

**GLOBAL
INNOVATIVE PARTNER OF
VACCINE AND BIOTECH**



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GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

CEO MESSAGE



“Global Innovative Partner of Vaccine and Biotech
From prevention to cure,
SK bioscience is creating a healthier and happier tomorrow for everyone.”

Greetings!

SK bioscience's commitment to 'Promoting Human Health' has been steadfast throughout the unprecedented global crisis of the COVID-19 pandemic. We have thus grown into a leading innovative partner in the global biopharmaceutical industry as the world prepares not only for the endemic phase of COVID, but also for the next pandemic.

Nearly 20 years of building up capabilities have provided the basis for remarkable growth in the present. We set the foundation for growth by establishing a vaccine R&D center in 2005 and building L HOUSE, our vaccine manufacturing plant, in 2012. Based on our own capabilities, the company's process spans the entire value chain across research, manufacturing, licensing, and commercialization. During that journey, we demonstrated our advanced technology by successfully establishing a portfolio of self-developed vaccines, including: SKYCellflu, the world's first cell-cultured quadrivalent influenza vaccine; SKYZoster Inj., the world's second herpes zoster vaccine; and SKYVaricella Inj., South Korea's only chickenpox vaccine to receive World Health Organization Prequalification.

Our vaccine R&D technologies and manufacturing systems are also recognized around the world. In 2014, we signed an agreement with Sanofi Pasteur, a global pharmaceutical company, to co-develop and commercialize a next-generation pneumococcal conjugate vaccine. We also launched joint vaccine development with international organizations such as the Bill & Melinda Gates Foundation, Program for Appropriate Technology in Health (PATH) and the International Vaccine Institute (IVI).

Our years of effort and experience have identified opportunities for a great leap forward in face of the COVID-19 pandemic. We quickly began to pursue a two-track business strategy. One was to engage international companies as a C(D)MO for their COVID-19 vaccines, and the other was to develop our own COVID-19 vaccine. In either case, we fully leveraged our manufacturing facilities, R&D technology, and global network that have positioned us a global vaccine hub.

Continuous upgrades to our manufacturing plant have led to the European Union's Good Manufacturing Practice (EU-GMP) certification, a first for a vaccine manufacturing facility in South Korea. We have established collaborative relationships with global companies such as AstraZeneca, Novavax and GSK. Our partnerships with the Bill & Melinda Gates Foundation and CEPI (The Coalition for Epidemic Preparedness Innovations) expanded into a close network for the joint development of a range of vaccines.

Looking back, we put faith in our own possibilities based on accumulated experience and expertise to undertake various projects for public health. As a result, we were able to achieve both a successful IPO and historic jump in revenue in 2021 amid the pandemic. In addition, we successfully developed our own and South Korea's first COVID-19 vaccine - SKYCovione Multi Inj. - with robust global collaboration.

We now seek the next leap forward as SKBS 3.0. We will continue to grow to achieve our unchanging mission to Promote Human Health under our new vision to become the Global Innovative Partner of Vaccine and Biotech.

We will enter SKBS 3.0 with an innovative and systematic strategy. By (1) Expanding our COVID-19 vaccine portfolio for the endemic phase, (2) Diversifying our vaccine portfolio, including basic and premium vaccines, (3) Establishing a glocalization model to build a global manufacturing system and footprint, (4) Entering the cell/gene therapy (CGT) sector, and (5) Developing a response strategy for the next pandemic, we will secure our competitive edge to become a Global Innovative Partner of Vaccine and Biotech.

To implement SKBS 3.0, we will first continue to secure advanced infrastructure by building the Global Research and Process Development (R&PD) Center in Songdo and expanding L HOUSE in Andong, as well as strengthening our portfolio by ensuring new platform technologies like mRNA. In response to issues of global vaccine inequity during the pandemic, we will establish manufacturing systems and footprints across the world through global partnerships. Through M&A activities in CGT, we will expand within the bioindustry beyond our current business in vaccines. Lastly, we will continue to build a world-class business infrastructure through activities like the implementation of ESG initiatives and continued pursuit of DT (Digital Transformation).

I am thoroughly grateful for all the attention and support for SK bioscience. The company will grow into an innovative partner in the global vaccine and biotech industry that is committed to a better tomorrow for all.

Sincerely,

Jaeyong Ahn
President and Chief Executive Officer



**From prevention to cure,
SK bioscience continues to
make the utmost effort to
promote life and health.**

At SK bioscience, we continue investments to secure innovative technologies and advanced manufacturing systems. We have successfully created commercial vaccines and have become a trusted global partner thanks to our achievements. Given our innovative achievements in the vaccine markets and our preparations to respond to endemic outbreaks and the next pandemic, we are attracting interest from governments, institutions and companies around the world.

