

Read on page 10 >>



ACCELERATING DEVELOPMENT

For Merck,
Korea isn't just a place for business—
it's a place for strong collaboration and innovation

Michael Grund Managing Director **Merck Korea**



Economic Analysis

5p

WHAT DOES A TRUMP
VICTORY MEAN FOR
KOREA?



Industry

8p

TRENDS AND
PROSPECTS OF
KOREA'S AI INDUSTRY
IN 2017



Ombudsman's Office

12p

KOREA'S FOREIGN
INVESTMENT
OMBUDSMAN SYSTEM
INTRODUCED AT
WORLD BANK GROUP
FORUM 2016



Zone

13p

POHANG CITY, THE
DRIVER OF ALL
THINGS SCIENCE



Event Overview

6p

INTERNATIONAL
BUYERS AND KOREAN
COMPANIES FORGE
NEW PARTNERSHIPS AT
GP KOREA 2016

KOTRA News

KOTRA & Invest KOREA

3p

Korea News

Trade News,
Government & Policy

4p

KOTRA's Services

Introducing Korea's
SMEs

Economic Indicators

14p

15p



Dear Readers,

On behalf of the Korea Trade-Investment Promotion Agency (KOTRA), let me welcome you to the newly launched *KOTRA Express*, an all-English magazine that covers everything you need to know about Korea's economy, trade and investment environment.

We're well aware that a growing number of foreign investors and buyers want to know more about doing business in Korea and with Korean companies. In order to meet this growing interest, *KOTRA Express* will serve as a channel informing readers with the latest and most up-to-date information on Korea's economic landscape.

On that note, *KOTRA Express* will contain in-depth success stories, economic analyses and event overviews of major KOTRA events for foreign companies, international buyers and Korean SMEs. The magazine also offers insight into how you can more easily work with Korean companies through KOTRA's services. Not only that, we've included information on the latest trade news relevant to your business so that you can better prepare for any possible market changes.

Korea's economy is changing rapidly, which means we need to make profound changes to how we relay such information to our readers. As such, we'll continue to think of ways to improve our channel of communication with you. If you have any suggestions on how we can *KOTRA Express* can better suit your needs, we're always ready to listen.

Sincerely,

A handwritten signature in black ink, which appears to read '김재홍' (Kim Jaehong).

Jaehong Kim / President & CEO of KOTRA

K-GLOBAL SILICON VALLEY 2016 DRAWS LARGE CROWDS

The 5th K-GLOBAL Silicon Valley was held from Nov. 2-3 under the theme '4th Industrial Revolution'. It drew a total of 1,500 participants from companies and start-ups from the virtual reality (VR), artificial intelligence (AI), Internet of Things (IoT) and autonomous vehicle industries.

This year's event was co-organized by the Korea Trade-Investment Promotion Agency (KOTRA)'s Silicon Valley office, National IT Industry Promotion Agency (NIPA) and the Ministry of

Science, ICT and Future Planning (MOTIE). It consisted of 1:1 export consultations, start-up pitches, job fair and investment promotion forums. In particular, participants discussed the future direction of innovation taking place in Korean companies.

Officials from Seoul Metropolitan City and Jeju City also participated in the event to showcase their VR and autonomous driving technology. In addition, a total of 20 companies held job interviews with prospective employees.

KOTRA HOLDS KOREA CONSUMER GOODS SHOWCASE 2016

On Nov. 9-10, MOTIE and KOTRA held the Korea Consumer Goods Showcase 2016 in the city of Ilsan with the aim of expanding exports of Korean consumer products.

Co-organized by the Korea Institute of Design Promotion, the event featured a 1:1 business meeting pavilion in conjunction with Korea's largest premium consumer goods exhibition, Design Korea 2016. A total of 100 distributors from 13 countries and 450 Korean design compa-

nies participated in the event.

Doo Young Kim, Executive Vice President of Strategic Marketing at KOTRA, said, "It is critical to leverage Korea's strengths such as design and consumer goods into key export items in the future. We will not only focus on exporting more consumer goods to major markets, but also on increasing the overall exports of Korean consumption goods by location-specific marketing strategies."

KOTRA HOSTS GLOBAL HALAL MARKET FORUM

On Nov.17, KOTRA hosted the Global Halal Market Forum in Seoul. The forum aimed to analyze the current status of the global halal market and to suggest effective market entrance strategies for Korean companies.

A total of 200 Korean companies attended the forum, reaffirming their keen interest in the fast-growing halal market.

The forum also took a closer look at Malaysia and Indonesia's halal certification system. The world's representative



halal certification institutes, Malaysia's JAKIM and Indonesia's MUI, explained in details the policies and procedures of the certification system.

IK HOSTS KOREAN-GERMAN INVESTMENT FORUM

On November 3, Invest KOREA, the national investment promotion arm of KOTRA, and the German state of Hessen co-hosted the Korean-German Investment Forum coinciding with the arrival of the investment delegation led by Deputy Prime Minister and Minister of the Economy of Hessen, Tarik Al-Wazir. With the support of the Korean-German Chamber of Commerce and Industry, about 100 delegates from Hessen Trade and Invest, foreign-invested companies and Korean companies attended the forum.

Located in Hessen, Germany, Frankfurt is home to the largest Korean economic community in Europe. Hessen has



become a gateway to Europe for Korean companies by providing connections to clients faster than any other region in Europe. Through this forum, practical information for Korean and foreign companies looking to enter the Korean and German market was provided and is expected to help companies plan their overseas expansion in the future.

