

GFEZ Journal

Winter 2016



The power of sharing that enables continuous growth

In winter, wild geese embark on an arduous 40,000-km flight. It is thanks to the flock as a whole that they can endure the long travel with flaps of their small wings. Flapping their wings creates lift in the air current that make flying in a flock 71% easier than flying solo. Similarly, the new development strategy our society has found amid severe competition is sharing and moving forward together. The Chinese character for person, 人, is widely used in Korea and symbolizes two persons leaning against each other. We can achieve continuous growth by helping each other in our advance forward like the character.



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GFEZ Introduction

The Gwangyang Bay Area Free Economic Zone, or GFEZ, was designated in October 2003 to build Northeast Asia's business center. Armed with the advantageous location of being at the center of Northeast Asia's marine transportation, the comparative advantage of a developed industrial infrastructure, and a business-friendly environment boasting a range of support and deregulation measures, we are the frontrunner among Korea's free economic zones.

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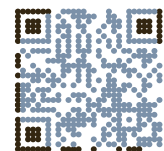
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62th Theme

Written by Sim Nam-sik
Jeollanam-do Provincial Assembly Secretariat

Snowy Morning

Downy white snow
dances in the dark,
and a morning of joy arrives
covering all the sorrows in the world.

Old pine trees
wear white wedding veils.
Everywhere it snows,
a mysterious yet beautiful sight appears.

Snow accumulated on trees
flies in the wind.
Wherever it stops,
brilliant snow flowers bloom.

A nameless poet's
exclamation,
It becomes a poem and a song
tidying up the snowy morning.

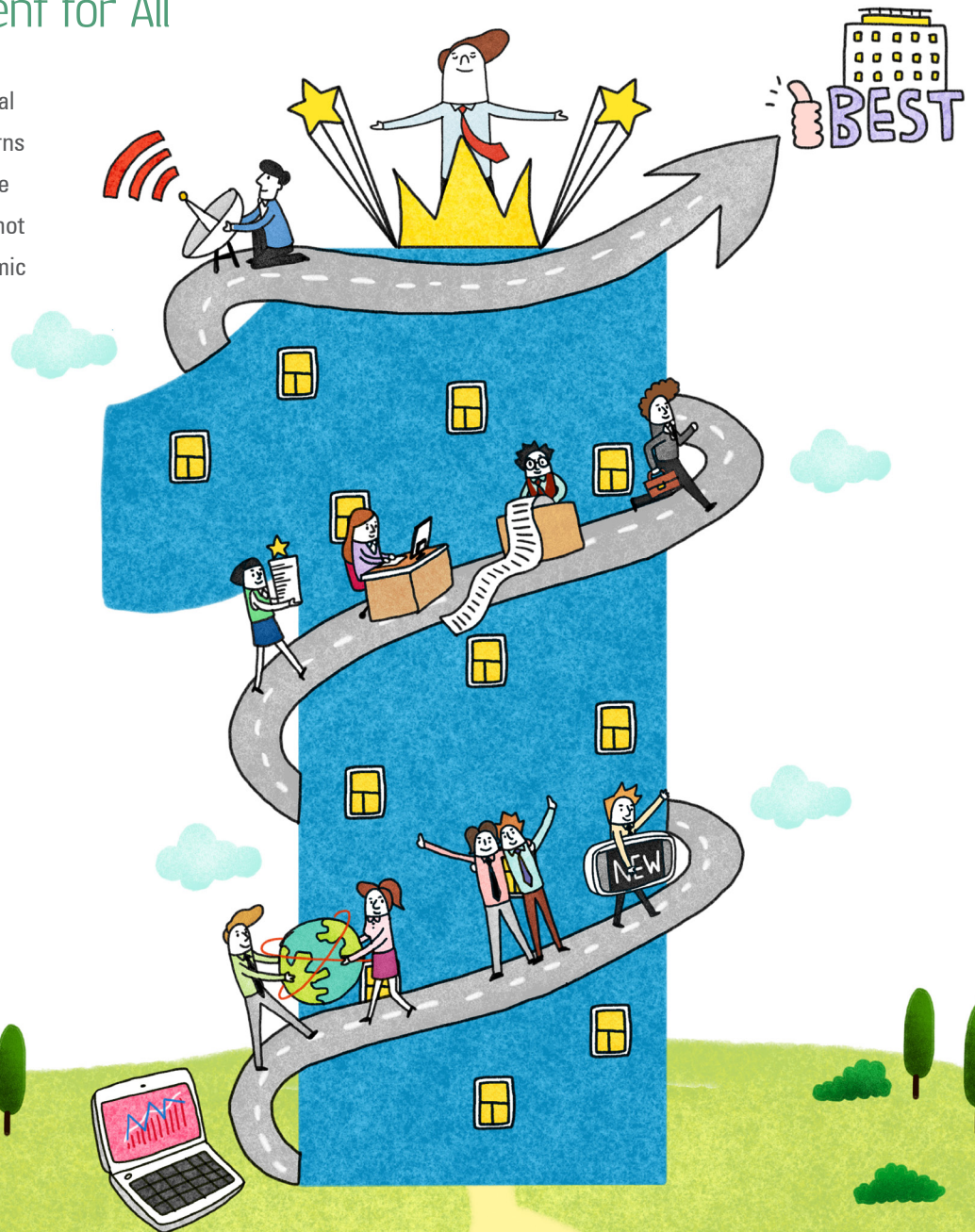




Theme Story.

Sharing Economy, the Path to a World of Advancement for All

The sharing economy is becoming a global movement to weather economic downturns and reduce environmental pollution. In the sharing economy, things are recognized not as objects to own but to rent, and economic activities are conducted accordingly.



The annual general meeting of the WEF (World Economic Forum) held early this year was about the fourth industrial revolution. All industries are straining under the global economic downturn, highlighting the need for new drivers of growth. Nations around the world are, therefore, taking action to lead the fourth industrial revolution. For instance, global ICT companies are competing to seize first-mover advantage in AI and IoT.

The fourth industrial revolution is about connection. Its greatest representatives, Google and Facebook, can be seen as the rulers of the data world. Their enormous profits derive from data. The more users use their services, the greater the value of their search engines and social networks. Then, they sort and analyze such collected data and use it to sell ads. The world is increasingly becoming one, and the power of the market is strengthening.

High-growth values generated by the sharing economy

The Davos Forum defined 2025 as the starting year of the sharing economy. This was meant to encourage change in the concepts of ownership and consumption. In the sharing economy, things are recognized not as objects to own but as those to rent, and economic activities are conducted accordingly. The premise is collaborative consumption where products and services are shared by many people. The sharing economy has emerged in response to the 20th century's capitalist economy, characterized by mass production and mass consumption. Not only products but also services and facilities are rented by individuals for as long as they need without owning them. They rent out things they do not need to others to complete the cycle of collaborative consumption. PwC (PricewaterhouseCoopers), one of the world's Big Four auditors, estimated last November that the global market of the sharing economy would multiply 20 times from 15 billion dollars in 2014 to 335 billion dollars by 2025.

Success cases of sharing economy-based businesses

According to the Wall Street Journal, which ranked start-ups around the world in 2015, Uber was no. 1 followed by Xiaomi and Airbnb. Uber, an online transportation network company, did not have expertise in transportation but has

come to dominate the industry through data analysis. The situation is similar with Airbnb, a homestay network. They do not own any property. Uber does not own even one car and Airbnb does not have a single lodging. The conventional inventory means nothing to them, hence their high margins. Uber basically connects passengers and cars and charges 20% of the fare as a fee. The drivers take 80%. It is a mobile driving service reservation and car sharing service provider and has grown so rapidly that it truly represents the sharing economy. To Airbnb, both owners of properties that can be shared like detached houses, flats, and vacation homes, and consumers who want to rent them are customers. It monopolizes information on the credibility and reputations of owners and consumers.

Toward a sharing economy where people share things and advance together

The sharing economy is emerging as a movement that looks for ways to weather hard economic times and to reduce environmental pollution. Beautiful Store is a recycling store and charity organization run by a civic group that sells used products donated and uses the proceeds from such sales for the public good. It serves to protect the environment in that it recycles used products and is part of a new community campaign in that it connects people through reuse of resources. It is also a participatory charity campaign as its proceeds are used for the public good. Beautiful Store contributes to society's ecological and environment-friendly change through reuse and recycling of resources; assists the underprivileged and public-interest activities both at home and abroad; and helps build civic consciousness and grassroots communities. Kenneth Arrow, a laureate of the Nobel Prize in Economic Sciences, said, "Trust is an important lubricant of a social system and a commodity that reduces transaction costs and thereby increases economic value. Trust is not a commodity that can be issued by the government or directly bought from the market as it is society's common asset that takes lots of time and effort to accumulate." For the sharing economy to continue to develop, the social economy should be pursued where people move forward 'together' with each other based on trust.

