banking

## (1) Internet Banking

### ① How to apply

Apply for this online banking service at a bank counter. Necessary documentation includes an ID (an ID valid in Korea, foreign passports not accepted).

### ② When receiving money from overseas

Necessary documents: The applicant's ID (the ID shown on the Internet banking application), account number, account password, resident registration number (alien registration number), transfer password, security card or OTP, a portable storage device

(i) Access the certification center of your bank's website and click [issuance of certificate] or [Issuance of new certificate].

(ii) Click 'I agree' to the terms and conditions and then enter your account password.

(iii) Set numbers irrelevant to your personal information as your certificate password. Store the certificate in a portable storage device (USB) instead of a computer for security.



## (2) Domestic Branches of Foreign Banks

Country	Bank	Country	Bank
USA	<ul style="list-style-type: none"> <li>- JP Morgan Chase</li> <li>- Bank of America</li> <li>- BNY Mellon</li> <li>- State Street</li> <li>- Wells Fargo</li> <li>- Northern Trust</li> </ul>	China	<ul style="list-style-type: none"> <li>- Bank of China</li> <li>- Industrial and Commercial Bank of China</li> <li>- China Construction Bank</li> <li>- Bank of Communications</li> <li>- Agricultural Bank of China</li> <li>- China Everbright Bank</li> </ul>
Canada	<ul style="list-style-type: none"> <li>- Nova Scotia Bank</li> </ul>	Pakistan	National Bank of Pakistan
France	<ul style="list-style-type: none"> <li>- Credit Agricole Corporate and Investment Bank</li> <li>- BNP Paribas</li> <li>- UBAF</li> <li>- Societe Generale</li> </ul>	Japan	<ul style="list-style-type: none"> <li>- MUFG Bank</li> <li>- Mizuho Bank</li> <li>- Mitsui Sumitomo Bank</li> <li>- Yamaguchi Bank Busan Branch</li> </ul>
Netherlands	<ul style="list-style-type: none"> <li>- ING Bank</li> </ul>	Philippines	<ul style="list-style-type: none"> <li>- Metrobank</li> </ul>
India	<ul style="list-style-type: none"> <li>- Indian Overseas Bank</li> <li>- State Bank of India</li> </ul>	UK	<ul style="list-style-type: none"> <li>- HSBC</li> <li>- Morgan Stanley</li> </ul>
Australia	<ul style="list-style-type: none"> <li>- Australia and New Zealand Bank</li> </ul>	Switzerland	<ul style="list-style-type: none"> <li>- Credit Suisse Bank</li> </ul>
Indonesia	<ul style="list-style-type: none"> <li>- Bank Negara Indonesia</li> </ul>	Iran	<ul style="list-style-type: none"> <li>- Bank Mellat</li> </ul>
Germany	<ul style="list-style-type: none"> <li>- Deutsche Bank</li> <li>- State Bank for Baden-Wuerttemberg</li> </ul>	Singapore	<ul style="list-style-type: none"> <li>- DBS Bank</li> <li>- United Overseas Bank</li> <li>- Oversea-Chinese Bank</li> </ul>

*If you have further questions please contact*



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*or visit*



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# New Fed, New BOK and New Government

**O**f all the global changes that the year 2022 will bring about, nothing would have more far-fetching and further-reaching an economic impact than the actions that the U.S. Federal Reserve System (the Fed, hereafter) would take under this tumultuous times. Considering its immense influence on global finance, exchange rates and interest rates, even a tiny butterfly swing from the Fed could have brought a gargantuan consequence on Wall Street with global consequences. It was not just a little sway of a bug, but a series of significant moves inside the Eccles building since the late Fall of 2021 that would arouse global concerns in coming years.