Trade News

S. KOREA-CENTRAL AMERICA FTA TO TAKE EFFECT

On Nov. 16, 2016, South Korea and six Central American countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama) reached an agreement on a free trade deal. The annual trade volume between these two economic blocs stands at around USD 4-5 billion. The Korea-Central America FTA is expected to rapidly spur each other's

economies. Each country has adopted varying degrees of tariff reduction on different sectors, citing market sensitivity as the reason. It is all the more meaningful, however, as this is the first case for the six Central American countries to conclude a free trade deal with an Asian country.

S. KOREA-VIETNAM AEO MRA TO SERVE AS EXPORT-IMPORT FAST TRACK

South Korea and Vietnam are expected to sign a deal for the Mutual Recognition Arrangement (MRA) of the Authorized Economic Operator (AEO) program by the end of this year, which will boost bilateral trade by providing an export-import fast track with simplified clearance. Under the AEO program, when an individual satisfies the security management requirements of customs (law, internal control system, and safety standards, etc.), Customs accredits the person

as an Authorized Economic Operation and provides the individual with preferential treatment during the clearance process.

As Vietnam is in its initial stage of adopting the program, Korea Customs Service is stepping up efforts to become the first country to strike the MRA deal with Vietnam. The two countries are expected to make a deal by the end of this year.

S. KOREA-EAEU FTA NEGOTIATIONS TO START IN EARNEST

South Korea and the Russia-led Eurasian Economic Union (EAEU) will expedite negotiations for a free trade agreement. As Russia, the centerpiece of the regional economic bloc, started negotiations with Korea, the FTA negotiations will no longer be pursued at a private level but at a governmental level.

Launched in Jan. 2015, the EAEU

comprises of Russia, Kazakhstan, Belarus, Armenia and Kyrgyzstan. The regional bloc has a total population of 180 million. With the implementation of the FTA, both countries will significantly expand their economic territory and find new growth momentum by boosting sluggish bilateral trade and investment.

Government & Policy

SEOUL CREATES A R&D 'CONTROL TOWER' FOR FOURTH INDUSTRIAL REVOLUTION

Seoul Metropolitan City is planning to establish the Seoul Science and Technology Research Institute to coordinate R&D projects in the artificial intelligence, big data and IoT industries, which will become important pillars of the fourth industrial revolution. City authorities said that the institute aims to improve

the city's innovation-driven global competitiveness while nurturing science and technology that befit regional characteristics. The city government said that they will analyze case studies to predict how industries will change in 10 years and what impact such changes will have on local communities.

S. KOREA-JAPAN CHAMBERS OF COMMERCE & INDUSTRY HOST SUMMIT

The Korea Chamber of Commerce and Industry (KCCI) and the Japanese Chamber of Commerce and Industry (JCCI) hosted the 10th Korea-Japan Chambers of Commerce and Industry Summit Meeting on Nov. 8 at the Sheraton Grand Incheon Hotel. About 30 officers of the chambers of commerce of both countries, including KCCI Chairman Park Youngman and JCCI Chairman Akio Mimura, attended the event to discuss mutual assistance and

cooperation in the newly-rising industries.

KCCI Chairman Park said that amid the stagnant global trading market, both countries should tap into abundant growth opportunities in the emerging economies' infrastructure market. Park also added that both countries should expand their scope of bilateral cooperation in the state-of-the-art infrastructure industry, which in turn will create new growth momentum for Korea and Japan.



After Donald Trump's surprising upset win at the U.S. presidential election, many countries—if not the entire world—are wondering what this victory means for their own economy. Given that Mr. Trump has quite the reputation for being eccentric and somewhat bizarre, many worry that he might carry out the same eccentric and bizarre ideals in his policies. But would he? The answer is no. Running a country is not the same as running a company. In a private company, the CEO may be able to call all the shots, but the president of the United States cannot. First, the president must deal with the Constitution. Second, he must persuade Congress. Third, he still has to appease more than half of U.S. citizens who have not voted for him. Tens of thousands of people have already rallied against him all over the nation. Can he turn a blind eye to them? Absolutely not. So among all this uncertainty felt by the public, here are some things we can be sure about.

First, under the Trump administration, the Federal Open Market Committee (FOMC) rate hike seems almost certain. FOMC members have been deadlocked for some time between the dovish and the hawkish, rendering quick action almost impossible. But this will change as Mr. Trump is expected to fill two vacant seats in the FOMC with the hawkish, making them the majority. On top of that, the current FOMC Chairwoman Janet Yellen will be replaced by someone who will try to pursue a rate hike. A higher rate will benefit the people of the middle class as they would be able to save substantially, which in turn leads to more consumption and consequently a more prosperous

banking industry. It will also make the U.S. dollar stronger, giving U.S. citizens greater purchasing power abroad, which is good news to Korea.

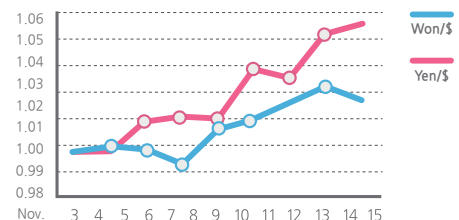
Under the Trump administration, there would also likely be huge federally financed investments in infrastructure across the nation. Bridges, airports, roads and highways are expected to be renovated, upgraded or newly built under the new administration. These public works will definitely raise the nation's growth rate. The federal budget deficit and government bond issues may surge, but not many will care as long as such decisions boost US growth.

The Korean people have also been closely following the election results, as they are curious as to see what this means for the Korean economy. In my opinion, for Trump, pressuring either China or Korea on trade and exchange rate issues may be important but not as imminent as the rate hike and infrastructure investment projects in the U.S. This is because trade talks with other countries require lengthy and tedious negotiations before both sides can come to an agreement.