GFEZ HOT Topic

Written by the Editorial Department

World-class university leading the ocean energy industry

A University of Aberdeen Campus in the Hadong District Will Boost the Offshore Plant Industry

The UK University of Aberdeen, known for its world-class faculty, ample experience in facility operation, and access to the latest information and technology through cooperation networks with relevant industries, has approval to establish a campus in the GFEZ, which will further the development of Korea's offshore plant industry.



The Ministry of Education approved the establishment of a UK University of Aberdeen campus in the Galsa Bay Ship-building Industry Complex of the GFEZ's Hadong District as of August 5. The campus is set to open in March 2017 and will recruit 78 students (33 masters of engineering students, 20 doctoral engineering students, and 25 MBA students) in its first year.

Program			Entrance quota	Term of study	Tuition
Program	Concentration	Degree			
Engineering	Petroleum engineering	Master	33	1 year	KRW 20 million/year
	No concentration	Ph.D (PGR)	20	3 years	KRW 16 million/year
Management	Management & energy management	MBA	25	1 year	KRW 39 million/year
			78		

Established in 1495, the University of Aberdeen stands shoulder to shoulder with other prestigious universities of the UK such as the universities of Oxford, Cambridge,

Edinburgh, Glasgow, and St. Andrews. One of the world's leading universities in the energy and offshore-plant industries, it has produced five Nobel Laureates in chemistry, physics, and medicine. It ranked 55th in terms of research results among the world's 750 prominent universities (2015 CWTC Leiden ranking); 137th in the 2016 QS (Quacquarelli Symonds, a British university evaluation agency) World University Ranking; and 42nd in 2015 by THE (Times Higher Education, another British agency).

The University of Aberdeen is located in Aberdeen, "Europe's capital of energy" and a "global city of energy," and specializes in ocean energy with some 140 world-class professors offering excellent lectures in energy. It also enjoys easy access to the latest information and technology through its extensive cooperative networks with major local petroleum and gas industries.



The Korean campus of the University of Aberdeen will help lay the foundation for R&D in the offshore plant industry and greatly revive and enhance the competitiveness of Korea's shipbuilding and marine industries.



The university was invited to establish a campus in Korea to help the domestic offshore plant industry to overcome its difficulties, namely, complete reliance on foreign sources for original design engineering technology and its less-than-20% localization ratio of offshore plant equipment and materials. One of the major causes for deficits at the three major local shipbuilders is the lack of specialized manpower for design and management in the offshore plant industry. The government is currently pushing ahead with extensive restructuring of the shipbuilding and marine industries. It is time for companies to invest substantially and for the government to provide much-needed support to train high-level manpower and use such manpower for the purpose of revitalizing the offshore plant industry. The University of Aberdeen has specialized programs in design engineering for offshore plants, energy management,

and other fields. With its well-established networks with British companies, it will help establish a strong foundation for R&D over the long term. Its Korean campus is expected to do much to revitalize and greatly improve the competitiveness of Korea's shipbuilding and marine industries. The GFEZ's Hadong District has experienced many challenges in its development, but the University of Aberdeen campus will be a turning point, allowing the development of the Galsa Bay Shipbuilding Industry Complex (562 ha), Daesong Industrial Complex (136 ha), and Duwoo Leisure Complex (264 ha) as planned. This will attract corporate investment, and finally lead to the development of Deokcheon Eco-City (255ha) to accommodate 10,000 residents, completing the development of the district. Once this is done, the GFEZ will truly become the center of Korea's offshore plant industry with a great boost in its population.

GFEZ Brief News

BUSINESS

01 /

Japanese and Taiwanese Plastic Companies Tour the GFEZ

In connection with the 41st Far East Asia Plastics Industry Conference



The GFEZ Authority gave a tour of the GFEZ's industrial facilities on October 6 and 7 in connection with the 41st Far East Asia Plastics Industry Conference. Representatives from 32 plastic companies from Japan and Taiwan joined to see the POSCO Steel Works, the Yeosu National Industrial Complex, Gwangyang Port, the Yulchon Industrial Complex, and the Sepoong Industrial Complex where a functional chemicals cluster will be formed. Director Kishimura of the Japan Plastics Industry Federation, who led the Japanese delegation, was impressed with the excellent industrial infrastructure and the potential of the Sepoong Industrial Complex for supplies of raw materials and exports, and promised to actively

promote the complex to those members of the Federation interested in foreign expansion. Board President Tsai Ming-chung of the Taiwan Plastics Industry Association led the Association's 18 members and expressed high expectations about opportunities using Gwangyang Port's excellent logistics

investment from companies dealing with functional chemicals and advanced parts and materials.

The delegation first visited Lyon, where there is a concentration of French chemical companies, and talked with resident companies in a chemical industry cluster. They promised to support corporate activities in both the GFEZ and Lyon and to jointly identify possible cooperative projects. They also visited individual companies in the area of advanced parts and materials like SATMA PPC SAS, JST Transformateurs, and DESCOTE for investment consultations. Their next stop was Dusseldorf to meet potential investors like Eifeler Vacotec and IPSEN International GmbH. The city hosts numerous advanced parts and materials companies, and the delegation talked with the Chamber of Commerce and Industry about mid- and long-term ways to cooperate. In London, they focused on identifying companies that are likely to move overseas as a result of Brexit.

BUSINESS

02 /

GFEZ Commissioner Gwon O-bong Promotes the Sepoong Industrial Complex in Europe

Publicizes the formation of a functional chemicals cluster and visits potential investors

A GFEZ investment attraction delegation led by GFEZ Commissioner Gwon toured through Lyon in France, Dusseldorf in Germany, and London in the UK from October 10 to 18 to actively promote



BUSINESS

03/

The GFEZ Authority Concludes an MOU with Shinhan Bank

Mutual cooperative system to be created to boost foreign investment attraction efforts



The GFEZ Authority concluded an MOU on October 20 with Shinhan Bank (President Jo Yong-byeong). Through the MOU, the Authority intends to use the bank's global network to identify promising companies overseas and jointly hold investment presentations. For its part, the bank promised to provide prompt and preferential financial services to resident companies as well as prospective residents in the GFEZ. Commissioner Gwon said, "We will actively support foreign companies investing in the GFEZ, in such ways as rendering investment consultation, arranging financial assistance, brokering cooperation between domestic and overseas companies, and resolving inconveniences they may experience."

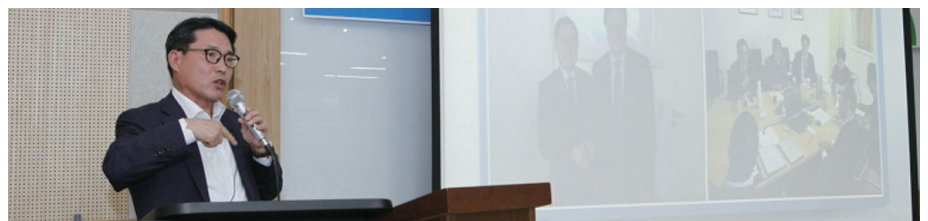
BUSINESS

04/

The GFEZ Authority Brings Local University Students to the GFEZ's Resident Companies

Accomplishing two objectives at the same time: finding jobs for students and resolving the shortage of labor for companies

Forty-five students soon to graduate from local universities visited 15 of the resident companies in the GFEZ including Hyundai Engineering & Steel Industries over a



period of eight weeks. The students had hands-on experience at companies in different businesses including machinery, electronic information communications, computer control, welding, and quality management. The host companies let them participate in actual operations and have first preference in hiring the students when the program ends. Some 220 students have participated in this program over the last five years to acquire professional skills required at industrial sites. Mentoring by the companies greatly improved the students' awareness of small yet promising local companies.