First of all, three new members of the Fed governors will be reappointed this year by President Biden, replacing the two resigning governors, namely Randal Quarles and Richard Clarida, and one filling the empty seat vacated by the current treasury secretary Janet Yellen who resigned in February 2018. One of the original appointees, namely Sarah Raskin, dropped out of the nomination, and the other two appointees await the already over-due senate confirmation vote. The two being Democrats, this process of confirmation will reshuffle the political landscape of the Fed from the Republican domination into the Democrats majority for the first time since 2017. More important than this political tint of the Fed is a fundamental hawkish shift in the Fed's monetary policy under the second term under Powell's leadership. Six

months after the emergence of significant inflation since April 2021, the Fed openly decided to change its highly accommodative policy stance toward the so-called normalization process late November 2021. First step was to reduce monthly asset purchases by USD 15 billion from USD 120 billion to USD 105 billion. But that move was heavily criticized as it was a far cry in the face of skyrocketing inflation. In December 2021, the Fed doubled the reduction of the asset purchases from USD 15 billion to USD 30 billion, and discussed in detail about the future changes in the monetary policy. After the minutes were first revealed in January 2022, the global financial markets plummeted after realizing the dedication of the Fed to fight inflation. The Fed had seriously discussed the normalization process, and its implications were very clear. To curb inflation, the Fed decided to end accommodative asset purchases by March 2022. Soon after, it raised its policy interest rate by 0.25 percent in more than three years, and soon was followed by the rundown of the Fed's balance sheet.

The critical point here is the number of the rate hikes this year and when the initial rundown will start. The majority of market analysts believe there will be at least six more rate hikes in 2022, rendering the federal funds rate almost to 2.0 percent by the end of the year. With this higher rate, global market rate hikes will also follow suit, and the dollar will become very strong, especially against the currencies of the developing countries. For

sure, higher global interest rates will dampen demands and investment, making economic growth and trade volumes slow down substantially. But the negative effect of higher rates and reduced demand will be significantly contained if companies are fully prepared by technological competitiveness, and the governments with adroit fiscal policies.

For Korea, the second term of the current governor of the Bank of Korea expired at the end of March 2022, and a new governor was named. The new governor position will face a series of challenging tasks of fighting inflation, crumbling domestic demands, higher borrowing costs, and stabilizing housing prices. With the expectation of the Fed's rate hikes this year, the BOK cannot avoid harmoniously paralleling its policy rate, but the crucial question is how far the BOK can catch up with the Fed's rate hikes this year. If the Fed is to raise 1.5 percentage points this year to the 1.75-2.00 percent level, the BOK's policy rate could reach 2.75 percent or even higher. It is not clear at this juncture how the BOK will react to the Fed's rate policy, but the BOK can't totally disregard the FOMC rate hikes, especially in view to stabilize the value of the Won. Whoever be the skipper of the BOK, significantly higher rate of interests should be esteemed by the markets.

Another big change in Korea in 2022 is the inauguration of the new president and new government. Although President-elect Yoon Suk-yeol emphasized integration right after winning the election, his strong message to the markets was the reconstruction of a free-market system and all-out deregulation. With incessant persistent intervention with the markets, the new government believes the previous government had been excessively interfering with efficient operations of the market system, discouraging the entrepreneurial spirit and investments. The outcome of the extraordinary interventionism was the lack of growth, job opportunities, and disparaged corporate vitality. Increasing number of firms left abroad, and fewer foreign investments landed on domestic soils. The potential growth rate has fallen below 2 percent, amid inflation rate is expected to hover above 4 percent. A quarter century feat of a trade surplus is about to be challenged by skyrocketing commodities prices for the first time since 1998. To no one's surprise, the new government will reinforce the once forgotten free market spirit with continual deregulation, stabilizing prices and expanding job opportunities. More houses will be built,

while tax burdens will be substantially reduced. Corporate reshoring will be welcome and extra incentives will be provided. The policy goal is more than ever evident.