Also, a booming U.S. economy accompanied by a higher rate hike is one of the best scenarios for Korea under the Trump administration. First, Korea could expect better export performance. As a major part of Korea's export performance is affected by the growth of the U.S., a stimulation of economic growth through

infrastructure investment would activate Korean and Chinese exports to the U.S.

Movement of Korean won and Japanese yen after Trump victory (Nov.3=1.00)



Source: Bank of Korea

Furthermore, a higher rate in the U.S. will induce the depreciation of the won exchange rate, which is also conducive to higher export performance. Of course, some challenges might arise, especially as the Japanese yen depreciated faster than any other currency after the U.S. election. This may mean that Korea's price competitiveness against Japan's may slightly weaken. But despite some bumps in the changing of administrations in the U.S., the Korean economy won't be heavily affected as long as exports continue to surge.

By Professor Se Don Shin
Dean, Sookmyung Women's University
Former Senior Economist,
Bank of Korea
seshin@sm.ac.kr



International buyers turned their eyes to Korea this week for the country's Global Partnering (GP) Korea 2016, an event that helps Korea's SMEs enter the global value chain as a parts supplier to foreign companies. Held on Nov. 15-16 at the K-Hotel in Seoul, this year's GP Korea was held alongside the Ministry of Trade, Industry and Energy's Korea Materials & Components-Ppuri Industry Week.

Organized by KOTRA, 243 domestic SMEs and corporations of middle standing had a chance to promote their products to buyers in 1:1 partnering meetings. 57 major companies from all over the world participated in GP Korea, including big names like China's Huawei Device, Japan's Hitachi High-Tech Materials and India's Minda Corporation. Over 600 consultations took place during the two-



International Buyers and Korean Companies Forge New Partnerships at GP Korea 2016

day event, resulting in USD 23 million worth of contracts and MOUs.

Most notably, China's largest rolling stock supplier CRRC took part in the business consultation meetings. It discussed supply agreements with domestic railway part suppliers regarding high-speed train installation technology and railway equipment. In just the first half of 2016, CRRC saw its overseas orders increase 126 percent to CNY 14.9 billion (USD 2.2 billion). As the overseas high-speed train industry continues to expand, the company attended the event to look for relevant Korean suppliers in this field.

One particular company that was eager to partner up with Korean companies was China's Huawei Device, a leading global information and communications technol-

ogy (ICT) solutions provider. Driven by ongoing innovation and open collaboration, Huawei has managed to establish a competitive ICT portfolio in China and beyond. "The smartphone is no longer just a device; it's a solution that connects the digital world to real life. Korea is known for its electronics and smartphones, and we hope to work with Korean companies that can offer us cutting-edge technologies", says Leostone, Marketing Manager of Huawei Device.

Together with 1:1 business consultations, the GP Consulting Hall was operated on-site to resolve grievances of domestic companies and provide useful information. For SMEs nearing contract signing, in particular, the Consulting Hall provided fruitful discussion on financing, techno-



logical guidance and overseas certification acquisition. As part of government efforts to deliver customized public services and generate new jobs in a creative manner, an initiative also known as

'Government 3.0', K-Sure, Korea Electronics Technology Institute, Korea Testing & Research Institute and Korea Institute for Advancement of Technology participated in the event to resolve any challenges facing domestic companies.

Also noteworthy is the fact that Austria's seven global corporations took part in GP Korea, as they hoped to pursue joint research and development (R&D) projects with domestic SMEs. Ubimet, a weather forecasts provider for Formula 1 competitions, signed an MOU with DIGI-PARTS for the joint development of automobile navigation software. APEX Engineering, a material technology company, also signed an MOU with T4L and agreed to jointly develop carbon fiber reinforced plastic products. To further spur cooperation in the field of R&D, the International Cooperation R&D Forum provided an insider's look at the various funding that organizations in Korea and

Europe could apply for.

Dooyoung Kim, KOTRA's Executive Vice President of Strategic Marketing, said "Despite sluggish exports, domestic parts and materials companies can increase their exports and enter local markets by making joint R&D efforts with overseas corporations. I hope that this year's event will serve as a platform where domestic SMEs and companies of middle standing can upgrade their export performance through joint R&D with foreign companies."

*By Esther Oh
Executive Consultant/KOTRA
estheroh@kotra.or.kr*

Buyer Interview



At Global Partnering Korea 2016,

we had a chance to interview **Annika Roest, Purchaser from UltraShip ApS**. Here's what she had to say about the event.

Please introduce us to your company.

UltraShip started off in 2014. It's a division below the Danish company Ultragas, a wholly owned subsidiary of Sociedad Ultrana Limitada, which is the shipowning/operating unit of the family owned Ultramar Group of Santiago, Chile. The company deals with the operation of gas vessels.

What do you hope to get from GP Korea this year? Do you have any thoughts on how the event can be improved?

We came out here to get to know Korean suppliers to extend our network. We're looking for companies that can provide parts for gas vessels, which include things like valves and engine

parts. We also just signed an agreement with Korean suppliers at an MOU ceremony during this event. But most of all, we're hoping to establish long-term, meaningful partnerships through GP Korea.

GP Korea is a good event because we get to know companies we might not have a chance to get to know. But I think some improvements could be made because there were some companies that didn't match what we were looking for. I think it would be a good idea to have more background information on the potential partners before meeting them.

What are some of the advantages of Korean parts/materials?

We already do business in Korea so we're well aware that Korean companies

offer good quality products. We also receive products from the country very quickly and the companies here offer very good prices. Overall, we're very pleased when it comes to doing with Korean companies.

What are your future plans on collaborating with Korean companies?