BUSINESS

05/

The GFEZ Authority Actively Attracts Japanese Companies

Publicity for the functional chemicals cluster and foreign investment zone in the Sepoong Industrial Complex

From October 24 to 28, the GFEZ Authority solicited investment from companies dealing with functional chemicals and advanced parts and materials in Tokyo and Fukuoka. Jointly with the Nikkan Kogyo Shimbun newspaper and the Kyushu Associations of Independent Entrepreneurs, they identified potential investors, invited economic organizations' officials, and made presentations on the GFEZ's industrial infrastructure. To attract

Japanese companies to the Sepoong and Haeryong Industrial Complexes, which the GFEZ is currently concentrating on, they met with individual companies or small groups of them and provided consultations. In Tokyo, they visited manufacturers of car seat frames, machinery oil, medical equipment, and others. In Fukuoka, they met manufacturers of electric and electronic machinery, plasticization, and superprecision machinery as well as port logistics and warehousing companies in connection with Gwangyang Port. They also participated in the 2016 Fukuoka Manufacturing Fair to match Korean and Japanese businesses and identify Japanese parts and materials companies with excellent technology. Those companies that expressed interest in the GFEZ will soon be invited to visit and see its facilities themselves.

GFEZ Brief News

BUSINESS

06/



A Small but Strong Company in R&D Helps Boost the Local Economy

Hankang Heavy Industry in the Yulchon Industrial Complex

GFEZ Commissioner Gwon visited Hankang Heavy Industry (Representative: Seo Byeong-yeong) in the GFEZ on October 27 to look around the site and talk about the business situation. The company moved into the GFEZ's Yulchon Industrial Complex in 2011. It designs and manufactures such industrial facilities as steel structures and steel-making facilities. As parts of its continuous efforts to develop technology and improve quality, it participated in the first technology exposition held by Hyundai Steel in October 2016. The company is currently preparing for mass production of products it showed at the exhibition. With multiple patents for coil strain relief pallet jacks, separation systems for buckling coil, strip chip removers, and other applications, Hankang Heavy Industry continues to invest heavily in securing and developing specialized personnel for technology development to better weather changes in industry paradigms and economic slowdowns. For instance, it regularly participates in R&D efforts by the Korea Industrial Complex

Corporation and Jeonnam Techno Park. In the talks, Mr. Gwon introduced the Authority's various support measures to resolve difficulties experienced by resident companies and promised active support in this regard.

BUSINESS

07/



The GFEZ Authority Concludes Investment MOUs with Resident Companies

Two small but strong companies, Kowas and Koins, to invest KRW 14.3 billion

The GFEZ Authority concluded MOUs with two resident companies, Kowas and Koins, on November 2. They will closely cooperate to implement these investments at the earliest time possible. Kowas (representative: Kim Sang-cheon), recognized by the Ministry of Maritime Affairs and Fisheries for new technology, will invest KRW 10 billion to build a factory on a 24,753m² site in the Haeryong Industrial Complex to produce environment-friendly buoys that will replace styrofoam buoys, one of the main sources of marine pollution. Koins (representative: Choi Myeong-hwan), a manufacturer of piping inspection devices (intelligent pigs), will invest KRW 4.3 billion won in a site of 16,500m² in the foreign

investment zone to be completed next June in the Sepoong Industrial Complex. Mr. Gwon said, "The GFEZ Authority will do everything it can for the investors to successfully settle in the GFEZ and make even more efforts to increase the investment value of the GFEZ."

BUSINESS

08/



"The Future of Jeollanam-do Province's Medical Equipment Industry" Symposium Held

Need to nurture the industry as the province's new growth driver and support measures

Gwangyang Health Sciences University (President Lee Seong-ung) held a symposium, "The Future of Jeollanam-do Province's Medical Equipment Industry," at the large conference hall of the GFEZ Authority on November 2. The symposium, hosted by the University and organized by the Authority, was joined by some 100 representatives of the local communities. President Lee welcomed the participants, emphasizing the need to nurture the industry as a new growth driver to replace the declining steel-making and shipbuilding industries. He cited the GFEZ's industrial infrastructure,

concentration of relevant industries, and networks among industry, academia, research institutes, and government agencies as great conditions for the development of the medical equipment industry. Chief Director Seon Gyeong of the Osong Medical Innovation Foundation gave a presentation, followed by a lively discussion on ways to develop the province's medical equipment industry which rather lags behind. CEO Kim Eun-yeong of MEDONE INNOTECH, then took the podium to explain the reason the company moved its factory from Gunpo, Gyeonggi-do to the Yulchon Industrial Complex as well as future plans. GFEZ Commissioner Kwon remarked, "The medical equipment industry in our region can surely be competitive based on the GFEZ's chemical and metal industries when joined by a stronger R&D basis, support measures, and efforts to attract relevant companies." "The GFEZ will devise a strategy to nurture the industry through cooperation with all relevant parties, and attract investment accordingly," he added.

BUSINESS

09/

GFEZ Commissioner Gwon Attends the 17th Meeting of Commissioners of the National Free Economic Zones

Central government support requested, and joint suggestion adopted

GFEZ Commissioner Gwon participated in the 17th Meeting of Commissioners of the National Free Economic Zones held at the Yellow Sea Free Economic Zone Authority on November 3. The meeting was attended

by the commissioners of the seven free economic zone authorities across the nation. They requested the government's institutional support in order for them to actively respond to the rapidly-changing investment environment, and they agreed on nine suggestions to be made to the government as the most urgent matters to attend to. For his part, Mr. Gwon suggested 'simplification of procedures to lift a ban on land transactions' and 'consolidation of permits for development and implementation plans for smaller projects.' He promised to simplify time-consuming procedures and reduce time till the start of developments, and to facilitate investments to increase the competitiveness of the GFEZ.



BUSINESS

10/

Investment attraction for the Hwayang District and using the Korea-China FTA

The residency by real estate investment program promoted to real estate companies in China's northeast as well as investments using the FTA

The GFEZ Authority visited Harbin, Changchun, and Shenzhen in China from November 7 through 11 to promote the Hwayang District's residency by real estate investment program and investments that take advantage of the Korea-China FTA. The delegation, headed by Commissioner Gwon, held a presentation at the Harbin New Paris Hotel on November 8 jointly with the Heilongjiang Development and Reform Commission and the China Communication and Transportation Association for some 30 Chinese companies wishing to advance overseas using Korea's 'global FTA platform' and 'made-in-Korea brands.' They visited five real estate companies including GuoXin Investment Group, a leading one in Harbin and Changchun, to introduce the residency by real estate investment program and provided personalized consultations. Mr. Gwon said, "The presentation and visits were meant to publicize the Hwayang District of Yeosu, set to be developed as a tourism destination, to businesses in China's northeast. All-out efforts will be made to develop tourism and leisure complexes that can attract Chinese investors and tourists."



CEO Column

Written by GFEZ Authority
Commissioner Kwon Oh-bong

A land of opportunity that creates the value of mutual growth, the GFEZ!

Innovation Partner Leading the Development of All of the GFEZ through Sharing

Commodities are shared by many. Profits are evenly shared. Experiences are not confined to their owners but shared with others. These kinds of economic activities are what sharing is all about. In short, sharing is about sharing and cooperation. It aims not to monopolize growth but instead to realize mutual growth through sharing and cooperation.

It was possible for companies to grow on their own at the initial stage of industrial society when they made individual products like clothes or shoes by simple technology. Growth in such isolation was still possible when several technologies were required to produce products like cameras, bicycles, and radios. But it is impossible now. An automobile requires 20,000 to 30,000 parts. Even the world's best automakers do not produce all of them by themselves. They are procured from suppliers. Now, for a company to grow, others have to grow too. In fact, the situation has become even more complex since industries have effectively converged with completely different ones. The automobile industry is adopting advanced IT technologies, and nano technology or bio-technology is being incorporated into the textile industry.

Highly-specialized technologies are becoming intertwined, and individual companies alone cannot keep up with the trends. They must share their experience through tight-knit networks to remain competitive. For individual companies to grow, all of the companies connected to it in some way must also grow.

The GFEZ Authority, likewise, exists for mutual growth. We provide companies from both home and abroad with great opportunities to do business. Within a one-hour drive are the airports of Gwangju, Muan, and Yeosu Sacheon. With the opening of the Honam high-speed railroad in April last year, it takes only two hours to reach Yongsan in Seoul from Yeosu. With the opening of expressways between Suncheon and Wanju, and Mokpo and Gwangyang, and the Yi Sun-sin bridge, the GFEZ easily connects to land transportation networks.

Our accessibility is excellent by any means of transportation. It is tantamount to the GFEZ Authority providing social overhead capital, the most important factor of corporate activities, for sharing.