The matter of the crux is how to get it achieved. All the governments in the past knew the importance of the market mechanism, free corporate spirit and deregulation. However, very few governments had actually achieved what it had originally designed ahead, due in part to failing to recognize formidable invisible tumbling obstacles. Sometimes by the resistance from the labor union, or by political objection, personal prejudice, or simply because of the withered disinterest from the political leaders, the mantra of deregulation has more often failed than otherwise. The deregulation with revision of the legislations seem especially difficult under the current congressional dominance by the opposition party. The nitty gritty of deregulation lays in successfully persuading the opposition party members with undeniable vision for the future. To accomplish a vision of building a technologically world-leading country, Korea may need a huge bulk of investment funds, an army of well-trained human resources, a plank of super charged education and research institutions, and efficacious policies by the administration. All of these require tenacious Copernican removal of old regimes and regulation. Without tenacity and Copernican iconoclasm on the part of the new government, its deregulation pledge will end up much cry with little wool. Realizing the importance of this future vision, it is natural to hope all the political authorities come up with sweeping harmony for the betterment of the nation.



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*\* The opinions expressed in this article are the author's own and do not reflect the views of KOTRA.*





# Floral Valleys

## Jirisan Mountain, Jeollabuk-do Province

*Not only is Jirisan Mountain Korea's most iconic wonders of nature; it is also the first National Park to receive the designation. Spanning across a sizable portion of the Korean peninsula (from Hamyang-gun, Sancheong-gun and Hadong-gun counties of Gyeongsangnam-do Province to Gurye-gun County, and Namwon-si City in Jeollabuk-do Province) is Jirisan Mountain. Join us as we cover the start to and the endpoint of the Jirisan Dulle-gil trail in the rural town of Unbong-eup, Jucheon-myeon, Namwon.*

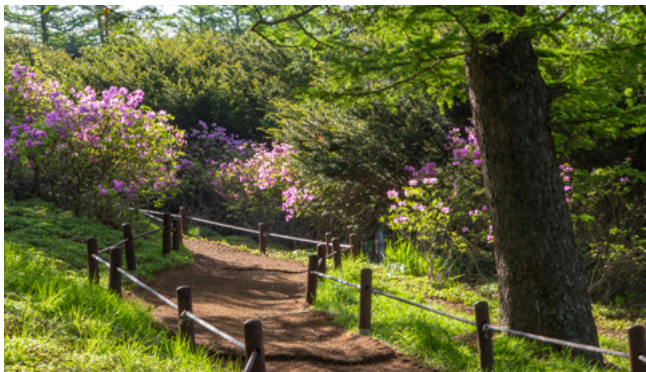


Any nature enthusiast who loves Korea's rugged slopes will find Jirisan special in many ways. As the mountain's scale spans over several provinces, this article will only cover the Jeollabuk-do Province portion, near the city of Namwon.

### Start & End Point

The rural town of Namwon is where the iconic Jirisan Dulle-gil Trail begins and ends. The famed trail, frequented by those seeking a tranquil, leisurely trekking session rather than one of extreme physical exertion, begins at Haengjeong Village in Unbong-eup, Jucheon-myeon, Namwon.

The village is situated on the northwestern part of the entire Dulle-gil course, on the Unbong plateau: an intersectional point between the rural mountainside and the modern tourist facilities.



### Narratives Woven on Pine Trees

Haengjeong Village greets you with a colony of pine trees. Besides their typical rugged shape, also noticeable are scars of uniform shape glaringly piercing the lower midsection—or at eye level—of their barks. They

are not natural marks but are literal scars from the colonial era during which pine trees were stripped of their resin, or sap and utilized as oil for aviation fuel.

A more light-hearted representation that configures pine trees quite literally is their tendency to pursue sunlight. Many of them, at least the ones in this region of the country, are curvy. This shape is a natural result of their inclination to chase wherever is better lit by the sun.

Whether the pine trees in the Unbong plateau, which leads gradually up the trekking course of Jirisan Dulle-gil, or standing amid the forests of Jirisan look the way they do because of the pain they have weathered or due to their natural tendencies, it is clear that pine trees embody honest reflections of the years they've endured.