We plan on attending a number of events in the future, and many of them are organized by KOTRA. There will be an event in Denmark next year hosted by KOTRA of a similar nature and we're looking forward to participating and getting to more promising Korean companies through these meetings.



Trends and Prospects of Korea's AI Industry in 2017

Although still in its early stage, Korea's AI industry will make more prominent changes to people's consumption patterns in the next year

Re-emergence of artificial intelligence

The term artificial intelligence (AI) was first coined by J. McCarthy at the Dartmouth Conference in 1956. Simply put, AI is technology that artificially creates human intelligence. The scope of AI study has continuously expanded, starting off with the notion of 'computationalism' to the more recent 'connectionism'. Computationalism first emerged as people began to develop computers with the aim of creating machines capable of performing intellectual activities like human beings. However, there were many limitations, especially since machines are unable to communicate with humans. This later gave way to connectionism. As opposed to computationalism, connectionism argues that AI can construct artificial neural networks to imitate the human brain and continuously reduce human errors by identifying similar patterns. Connectionism has been instrumental in bringing about major achievements in the field of AI, including Google's AlphaGo, IBM's Watson and Apple's Cortana.

Changes in lifestyle due to AI

Artificial intelligence technology will naturally bring about changes in the way of life. First, it will change people's consumption patterns and product marketing strategies. In the past, consumers decided to buy a product because of its functions but now, they do so because of the services offered by AI technologies. As a result, the service industry will become more important than the manufacturing industry.

For example, when Apple and Google provide services for autonomous vehicles, the question will not be whether the car runs well on the road, but rather what kind of smart services can it provide for its users. In addition, focusing on electric vehicles

can potentially open doors for other companies which do not have automobile engine technologies. Therefore, technological advancement of artificial intelligence will not only transform the industry, but corporate culture and consumption patterns as a whole.

Trends of major global companies

(IBM) IBM developed an artificial intelligence system called Watson. As of the first half of 2016, more than 3,500 partners are participating in developing Watson, and more than 270 applications are being commercialized. These major companies include ANZ (Australia), Bumungrad (Thailand), CaixaBank (Spain), Metropolitan Health (South Africa) and Red Ant. IBM is trying to formulate a Watson-centered ecosystem that can provide real-time data analysis services to users.

(Google) Google is developing AI technologies to upgrade its engine and develop new applications. Areas of application include home automation (Nest), automobiles (Google car), voice recognition (Google Now) and photo recognition (Google Photos). Google's ultimate goal is to become an artificial intelligence company itself. In order to develop its artificial intelligence engine, Google is focusing on securing relevant technologies mainly through the acquisition of start-ups in the field of recognition (video, face, gesture), natural language processing and machine learning (deep learning), while developing its own artificial intelligence engine.

(Apple) It wasn't until recently that Apple established optimum grounds for technological development in the field of artificial intelligence. The company is now developing technologies only in specific fields such as virtual assistance and automo-

biles. Apple recently hired a large number of researchers (86 people) to integrate artificial intelligence into the field of personal assistance. It's thus working hard to build a strong environment for technological development and securing technological competitiveness by acquiring start-ups like VocalIQ and Perceptio. In October 2015, when these two firms were acquired, Apple CEO Tim Cook said he would develop and integrate technologies only in the areas where they could prove to be competitive.

(Facebook) Facebook is developing technologies focusing on image, sound and natural language processing with a strategy to make the network smarter and more personalized. In December 2013, Facebook presented the possibility of applying artificial intelligence technology to its services by recruiting Professor Yan Le Cun from New York University, an eminent professor in the field of deep learning technology. The company acquired Wit.ai, a speech recognition startup in January 2015, and released a virtual assistant deploying AI technology "M" to the public in August 2015. Facebook is developing technologies largely focusing on drones, artificial intelligence and VR technology. It is also deploying strategies to make its social media applications available anywhere in the world.

To sum up the business strategies of major AI developers, there are three general trends: the support of enterprises, the strengthening of its own applications and the exploring of new business domains. When it comes to supporting enterprises, IBM is the most well-known for developing various applications for Watson. The second strategy is to develop the company's own applications. Google, Apple and Facebook are following this strategy as they have developed or are developing a personal assistant service to captivate their users and to make them use their services at all times. Thirdly, the example of the business expansion strategy is Google and Apple's attempt to develop autonomous vehicles. These companies are using artificial intelligence to explore a new business domain that they have never set foot in before.

Trends of Korean AI companies and 2017 market forecast

(Samsung Electronics) The company introduced 'S Voice', a smartphone application with voice recognition technology. It focuses on developing stable voice recognition technology which specializes in natural language processing. It is also developing technology with quality speech recognition, even in a noisy environment.

(NAVER) Through the use of artificial intelligence, NAVER currently provides users with various functions like N Drive and auto-complete function. When users upload pictures in the cloud system, N Drive automatically classifies and places them in various categories like animal, food, and text. With the auto-complete function, certain search suggestions pop up on the search box as users type in the first few letters based on analysis of their past search results. Internet service providers (for portal, mailing, backup, etc.) such as Google and Apple are developing this technology as their core technology.

(Hyundai Motors) Since 2010, the company has aggressive-

ly expanded its development of autonomous vehicles. In 2012, it succeeded in developing a highway driving support system. Based on images, voice recognition and deep learning technology, the highway support system includes functions such as lane departure warning, lane keeping assistance, rear side warning, vehicle speed control and autonomous emergency braking.

(NCSOFT) NCSOFT established its own AI center, consisting of the artificial intelligence lab and the natural language analysis lab in 2012. In the artificial intelligence lab, researchers are finding ways to combine deep learning technology with the company's gaming system to adjust the level of difficulty according to the skills of the user. In the natural language analysis lab, researchers are mainly developing technologies converting recognized voice into text to facilitate NPC(non-player character)-to-user and user-to-user communication.