The GFEZ also features major players of national industrial infrastructure like the POSCO Gwangyang Steel Works and Yeosu National Industrial Complex to afford ample business opportunities. The Creative Economy Innovation Center in Yeosu assists businesses using advanced technologies. The prices of land are much lower than in the capital area, and the sale prices of lots in the industrial complexes are only one-third of those in Incheon and Busan. It is the same as the GFEZ Authority providing an environment to share favorable conditions like the presence of major corporations, strong R&D capabilities, and affordable lots with necessary facilities. There are not many other places that are as attractive as the GFEZ to investors from home and abroad.

While advertising these merits, the GFEZ Authority has specialized teams to attract investment from Japan, China, and the West: it has worked out strategies customized to the different regions and is making all-out efforts to attract investments. The Japan team focuses on companies in bio and functional chemicals materials; the China team on



companies in real estate, leisure, chemicals for everyday purposes, and low-temperature distribution of agro-fishery products; and the West team on companies in metal processing and carbon nano fabrics.

These companies and industries are identified as possible sources of investment, and multi-faceted efforts are being made to realize investment from them. The more companies of different businesses and nations that are gathered in the GFEZ, the more that they will share among themselves and help each other. This is a synergy effect made possible by sharing.

Foreign investment attraction conditions have not been good for some time due to the prolonged global economic downturn, concerns over the Chinese economy, and changes in the economic environment stemming from the US presidential election. It is not difficult to achieve good results under good conditions: the true capacity of the GFEZ Authority will be

revealed when we achieve results under difficult conditions. Under these circumstances, it is more imperative to share experience, profits, and value and to cooperate.

The GFEZ Authority strives to build a 'dynamic international trade city of advanced industries, culture, and tourism.' To this end, we are endeavoring to attract sound companies that can provide quality products and services. It is our job to ensure that these companies share their experiences and profits to achieve mutual growth, and we are just doing that now.

Sharing does not only help corporate growth. Corporate growth directly leads to regional growth and national development. It is essential to study in earnest and promote efficient sharing of experiences, profits, value, SOC, and more. We realize that our role to induce joint growth of resident companies in the GFEZ is more important now than at any other time.

We expect shared growth through sharing and passionate participation by our staff and local businessmen in it.

Sharing and cooperation for the continuous growth of the GFEZ

Mr. Jeong Byeong-hoe



- Member of the 10th South Jeolla Provincial Assembly (Suncheon 2nd Election Precinct, affiliation: The Minjoo Party of Korea)
- Vice chairman of the Assembly's Operation Committee, member of the Education Committee and the Special Committee on Budget and Accounts
- Chairman of the Special Committee to Support Attraction for the Suncheon Bay Garden Expo
- Chairman of the Suncheon Municipal Assembly's Operation Committee
- Member of the 4th, 5th, and 6th Suncheon Municipal Assembly

Mr. Jeong Byeong-hoe
GFEZ Representative Organization
of Local and Regional Authorities

Q What is your role as a member of the GFEZ Representative Organization of Local and Regional Authorities?

A The GFEZ Representative Organization of Local and Regional Authorities (hereinafter "Organization") deliberates and makes decisions on main matters of the GFEZ Authority. It consists of Provincial Assembly members and vice mayors from Suncheon, Yeosu, and Gwangyang Cities of Jeollanam-do Province and Hadong gun-County of Gyeongsangnam-do Province. They confer on regional development together. As a member, I participate in the deliberation on the budgets, perform checks and controls on the GFEZ Authority's decision-making process, and assist its activities. Every member of the Organization strives to promote the GFEZ's development and activation and help make it more competitive.

Q How do you think you can best promote the growth and development of the GFEZ?

A The GFEZ intends to attract 25 billion dollars from 500 companies by 2020. This requires active cooperation and determination of the cities and county in the GFEZ. As a member of the Organization and of the South Jeolla Provincial Assembly, I will help ensure close cooperation between the local governments and the GFEZ based on my 14 years' experience in public administration. For instance, I intend to actively help the Haeryong Industrial Complex, first designated for basic processing industries in the Honam region, grow and lead the local economy.

Q The Organization intends to promote the development of all of the GFEZ. As a member who represents Suncheon, what experience or information do you intend to share with the other Organization members?

A Not just as a member representing Suncheon but as a person who strives for mutual development of the entire region, I would like to emphasize that we should always work together. When all the areas that constitute the GFEZ look past only their own interests and endeavor for the prosperity of all, then we will indeed be able to achieve region-wide, sustainable development.

Q What do you think are the GFEZ's potential and merits?

A The GFEZ enjoys the great advantage of being at the center of Northeast Asia's shipping and logistics networks. Still, never complacent with being a 'center of logistics,' the GFEZ is proactively responding to the rapid change in the global economy. All industry, academia, research institutes, and governments in the GFEZ are working together to develop high-value-added, advanced technologies. These will drive growth in the future. For instance, a functional chemicals R&D center and a bio packaging cluster are planned for the Gwangyang District's Sepoong Industrial Complex.

The GFEZ renders the best corporate support of all of the national free economic zones. Active and prompt administrative support by the GFEZ Authority to ensure smooth settlement and growth by investors is another strength of the GFEZ.

Q What do you think is the most pressing issue for the GFEZ, and will you offer any advice on its resolution?

A Even those industries that are strong today should continually look to the future and adjust to change in the global environment.

Petroleum chemicals, steelmaking, shipping, and logistics—the GFEZ's major industries—should reinvent themselves to keep abreast of the trends. For instance, steelmakers should branch out into lightweight metals, special metals in particular, for which demand is expected to steadily increase.

POSCO in the Haeryong Industrial Complex concluded an MOU to invest KRW 123 billion to expand production facilities of magnesium, a lightweight material, last October.

The GFEZ can achieve sustainable growth by developing high-value-added, advanced industries and connecting them to shipping, logistics, and other relevant industries to share and spread growth.

Q You must have a good understanding of local administration with your experience as a provincial and municipal assembly member.

What should the government, both at the central and regional levels, do to further the development of the GFEZ?

A The GFEZ is making all-out efforts to be more than just a zone favorable for business, lead the regional economy, and become a center that takes the nation's industrial competitiveness one notch higher. Both the central and local government should help the GFEZ Authority by implementing effective measures for boosting economic growth.

GFEZ People

Reporter : Jeong Ji-soo

Write by Ahn I-Seul



The Dream of POSCO Aspiring to Be the World's No. 1: POSCO
Magnesium in Every Mobile Device

A Leader in Ultra-light Advanced Materials

POSCO Magnesium Sheet Plant

The POSCO Magnesium Sheet Plant in Suncheon's Haeryong Industrial Complex produces magnesium sheets that are light, easily formable, and corrosion-resistant. POSCO is becoming a leader in the advanced materials market.

The specific gravity of magnesium is only 25% of steel and 70% of aluminum. It is the lightest of all metals and recyclable. Its other merits include a high specific strength, excellent shock absorption, and effective blocking of electromagnetic waves.

Narrow magnesium sheets (width: 600 mm) are excellent for light, slim products like smart phones, laptops, and TVs. Wide magnesium sheets (width: 2,000 mm) were long considered difficult to commercialize due to the corrosiveness of magnesium. Strong corrosion resistance is required for wide sheets which are mostly used for exterior applications. POSCO impressed the world with its excellent technology by showing that magnesium can indeed be used for exterior applications.

In 2015, it produced wide magnesium sheets to be used for roofing for some 8,000 units of the Porsche 911.

This was the first time in the world that magnesium had ever been used for such an application, and POSCO's magnesium sheets were designated by the Ministry of Knowledge Economy as one of the priority projects for the ten World Premier Materials.

The POSCO Magnesium Sheet Plant, located in Haeryong-myeon, Suncheon City, Jeollanam-do Province, is the culmination of development of advancement materials by POSCO.

The plant installed a rolling mill for 600 mm-wide sheets in 2007 and a foundry for 2,000 mm-wide sheets in 2012. There is currently only this foundry for production of wide sheets, but an MOU was concluded with Suncheon City last October to invest KRW 123 billion to install a rolling mill and post-processing facilities.

POSCO is one of the world's most influential steel companies. What prompted POSCO to move into the magnesium business?

The steel industry is mired in a crisis worldwide.

A steel industry restructuring report by the Ministry of Trade, Industry and Energy indicates the need for steel companies to develop light metal materials to remain competitive. We saw unlimited potential in the applications of magnesium as an ultra-light material, and we were able to move into the business because of our tremendous R&D capabilities.



PosMAF Team, New Business Department - Kwon O-deuk, managing director

How are magnesium materials produced?