Curvy trees were deemed worthless, until they formed colonies on mountainsides and formed a reliable buttress guarding the slopes.

### Borderline Landmark & Community

It is difficult to know how Haengjeong Maeul Village retains serenity considering how well known the Dulle-gil is, though elderly villagers are prone to greet visitors with open arms, especially youths—a demographic of rural villages like these often lack.

Streams cutting through the village have modern hanging racks and steps, yet such facilities are designed for washing and hanging clothes—itself a manual, less modern act. Our friendly local guide points out, “This particular facet is a manifestation of that boundary between modernity and antiquated [customs and lifestyles].” While modernity can be glimpsed through tourist-welcoming placards and signposts filled with explanations of the trees, tractors pass by to reap harvests and the air often carries wafts of manure.



## Streams & Waterfall

Nestled in the heart of the area is Guryong Valley, also known as Yonghogugok (“Dragon Lake Valley”), colloquially dubbed the latter for its accompanying legend. As folktale has it, the valley is visited by nine dragons descending from the skies every first day of the fourth lunar month. Characteristically, the closer to the lower base-level where the water streams lace themselves against rocks horizontally, the cooler the air feels. No wonder it is a prime spot to enjoy natural summer springs.

The valley is about 4 km-long and flanked by trails constructed for easy trekking. Feeling the cool breeze of the rock-steeped valley, one can feel why the area is most frequented by visitors in the months of May and October, when buds have blossomed but temperatures are mild.

## Philosophy in Foliage

From the region where we commenced our journey—the starting point of Dullegil—a roughly paved road is a glaring remnant from the past. Previously having linked Unbong-hyeon and Namwon-bu (as they were previously classified), the road imparts a poignantly antiquated atmosphere.

Hiking upwards on a small hilltop of the Hogyong region just a five minutes’ drive away, pine trees become even more predominant. Pointing to their figures, our guide reminds us of how straight-standing pine trees are the prime choice for anything to do with woodwork, especially for building cabins and most traditional housing. Those that haven’t been chosen now fill the mountaintops, flanking the hillside as if to protect the habitat rather than merely populate it.

Jirisan’s standout flowers blossom fully in April, heralding a colorful preview of what luscious vistas are set to unfold in the following month. In this part of the Jirisan Mountains dubbed “Hogyong,” an expression to denote ‘a village with a fine view,’ the alder tree claims a pivotal role in its ecosystem. True to its name, the mountainous habitation flaunts royal azaleas, which have sticky surfaces to trap insects and small-flower forget-me-nots. Thus Jirisan lives up to its stature as a series of flower-studded valleys.



*Source: Excerpt from “Floral Valleys” Written by Seong Hyekyeong, Photographed by Studio Kenn, KOREA (April 2021), Korean Culture and Information Service (KOCIS)*



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## Foreign Investment Ombudsman

The Office of Foreign Investment Ombudsman is an organization established in 1999 to provide close aftercare support and grievance resolution services for foreign-invested companies, and is dedicated to resolving any difficulties that foreign-invested companies face while doing business in Korea.

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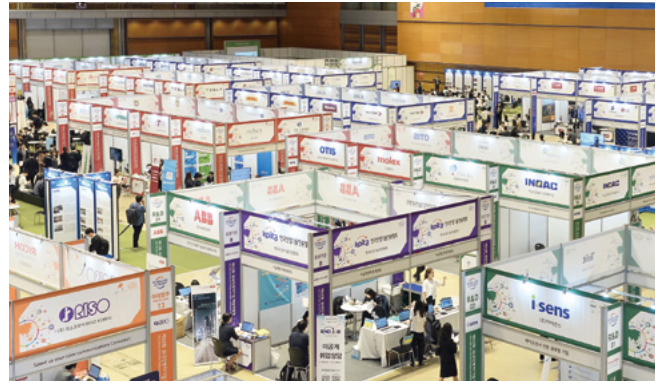
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