But it's not only major companies that are developing their AI systems; SMEs and start-ups are as well. Although they have yet to commercialize their products, various SMEs and startups are developing technologies to apply AI and increase the efficiency of their applications. The number of SMEs developing AI technology is also increasing because there is demand from the government and big corporations. DIOTEK, Cldi, UBIC, KonoLabs, Lunit, Standigm and MindsLab are newly-rising players and they are gaining attention in the market.

Prospects for domestic artificial intelligence industry in 2017

According to the Ministry of Science, ICT and Future Planning, which cited Hyundai Research Institute, the global AI market will grow from KRW 3.6 trillion (USD 3.1 billion) in 2013 to KRW 6.4 trillion (USD 5.4 billion) in 2017. KT Economic Management Research Institute predicted that the market will grow to KRW 27.5 trillion (USD 23.4 billion) by 2030. It is expected that the domestic AI market will increase following such global trends, but there will be no dramatic changes because the industry is still in its infant stage.

Revitalization plan

Although the government has initiated projects such as Exobrain and DeepView with an aim to develop core artificial intelligence technologies, there are still some hurdles to get through to revitalize the AI industry. First, more diverse participants should participate in the process of developing technologies. This will not only increase supply but also demand for relevant technologies. Second, more efforts should be put on creating a code of ethics or moral standards for artificial intelligence, as opposed to the primary focus having been put on developing applications. Third, unnecessary regulations should be adjusted or eradicated in advance.

By Wang-hun Seok
Electronics and
Telecommunications Research Institute (ETRI)
whseok@etri.re.kr



Michael Grund
Managing Director Merck Korea

Founded in Darmstadt, Germany in 1668 by Friedrich Jacob Merck, Merck is the world's oldest science and technology company specializing in the fields of health-care, life science and performance materials. Around 50,000 employees work in 66 different countries to further develop technologies that improve and enhance life. These technologies include cutting-edge systems for scientific research and production and liquid crystals for smartphones and LCD televisions. It's no surprise then that the company has set up shop in Korea to expand its life science and performance material sector. Most recently, Merck established the M-Lab Collaboration Center in Songdo, Incheon to provide biopharmaceutical manufacturers with an ideal environment to solve their toughest challenges and accelerate development and production of new therapies.

Dr. Michael Grund, Managing Director of Merck Korea talks to *KOTRA Express* on what makes Korea a well-cultivated landscape for its technological development.

What made Korea an ideal place for business for a company like Merck?

Korea's economy is characterized by a small number of companies (conglomerates), which represents the lion's share of the Korean economy. These conglomerates have a global footprint and occupy

top rankings in their respective businesses. Merck came to Korea more than 20 years ago and supported the tremendous growth of the Korean economy by close collaboration with these players from the very beginning. The joint success story of the Korean display industry and Merck, the global market leader in display materials, is just one prominent example. Consequently Merck did not only invest into the supply chain and production of its parts, but also in the R&D and application/training centers to mutually benefit both partners. Merck appreciates the continuous support from the Korean government, the country's stable economic environment and the people's can-do spirit. Korea shaped the markets with its unique set-up in the past and will do so in the future. In this sense, the country can be regarded as the "lab of the future".

How can Korea become a more ideal investment and business destination for foreign companies?

We appreciate a stable, predictable business environment, including issues dealing with regulation or taxation

Accelerating Development

For Merck,
Korea isn't just a place for business—
it's a place for strong collaboration and innovation

because we are thinking of making long-term investments. As a local Merck-sub-sidiary, we compete with other Merck subsidiaries for resources; continuous support from the government is very much appreciated so that our headquarters can continue to stay committed and do business in the country.

Does your company have strong business partnerships with domestic companies here in Korea?

The majority of our business is with global Korean companies. We are only successful because we seamlessly collaborate from the earliest R&D stage, which is based on mutual trust and cooperation. This is the major pillar of our success.

What are some of the goals that your company has for Korea and Northeast Asia? Are there any further investment activities that will take place here?

Merck is where our customers are; our business in the Asia Pacific region today already outperforms our business in Europe. We are prepared and willing to



and is the operation site of global Korean players in this field. Merck does everything to support these companies to be successful; that's why we moved our M-Lab to Songdo. In our M-Lab, our customers can explore our products and services, get training that is classroom based and hands-on, develop their processes by easily optimizing them in our fully equipped, non-GMP environment and speed up their overall time-to-market. Together with the continuous support from Incheon city and IFEZ, we can create a more complete bio ecosystem.

What is your advice to foreign companies interested in extending their reach to Asia?

Korea has a proven track record and is ranked at the top in a number of industries. But the global economy is changing and the recipe of the past might not work in the future any more. To master the challenges of the future, global cross-collaboration between companies and organizations is mandatory. This needs to be the common long-term benefit of both partners, and relationships must be founded on mutual respect and trust. I strongly recommend building this relationship first to establish a prosperous business.

By Esther Oh

*Executive Consultant/Invest Korea
estheroh@kotra.or.kr*



invest into future growth engines. In Korea, for example, we are focusing on technologies in electronics and display, biotechnology and other promising future drivers of growth. Our most recent examples commitment include opening our OLED application center last year, establishing M-Lab in Songdo this year and signing a memorandum of understanding



(MOU) with Incheon Free Economic Zone (IFEZ).

Speaking of M-Lab, why did Merck choose Songdo in particular and what does the company hope to achieve through M-Lab?