Magnesium sheets are produced by casting, rolling, cleaning, and cutting. Ingots are imported and melted by casting. Liquified magnesium is thinly passed between rolls and rolled into coils. These coils are heat-treated and passed through rolls again into desired thicknesses. Lastly, they are cut according to lengths and widths required by users. At the plant, we do all processing for narrow sheets and casting for wide sheets.

What are the competitive advantages of the POSCO Magnesium Sheet Plant?

Our greatest advantage is having the world's best technology.

Produced in 2015
magnesium sheets to be
used as roofing for the
Porsche 911, the world's
first such application



To be a supplier of automobile magnesium sheets, we must have not only production technology but also technology to use such sheets, and we are quite far ahead of others in this regard. We also have a research center exclusively for automobile parts and produce automobile steel sheets. This means we are capable of more than just producing materials.

What are you currently focusing on?

We are continuously developing new functional alloys. Two of the disadvantages of magnesium are its poor formability and corrosiveness, but we resolved its formability.

As a result, the two largest domestic electronics companies are competing to get our supplies for their laptops. We are of course also addressing its corrosiveness and expect to some day get an original patent.

The most pressing task today is to add rolling and polishing sections to the processing for wide sheet production. We intend to develop advanced rolling and post-processing technologies together.

What is the most important value that allows the company's growth and development?

That would be not being complacent with previous accomplishments but challenging ourselves to take on new things. POSCO is one of the world's very best steelmakers, but it was a challenge even for us to move into the uncharted area of new materials. Our catch phrase is 'POSCO the Great,' which means creating a great POSCO that can be of help to future generations through an unwavering spirit of challenge.

Is there any special way in which all the employees can share the corporate values?

We take on new things, persevere for success, and rejoice at results together. Our staff is engaged in both production and R&D. I am proud of our staff. Everyone silently perseveres under the unavoidable stress from test failures and continues to do research. Our sense of responsibility is great as we have been conducting the national project for six years to develop one of the 'World Premier Materials' that will lead the national economy starting in 2020. This is not only for POSCO but for all of Korea. Our spirit of challenge and perseverance has paid off. We have achieved commercialization for laptops and automobiles, and the production lines are always busy. These results have boosted every employee's confidence.

POSCO announced that it will actively establish a magnesium industry ecosystem based in Suncheon. What are the merits of the Haeryong Industrial Complex as a magnesium production base?

Nine national strategic projects were announced last August, and one of them is for light metal materials. This heralded the start of a seven-year project to produce titanium, aluminium, and magnesium. This is favorable for the complex. Not only POSCO but other entities have made some investments in magnesium in the province. Now, some of the Jeonnam Techno Park facilities are producing magnesium sheets as well as extruded products. They started to produce billets, the basic unit of extruded products, this past August. Extruding companies have been attracted, too. In short, the GFEZ is attractive in that it has a well-established infrastructure and an ecosystem for magnesium.

As a resident company in the GFEZ, what do you need from the GFEZ Authority?

We would like to see an ecosystem for processing magnesium sheets in place. It is regrettable that magnesium sheets are now generally processed overseas. Such an ecosystem would create jobs, and developing and attracting the electronics industry would boost regional growth. The automakers and electronics companies have most of their operations in Gyeonggi-do Province and in Changwon City and Gumi City in Gyeongsang-do Province. If we can attract some of them to the GFEZ, everyone will benefit all around.



PosMAF Team, New Business Department -
Lee Myung-Geun, manager / Han Yong-Hwi, supervisor responsible for safety

Talk with the Staff

Q1 What was your happiest moment at the company?

A1 **Lee** I felt a great sense of reward when I heard that leading global companies had decided to use our new materials.

Han We focus on new businesses, and I am involved in R&D. Nothing makes me happier than when test results come out as expected. We all erupted in cheers last April when we finally succeeded in making 4m billets after dozens of failures.

Q2 What are you doing to increase your own value within the organization?

A2 **Lee** We are a global company, so we need to speak different languages. This is especially important in the magnesium business since it often cooperates with companies overseas. We need not only English, but also Chinese and Japanese, and I am certainly doing my best to improve my foreign language skills.

Han I am constantly studying safety and the environment directly related to my responsibilities. I acquired one more relevant qualification this year. We need to consistently guard against becoming complacent and always work hard if we expect to continue to grow.

Q3 What aspects of POSCO's corporate culture are you most proud of?

A3 **Lee** We are not bound to one specific area at the company. We are all accumulating rich experience and building capabilities in various areas so that we can become highly-capable, versatile personnel. Collaboration is easy because nearly everyone is knowledgeable about various areas.

Invest in GFEZ

Written by the Editorial Department



The development of the Hwanggeum Industrial Complex to help the Gwangyang District achieve a second takeoff

Reborn as Northeast Asia's Logistics Center

Gwangyang District

The Hwanggeum Industrial Complex of the Gwangyang District will be developed in an area of 115,000m² in Hwanggeum-dong, Gwangyang City, Jeollanam-do Province with investment of KRW 300.7 billion. Main industries to attract include primary metal manufacturing, metal processing, electric equipment manufacturing, other machinery and equipment manufacturing, warehousing, and shipping service.



The Hwanggeum Industrial Complex will be developed following the development of the east and west sides of the Gwangyang Container Berth Hinterland. It is only five minutes from Gwangyang Port and will be able to tap a rich pool of manpower and have the best business environment. Inquiries by companies are already coming in.



The lights are never off at night in the GFEZ, home to active companies leading the economic development of Korea's deep south. The Gwangyang District around the strategically-located Gwangyang Port has companies in the upstream and downstream industries to POSCO, the world's leading steel producer, and the Yeosu National Industrial Complex for petrochemicals in its vicinity.

Completed in June 2012, the east and west sides of the Gwangyang Container Berth Hinterland are part of both the free economic zone and the free trade zone. As companies can lease lots at low rents for long terms there, they are popular among both domestic and foreign companies looking to cut back on initial investment outlays. Companies of different nationalities currently operate in the east side, and the west side continually receives inquiries about moving-in from companies in composite logistics, food and beverages, and other relevant industries.

In addition to the Gwangyang Container Berth and its east- and west-side hinterlands, the Gwangyang District also includes the Hwanggeum Industrial Complex, which will enable its second takeoff. The Hwanggeum Industrial Complex will be developed in an area of 115,000m² in Hwanggeum-dong,

Gwangyang City, Jeollanam-do Province with investment of KRW 300.7 billion (public funds: KRW 44.1 billion, private capital: KRW 256.6 billion). To be provided are industrial lots of 721,000m², support facility lots of 37,000m², and public facility lots of 356,000m². Main industries to be attracted include primary metal manufacturing, metal processing, electric equipment manufacturing, other machinery and equipment manufacturing, warehousing, and shipping service. Industrial lots will be formed in two steps, and the first step will be completed by 2020. For companies eagerly waiting to move in as soon as possible, lots will be available in 2017. Compensation for lots has been completed, and construction started in full swing in August 2016. The Hwanggeum Industrial Complex is only 5 minutes away from Gwangyang Port, which will minimize logistics costs for companies that do not have their own berths. Manpower can be easily recruited from educational institutions within the GFEZ, making for a great environment to do business. Companies are making inquiries about moving into the complex even before its completion.

Against this background, expectations are high for the Gwangyang District to become Northeast Asia's logistics center.

Local News

Written by the Editorial Department

Yeosu-si



Public Rapid Chargers Installed for Electric Cars

For convenient charging of electric cars, of which dissemination started this year, Yeosu City (Mayor Ju Cheol-hyeon) has completed the installation of public rapid chargers in the parking lots next to the Yeosu Culture Center in Hak-dong and in front of the health center of the City Hall branch office in Dolsan. These chargers can charge seven models of electric cars currently available in Korea, namely, the Ionic, SM3, Ray, Spark, Soul, I3, and Leaf. Complete charging takes only 30 minutes. To use the chargers, a user should subscribe for car charging at the Ministry of Environment's electric car charging webpage (www.ev.or.kr). A membership card will be issued. The city also publicizes the ongoing effort by Korea Electric Power Corporation (KEPCO) to install systems for car charging at apartment buildings. The managements of those apartment buildings where residents consent to installation of charging stations can request installation. Those selected through screening will have both rapid and slow chargers installed at the expense of KEPCO. A city official said, "Installation of charging stations will continue into next year to facilitate the use of electric cars and afford drivers greater convenience. The city hopes more citizens will drive electric cars, which are eligible for various tax benefits, have low maintenance costs, and produce no air pollution."

Suncheon-si

MOU Concluded for the National Strategic Project for Carbon Resources

Suncheon City concluded an MOU for the national strategic project to develop carbon resources such as carbon conversion flagships on November 3 at the Jeonnam Creative Economy Innovation Center. The ceremony was witnessed by representatives of the Ministry of Science, ICT & Future Planning; Jeollanam-do Provincial Government; Suncheon, Yeosu, and Gwangyang municipal governments; POSCO; and other appropriate companies.

In compliance with the Paris Climate Change Accord and the new climate framework, the government has set greenhouse gas reduction goals and is pursuing the project to turn carbon substances like green-



house gases and byproduct gases (from industrial processes) into useful products. The carbon conversion flagship, the MOU's key component, will substantiate technology that produces chemical ingredients such as ethanol from byproduct gases and greenhouse gases emitted from the GFEZ's industrial complexes. The Ministry institutionally supports the project and relevant policies while local governments provide administrative assistance for permits and participation by involved agencies.



Large-Scale Forest Park to Be Formed in Connection with the Gubongsan Mountain Observatory

Gwangyang City announced a plan to form a large-scale forest park across Gubongsan Mountain where an observatory is located. The city will spend KRW some 1.9 billion on a forest area

of about 60 ha connecting to the observatory to create a forest park with healing forest walks, outdoor rest areas, nature sports facilities, and other such amenities.

Discussions will be completed this year on the incorporation of lots including government-owned forest land under the administration of the Korea Forest Service. Landscaping work will start in the first half of 2017 and be completed in 2018. A city official said, "The forest park will take advantage of forest tourism resources and nearby tourism facilities, serve as a public place of rest and relaxation, and provide various forest welfare services."

The Gubongsan Mountain Observatory offers a bird's eye view of all of Gwangyang City, Gwangyang Steel Works, Yeosu Industrial Complex, Gwangyang Port as well as Yeosu, Suncheon, Hadong, Namhae, and other parts of the GFEZ. It has such amenities as walks, photo zones, and digital beacon fire stations.

MOU Concluded with the Hadong Power Generation Headquarters to Install Solar Generators in Industrial Complexes

Hadong County has established solar generation facilities at 22 government offices and now annually generates 1.53 million kW. To further produce environment-friendly, new renewable energy, it has concluded an MOU with the Hadong Power Generation Headquarters of Korea Southern Power (KOSPO) to install solar generators in the industrial complexes. County Governor Youn

Sang-ki and Headquarters Director Kim Man-nyeon signed the MOU for the project. The industrial complexes where solar generators will be installed include the Galsa and Dae-song industrial complexes in Geumseong-myeon district as well as agricultural and industrial complexes in Geumseong, Jingyo, Gojeon, and Jeongnyang-myeon districts. With the MOU in place, Hadong County intends to actively encourage resident companies in the complexes to install solar generators and help them get permits for such facilities. The Hadong Power Generation Headquarters will pay part of resident companies' rents in the amount of KRW 20 million per MW of electricity produced and install and manage solar generators on the roofs of their buildings. After a certain period, the facilities will revert to the companies. A county official said, "Resident companies with solar generators installed on their roofs can generate additional revenues, reduce construction costs, meet the requirements of the government's policy to provide new renewable energy, and help improve the image of clean industrial complexes."



Work

Written by the Editorial Department

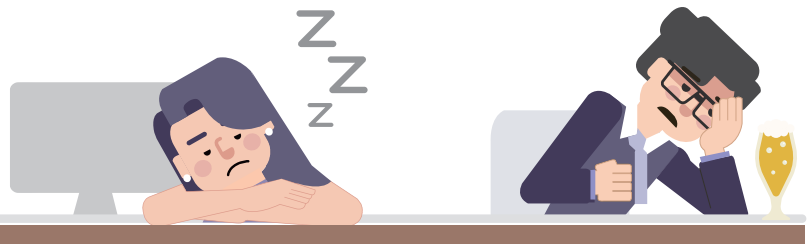
A media survey that shows 95% of workers are under stress offers a vivid picture of them subjected to ever-intensifying competition, their employers demanding more and more productivity, tense relations with superiors and peers, and difficult tasks. It is impossible not to feel extreme stress under such pressures. Employees simply cannot avoid stress; they must learn to manage it. This article tells you how to manage stress and be happier with your work.



Healthy Ways to Manage Stress

| Types of employee stress

According to a survey about the causes of employee stress, the leading cause (48.2%) of stress is from human relations. It is true that people are more difficult to deal with than work. This was followed by excessive workloads (24.5%), pressure to perform better (11.0%), autonomy of work (7.4%), having to work with others (6.1%), and frequent meetings (1.5%).



How to manage stress at work

How do employees manage stress from work? A survey by online recruitment site, Saram In, offered various ways. The most popular was making sure to get enough sleep (39%), followed by drinking (37%), building endurance (30%), smoking (28%), and chatting with colleagues (25%).

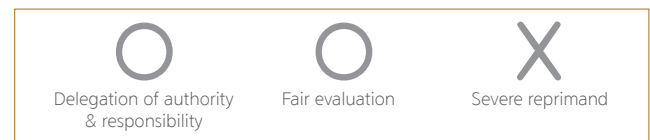
Keys to healthy management of stress

Tips

- ① Find things you are grateful for: Write up a list of things to be thankful for everyday.
- ② Find fun between busy times at work: The cerebral nerves get more excited and creative when you are having fun.
- ③ Create a buoyant environment: Decorate your workspace with photos and decorations that can induce positive thinking.
- ④ Log your worries: Write down worries and negative thoughts. It is easier to shake them off when seeing them.
- ⑤ Invest in human relations: Make an effort to approach one person a day.
- ⑥ Take a rest to increase work efficiency: Work for 90 to 120 minutes and rest for five minutes.

Roles of managers and companies

Managers should involve employees in making decisions on goals to prevent stress arising from ambiguity in their roles and lack of participation. Caution must be taken to avoid emotionally hurting employees. This requires careful evaluation and fair compensation.



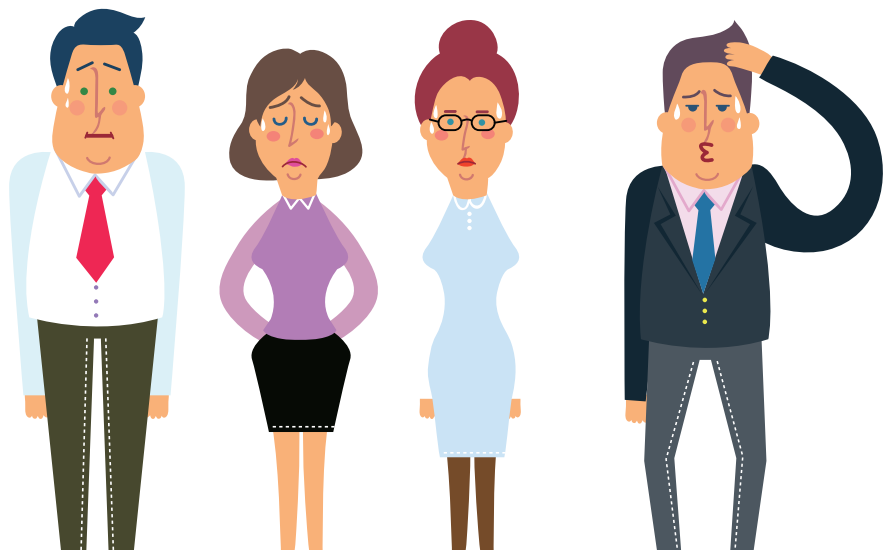
Employees should be given flexitime, which allows them to choose when to come to and leave work. A full 70% of employees prefer to choose their own working hours so that they can manage their schedules as they see fit and work to the best of their abilities. Companies that adopt flexitime see such benefits as fewer absences by employees, greater employee engagement in work and the organization, and lower employee stress. Another recommendation is to allow employees take long-term leaves and sabbatical years or months to get away from daily routines and recharge themselves. Constructive rest stimulates one's creativity and motivation for new tasks, producing energy to delve into work with renewed enthusiasm and vigor. Facilities for rest and conveniences should also be in place at workplaces to help employees relieve stress while at work.

Reference: "3X3 Strategy for Stress Management at Work" by Baek Seong-uk, Samsung Economic Research Institute

The effects of employee stress on companies

The stress that pervades our society is an impediment not only to individuals but also toward making the Korean economy more competitive.

A high level of stress at work reduces motivation and creativity, in turn reducing companies' competitiveness. For employees to reduce stress, what is more important than their individual efforts is change in their leadership or organizations. Individuals' change alone is insufficient to address fundamental causes of stress. Change from the top can go beyond individuals' change and bring positive synergy effects across the board.