Songdo in Incheon is one of the world's biotech hotspots, as it hosts R&D

Upcoming KOTRA Events



K-Hightech Forum (California, USA)

Organized by KOTRA and Seoul Business Agency, the K-Hightech Forum will take place in California on

December 5-10. The forum, to take place in Silicon Valley and Los Angeles, seeks to spur investment in Korea's promising companies and expand networks with American companies. The event will particularly focus on industries dealing with IoT, autonomous vehicles, VR, AR, IT, games and clean energy. 11 promising high-tech companies based in Seoul and Daejeon will participate in the event while 50 local venture capitals, accelerators and angel investors will attend. The event will also include networking meetings and presentation pitches for investors.

Korean Expo 2016 (Mumbai, India)

The Korean Expo 2016, organized by KOTRA and hosted by MOTIE, will take place in Mumbai, India from Dec. 19 to 20. Held at Bombay Exhibition Center (Hall 5), approximately 100 Korean companies will attend to showcase their consumer goods, electronics, cosmetics and fashion products to 500 buyers from India and the Southwest Asia region. The Korea-India Cooperation Forum and Consumer Goods Showcase are also scheduled to take place on the sideline.

Korea's Foreign Investment Ombudsman System Introduced at World Bank Group Forum 2016



On the invitation of the World Bank Group (WBG), I visited its headquarters in Washington D.C. to attend the “Investment Policy Forum 2016” on Nov.1. In particular, I participated in the high-level panel discussions that enabled various investment stakeholders to gain a deeper understanding of key issues. These include the political economy of regulatory conduct affecting retention and expansion of FDI and the systemic investment response mechanisms enabling a more coordinated and timely response of governments in addressing issues arising from investors.

Within this context, I had the opportunity to present on Korea's Ombudsman system and share the recent major operational reforms that the Office of the Foreign Investment Ombudsman (OFIO) has gone through since its founding in 1999. Specifically, our office has recently shifted our grievance-collection system from ‘passive call-waiting’ to ‘proactive outreach’. Previously, nine “home doctors” used to await emergency calls regarding foreign investor grievances from foreign-invested companies in Korea. But home doctors have rarely received calls since then. Even if they did receive the call, it was too late to respond properly. To prevent this from occurring, we now proactively reach out to companies to listen to their complaints and problems. Under the leadership of the

Ombudsman, we go out in small groups and prescribe solutions on-site after carefully listening to business-related challenges.

Another operational reform is that we have organized a new senior advisory group comprising of renowned scholars, retired professors and retired high-ranking government officials. These days, foreign companies with more advanced technologies suffer from grievances due to the complexity of the issues involved. For the same laws and decrees, different government agencies have different interpretations. Consequently they have to pay heavy taxes and fines. When things get worse, they wrap up their business and leave the host country. To avoid such unfortunate events, we utilize the high level of expertise of senior advisers. By effectively leveraging their professional inputs, we can resolve the grievances at relatively smaller expenses.

The purpose of the forum was to maximize the investment potential of international trade and investment agreements. The World Bank is keen on the flow of FDI as it believes that this brings substantial benefits to the world economy and particularly to the economies of developing countries. The benefits to the host country include easier access to world markets, transfer of capital, technology and managerial skills. To realize the maximum benefit of FDI, the World Bank

believes that foreign investment should not only stay in the host country but should also be expanded. To make this task possible for their client countries, namely developing countries, the Bank is trying to design a coherent investment policy and promotion strategy that can be adopted by their client governments.

According to the Bank's observations, many developing countries attract foreign-invested companies but many of them also leave the host countries for two reasons: they realize that the various incentives promised by the host governments no longer exist or there is no place to go when they encounter unexpected problems and difficulties except through an expensive court process. But the Bank people say that Korea is exceptionally different, as the country has the Ombudsman system which provides necessary services for foreign investors. As such, the World Bank has ranked Korea as the fifth easiest place to do business.

The forum came to an end by reviewing the result of the Bank's recent research on the failures of FDI in developing countries. The research team points out that macroeconomic instability and political risks are two principal factors that would make foreign investors leave the host countries.

Due to many factors taking place both inside and outside the country, Korea should take heed of potential risks that might undermine its macroeconomic stability and political landscape. If Korea isn't ready to preemptively manage such risks, the country could end up facing another economic recession, most notably in the field of FDI. Therefore, the country should pay close attention and manage such risks to prevent any issues from emerging in the future.

By Dr. Jeffrey I. Kim
Foreign Investment Ombudsman
jeffikim@kotra.or.kr

Pohang City, the Driver of All Things Science

The Pohang Fusion Tech District and POSTECH have been driving Korea's robotics industry on a global level



Long known as the hub of technology and research & development (R&D), Korea now has its eyes set on the robotics industry.

Last month, Korea announced that it would inject KRW 500 billion (USD 445 million) into the robotics industry over the next five years. The country has 20 pilot projects scheduled for the next two years and is actively developing and commercializing advanced manufacturing robots. The Ministry of Science, ICT and Future Planning also announced it would spend KRW 2.2 trillion (USD 1.9 billion) over the next 10 years to foster self-driving cars, smart cities, artificial intelligence (AI), virtual reality (VR) and augmented reality (AR).

For foreign investors looking to enter the fast-developing industry, they should take a close look at Pohang City, located in North Gyeongsang Province.

Location

Pohang City is the main seaport of the Daegu-Gyeongbuk region on Korea's east coast. It is located about 110 km north of Busan and about 360 km southeast of Seoul. By train, it is 1.5 hours to Daegu, and 2-3 hours to both Busan and Seoul. The Pohang Airport also provides domestic access to other parts of Korea.