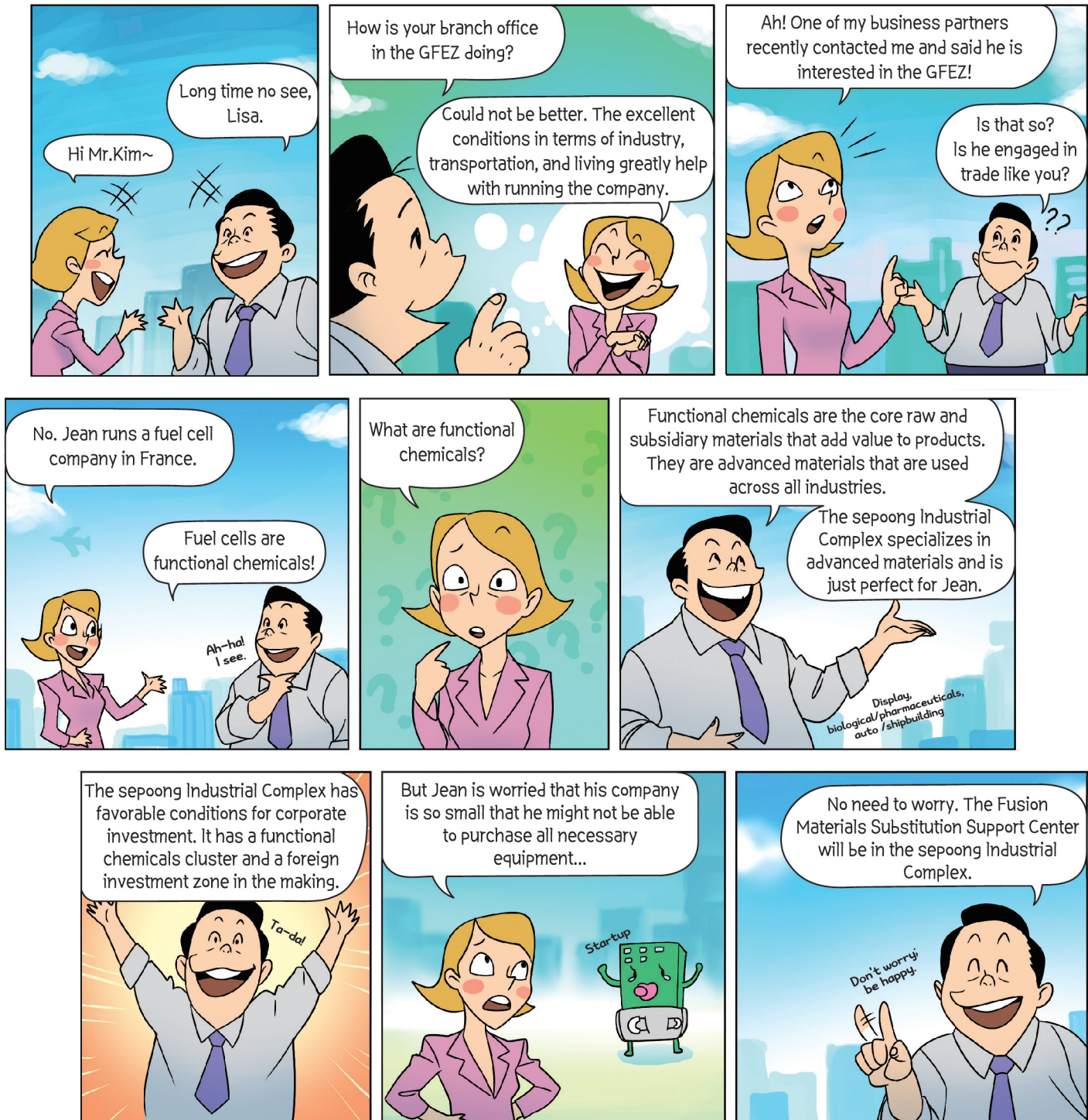


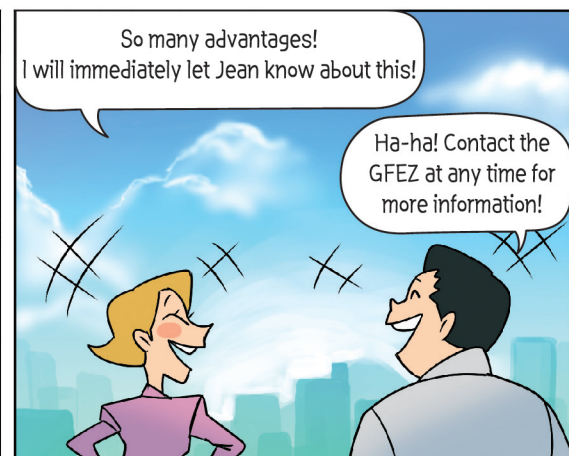
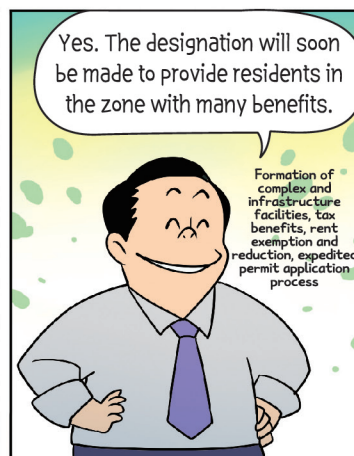
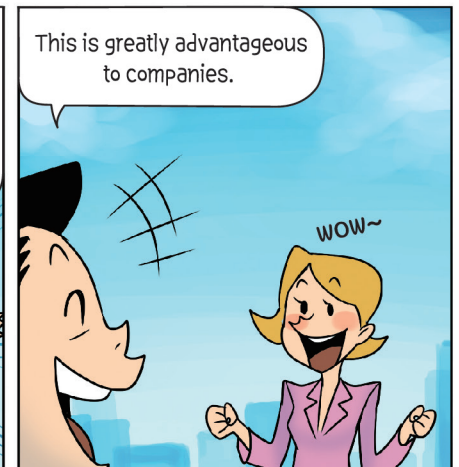
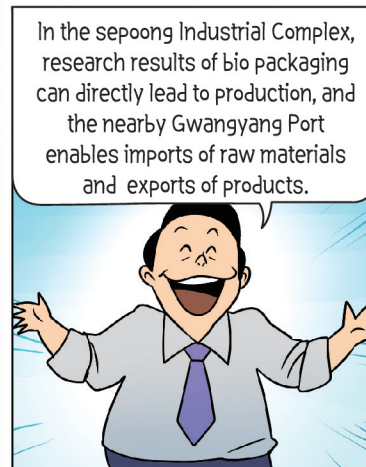
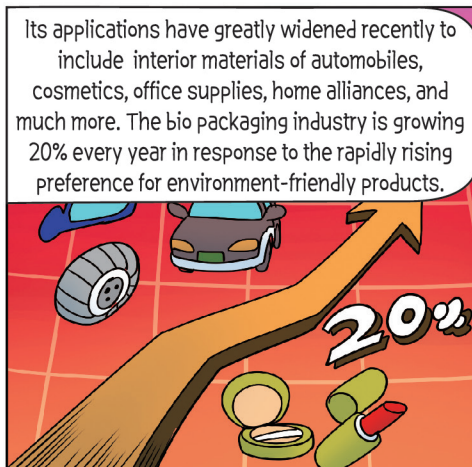
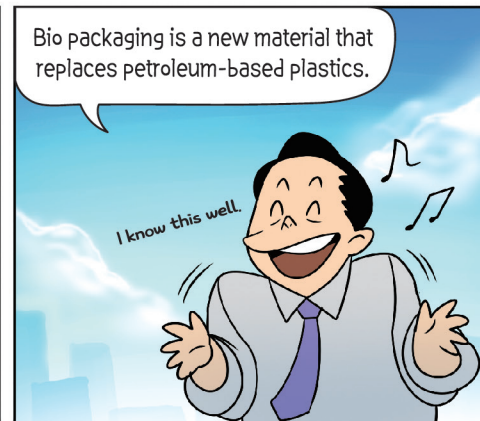
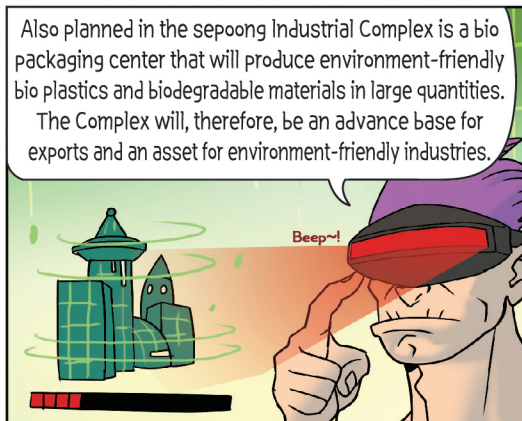
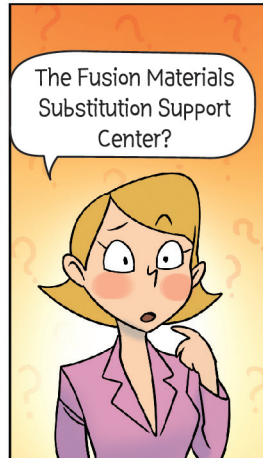
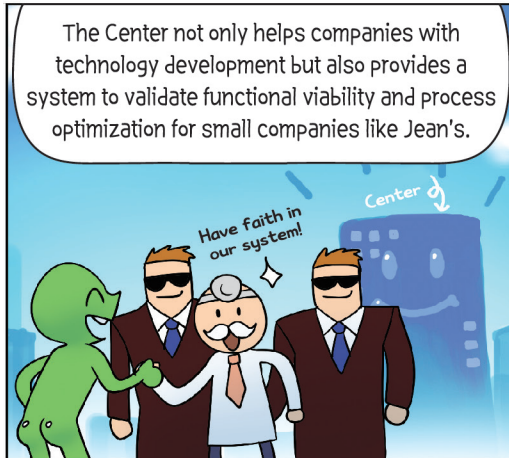
GFEZ Cartoon