In addition, the Pohang Port boasts excellent conditions as a bridge to the Daegu Metropolitan City and the North Gyeongsang region. Divided into the New and Old Port, the new port is respon-

sible for supporting the steel industry such as POSCO, while the old port handles sand and oil products.

Pohang is also part of the Daegu-Gyeongbuk Free Economic Zone. Established in 2008, the Daegu-Gyeongbuk Free Economic Zone (DGFEZ) offers customized facilities and infrastructure to companies operating in the Korea and Asia-Pacific market.

Pohang Fusion Tech District

Located in the heart of Korea's East Coast Energy Cluster is the nation's largest wind power and nuclear complex, also known as the Pohang Fusion Tech District. The district is especially accessible to two major ports, and is well suited for companies looking to deliver goods either internationally or to the Korean market. The region is looking to house high tech industries in the sustainable energy, biotechnology and industrial material industries. The district will provide land for the bio-medical, new materials, energy and R&D industries as well as foreign schools and international hospitals.

As part of the DGFEZ, the Pohang Fusion District provides foreign-invested companies and developers with customized financial support in the form of tax exemptions, cash grants, reduced rent and other subsidies in accordance with the Free Economy Law (Article 16 Clause 1). In particular foreign-invested companies in the manufacturing and R&D industries are eligible for up to 100 percent tax exemption for the first five years and 50 percent tax exemption for the following two years.

Pohang University of Science and Technology (POSTECH)

Along with the Pohang Fusion Tech District, Pohang University of Science and Technology (POSTECH) is dedicated



to science and technology for budding engineers and technological development. POSTECH consistently ranks as one of the best universities in the world and is highly regarded as a national research facility.

The Korean government and foreign businesses have also shown its support of the institute. Four government-operated research centers of the Institute for Basic Science (IBS) to promote research in basic sciences are located at POSTECH. In addition, the Max Planck Society of Germany and POSTECH established the Max Planck-POSTECH Center for Attosecond Science and the Max Planck-POSTECH Center for Complex Phase Materials.

Furthermore, the POSTECH Biotech Center was founded in 2000 to incubate the development of biotechnological sectors such as immunology, pharmaceuticals and nanobiotechnology. Its Smart Campus system allows students to access scientific and technological information via smart phones and mobile devices as well as laptops. In 2010, for the first time among Korean universities, POSTECH implemented a Desktop Cloud Service, providing a convenient and secure computing environment.

*For more information,
visit eng.pohang.go.kr*

Did you know?

KOTRA offers you a quick and easy way to buy Korean products!



buyKOREA is the fastest way to view products and make online transactions with Korean suppliers. You can make payments with the KOTRA Online Payment Service (KOPS), an easy-to-use, secure online payment service that enables non-Korean buyers to pay with their credit card (Visa, Mastercard, JCB). This means you can save time since you won't have to go through the hassle of making offline transactions. Realtime shipping status of your package is also available on the buyKOREA website once the seller has shipped the product through the Express Mail Service (EMS).

For more information, check out buyKOREA.org.

What are the benefits of KOPS?

- 1) Securely receive ordered product from Korean exporters
- 2) Saves time as you won't have to go to the bank in person
- 3) Enables buyer to enjoy 30-day credit granted by credit card issuer

How to use KOPS



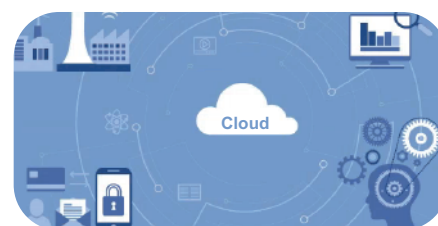
Each month, KOTRA Express introduces one Korean SME that seeks to expand its network. In the December issue, we take a look at one of Korea's most promising IT companies.



Established in 1994, MDS Technology is a fast-growing leader of embedded solution companies in Korea. MDS Technology provides comprehensive, cutting-edge embedded solutions in diverse sectors such as the automotive, mobile, digital device and aerospace industry.

With branch offices in countries like Singapore, India and Thailand, MDS Technology also provides Window Embedded OS and Windows Mobile Solution for partners in Southeast Asia, India and Oceania. The company not only develops software development tools, it also provides debugging solutions (TRACE 32) for design automation, test automation and invehicle infotainment. Most notably, the company participated in the Ministry of Trade, Industry and Energy's International Materials & Components Forum on Nov.15-16 to showcase its state-of-the-art technology.

As a unique IT convergence solution company, MDS Technology has attracted a prominent client base of about 1,500 companies, including Samsung, LG, Hyundai and SK. As it continues to expand its business to the ICT field, including IoT and big data, MDS Technology shows no sign of slowing down.



Contact Info:

MDS Technology

Address: 3F Pangyo Seven Venture Valley, 17, Pangyo-ro 228beon-gil Bundang-gu, Seongnam-su, Gyeonggi-do, 13487, Republic of Korea

Tel: +82-31-627-3000

Fax: +82-31-600-5169

E-mail: chul@mdstec.com

Economic Indicators

GDP	2011	2012	2013	2014	2015
Nominal (USD million)	1,202,700	1,222,400	1,305,400	1,410,000	1,377,500
PPP (USD million)	1,559,447	1,611,273	1,640,377	1,685,033	1,748,777
GDP Growth Rate (Y-O-Y) (%)	3.7	2.3	2.9	3.3	2.6

Source: The Bank of Korea, November 2016

GDP Per Capita	2013	2014	2015	2016
Nominal	25,998	27,989	27,222	27,632.8
PPP	33,824	35,436	36,612	37,948

(Unit: USD)

Source: International Monetary Fund, October 2016

Foreign Trade	2011	2012	2013	2014	2015	Jan.-Oct. 2016
Exports	555,214	547,870	559,632	572,665	526,757	405,076
Imports	524,413	519,584	515,586	525,515	436,499	330,359
Trade Balance	30,801	28,285	44,047	47,150	90,258	74,717

(Unit: USD million)

Source: Korea International Trade Association, November 2016

KRW-USD Foreign Exchange Rate	2010	2011	2012	2013	2014	November 2016
	1,156.3	1,108.1	1,126.9	1,095.0	1,053.2	1,178.9

(Unit: KRW)

Source: The Bank of Korea, November 2016

Balance of Current Account	2011	2012	2013	2014	2015	Jan.-Sept. 2016
	18,655.8	50,835.0	81,148.2	84,373.0	105,870.7	72,078.5

(Unit: USD million)

Source: The Bank of Korea, November 2016

The following tax information is translated from Korean for foreign-invested companies, and is not legally binding.

Q. What is the amount of acquired treasury stocks that is deducted from unappropriated corporate earnings?

A. 'The amount of treasury stocks acquired by a listed stock corporation during the relevant business year as prescribed by Ordinance of the Ministry of Strategy and Finance and retired within one month' (Article 93 (10) 3 of the Enforcement Decree of the Corporate Tax Act) is deducted when calculating corporate tax on unappropriated corporate earnings. Such an amount shall be the amount of all treasury stocks acquired in accordance with the methods and procedures prescribed by Article 341 of the Commercial Act retired within one month of the date of final acquisition.

Source: Ministry of Strategy and Finance (Nov. 1, 2016)

Q. What form of division is required to defer a divided company's transfer income?

A. A domestic company divided its manufacturing business division and lease business division and established a separate company consisting of the divisions. In this case, if the newly created company comprehensively succeeds the two business divisions and their assets and liabilities, and the new company can be operated independently with the main physical and human resources remaining identical to before the division, it shall be deemed that the requirement in Article 46 (2) 1 (a) of the Corporate Tax Act is met, and therefore the transfer value of the net assets received by the divided company shall be the book value of net assets (refer to the formula below).

* Transfer value of net assets of a divided company = Transfer value received by a divided company, etc. from a company established through division – Book value of net assets at the registration date of division of a divided company, etc.

Source: National Tax Service (Nov. 2, 2016)

Q.

In the case that a vessel transferred through a bare boat charter hire purchase contract is transferred, how is the tax base for value added tax calculated?

A.

In the case that a vessel acquired through a bare boat charter hire purchase contract (hereafter “vessel in question”) is transferred to a new company created through an unqualified spin-off, the tax base for value added tax for the vessel in question shall be decided based on Article 29 of the Value Added Tax Act.

* Article 29 (1) & (3) of the Value Added Tax Act Article 29 (1) The tax base for value-added tax on the supply of goods or services shall be the total value of all supplies of goods or services provided during the relevant taxable period.

Article 29 (3)

The value of supply under paragraph (1) means each of the following. In such cases, it shall include payments, rates, fees, or all other things of value, whatever their names are, which are provided by recipients of goods or services, but exclude value-added taxes:

1. Where payments are given in money: The payments: Provided, that when payments are given in any foreign currency or other foreign exchange, they mean the value converted in the manner prescribed by Presidential Decree
2. Where payments other than money are given: The market price of goods or services supplied by the supplier himself/herself
3. Where a business is closed: The market price of goods in stock at the time of closing the business
4. Where deemed that goods or services are supplied under Articles 10 (1), (2), (4) and (5) and 12 (1): The market price of goods or services supplied by the supplier himself/ herself
5. Where deemed that goods are supplied under Article 10 (3): The value prescribed by Presidential Decree based on the acquisition value, etc. of the relevant goods
6. Where goods or services are supplied through credit sales, installment sales, etc.: The value prescribed by Presidential Decree in consideration of the types, etc. of supply

Source: National Tax Service (Oct. 7, 2016)

Q. In the year-end tax adjustment, what income deductions apply to residents and non-residents?

Type		Deductibility		Note
		Resident	Non-resident	
Total wage & salary income		Including foreign-source income	Domestic-source income	Foreign residents under Article 3 of the Income Tax Act, liable to pay tax on foreign-source income when it is paid in or remitted to Korea
Deductions for wage and salary income		○	○	
Personal deductions	Basic deductions (Self, spouse, dependent family)	○	Self only	
	Additional deductions (The aged, the disabled, qualified female taxpayer, etc.)	○	Self only	
Pension contribution deduction		○	○	Deductible for participants of a pension plan
Special deductions	National health Employment Insurance	○	X	
	Housing fund	X	X	A foreigner is not deemed a householder
Other income deductions	Pension savings etc.	○	X	
	Contribution paid to small-sized company, & self-employed mutual aid association	○	X	
	Home purchase savings	X	X	A foreigner is not deemed a householder
	Investment association	○	X	
	Credit card usage	○	X	
	Interest Payment for Housing Rental Loan without a Lump-sum Payment	○	X	
	Workers in S/M enterprises which maintain the same employment level	○	X	
	Long-term Collective Investment Securities Savings	○	X	
	Employee stock ownership association contribution	○	○	Deductible for members of an association
Tax credits	Tax credit for wage & salary income	○	○	
	Child Tax Credit	○	X	
	Retirement account tax credits	○	X	
	Special tax credit (insurance medical, educational, donation)	○	X	
	Tax credit for monthly Rent	X	X	A foreigner is not deemed a householder
	Taxpayer association credit	○	○	For tax withheld by an association for its members
	Foreign tax credit	○	X	
	Standard tax credit	○	X	

For more information, please contact the International Tax Resource Management Office of the National Tax Service (82-44-204-2873~4).