Planning : Jeong Ji-soo
Illustration : Mun Sang-wung



The Sepoong Industrial Complex to Specialize in Advanced Materials







full of valuable information

<http://webzine.gfez.or.kr>

GFEZ Journal is keen to hear the precious opinions of our readers. Please share your feelings and thoughts with us after reading our magazine. Not only will your opinion be included in this section, it may be reflected as part of our editing efforts in the future.

I Like This Column

GFEZ Cartoon



The news of the Yeosu Hwayang District's residency by real estate investment program was

interesting. The cartoon explanation about the district and program was easy to understand. I have great expectations about the Hwayang District being reborn as a tourism district.

Reader Oh Hyun-seo

Trip



The travelog of Gwangyang informed me of tourist spots hidden across the city. It was good to learn

about new things about the city. I was previously only aware of its steelworks.

Reader Jang Jung-hoon

QR code quiz

Take a picture of the QR code below, which will allow interested participants to take part in our quiz. Those who participate in the quiz and leave opinions will be entered into our lottery draw for gifts. Your participation will be greatly appreciated!



How to enter our draw

It's very simple. Scan the QR code with a QR reader app on your smartphone. That's it! Or you can participate on the Internet by entering the URL of our GFEZ Webzine (<http://webzine.gfez.or.kr>) in your browser's address bar and submitting a private response. Those who participate in our Internet quiz or leave opinions on our website will also be sent a small gift after a lottery draw. We appreciate your participation.

The closing date February 11, 2017

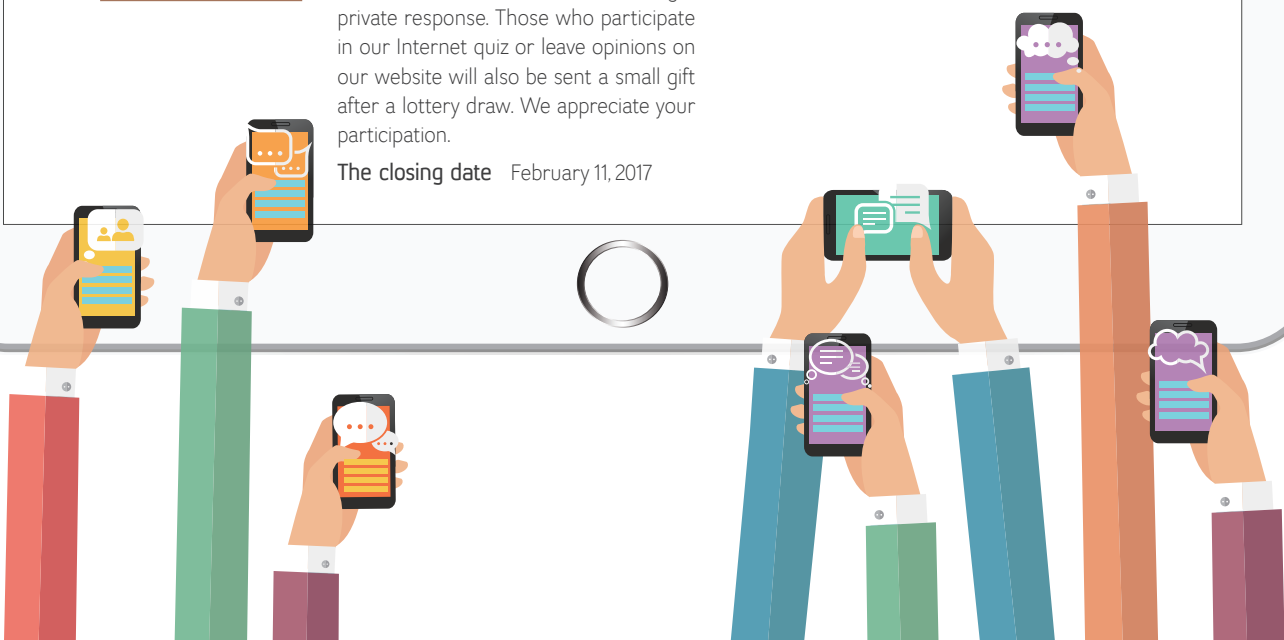
Here are the gifts for the winners.

1st Prize (1 person)
A department store gift certificate worth 100,000 won



2nd Prize (2 people)
Book & Cultural Gift Certificate worth 30,000 won

3rd Prize (5 people)
Starbucks eGift icon



Dynamic Trade City, Center of New Industry and Cultural Tourism

Gwangyang Bay Area Free Economic Zone

Various Business Opportunities



- GFEZ has the industrial district, 21 industrial complexes in 5 districts (77.69km²), that can satisfy various needs of investors.
- Logistics - Gwangyang District
- Manufacturing - Yulchon District
- Residential - Sindeok District
- Multi-Purpose - Hadong District
- Tourism - Hwayang District



**Best business
investment place
in Northeast Asia**

www.gfez.go.kr

Optimal Industrial Conditions



- POSCO's Gwangyang Steelworks



- Yeosu National Industrial Complex
- GFEZ possesses abundant industrial lands. (13.52% of national industrial areas : 189.6km²)
- Industrial complexes instantly available due to low land price

Efficient Transportation Infrastructure



- International port - Gwangyang Port (Capacity : Approximately 272 Million Tons as of 2015)
- Yeosu, Sacheon & Gwangju Airports are located within 1 hour-distance
- Established KTX network connecting the area to Seoul
- Connected to 5 major expressways (Shortens travel to Seoul around 3 hours)

Real Estate Investment Immigration System Implementation Hwayang District Tourism Complex

- Location : Hwayang-myeon, Yeosu-si
- Development area : 9.9km²
- Stay & Leports Zone : Experience, Healing, Leports
- Culture Zone : Shopping, Culture
- Entertainment Zone : Entertainment, Healing
- Golf Zone : Golf
- Ocean & Marina Zone : Healing, Marine leisure

Tour / Leisure, Living Environment



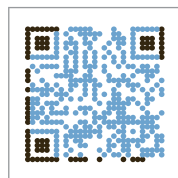
- Development of Comprehensive Tourism Complex in Hwayang District
- 3 National Parks and Market with 5.3 Million Customers within 100km
- The lowest land price in Korea and provided with the right of eminent domain



- Residential, Educational, Medical, and Leisure Environment Prepared for Settlement

Various benefits for investors

- Non-stop service from investment consultation to the commencement of business
- Market survey and connection to corporate partners
- Support for the selection of sites suitable for business categories
- Support for management support subsidy



Cover Story

The GFEZ, a dynamic international trade city of advanced industry, culture, and tourism.

The Gwangyang Free Economic Zone (GFEZ) helps develop the local communities and industries by identifying potential investors and realizing investments from them. We assist people and companies coming to the GFEZ in search of a better life and a better place to do business that we can all grow and prosper together.