Now, we are embracing the next-level challenges that will accelerate another leap forward.

GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH



VISION Global Innovative Partner of Vaccine and Biotech

Global Innovative Partner of Vaccine and Biotech

SK bioscience has continued investing in vaccine R&D and manufacturing with a medical paradigm shifted from treatment to prevention. We achieved innovation in all business areas, from basic research to manufacturing and commercialization, which led to successfully develop our premium vaccines. In the early stage of the pandemic, with faith in our extraordinary technology and determination, we entered an unprecedented business. Our intrepid decision of the two-track strategy of vaccine CMO and original vaccine development resulted in the company's highest-ever performance. Constant innovation has allowed us to discover more possibilities and on accumulated capabilities offers us a blueprint for the future to create new value.

New Strategy for SKBS 3.0

SK bioscience is becoming a global innovation partner in the vaccine and bio-industry. To achieve our vision, we have designed a strategy to identify new growth engines and implement action plans. With robust investments in R&D and manufacturing facilities, we are strengthening our vaccine portfolio to prepare for COVID-19 endemic. We will also create opportunities to combat the next pandemic by securing new technologies such as mRNA. We will diversify the vaccine pipeline, consolidate growth and strengthen our core competitiveness by implementing a range of projects. Our proven competitiveness will attract synergistic global partners, further solidifying our commercial relationships. Taken together, these strategies will create a hub for the global vaccine manufacturing and supply.

GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

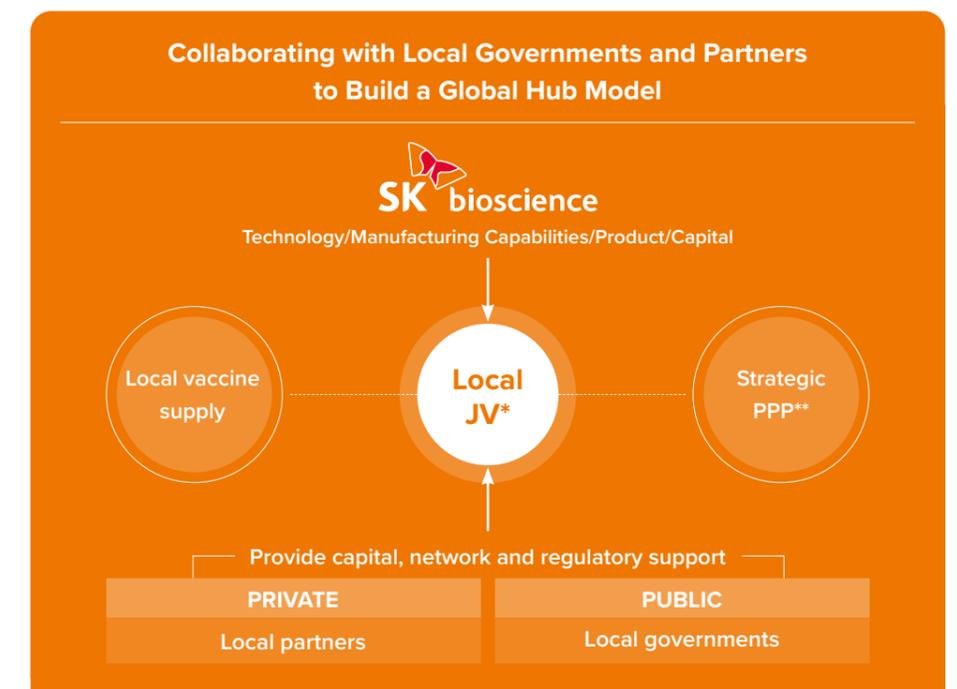


By expanding our manufacturing base around the world, we are becoming a global hub for vaccine distribution.

As demand for vaccines rises, we will become a hub for vaccine distribution while harnessing our innovative capabilities to further empower our global partnerships.

We have created a global vaccine network through co-development and collaboration with global partners, international organizations and research institutions. As we deepen international partnerships forged during the pandemic, we will improve our R&D capabilities and expand our worldwide vaccine CMO/CDMO businesses to lead the global market. In parallel, we will transfer our certified vaccine manufacturing and development capabilities and CMO business knowhow to global markets. That transferred glocalization* expertise will help local governments and partners in emerging markets to build manufacturing infrastructures tailored to their regional needs. Such efforts will fortify our hub for global vaccine distribution and expand access to pharmaceuticals around the world.

*Global + Localization



* Joint Venture ** Public-Private Partnership

GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

We create new opportunities with constant inventiveness.

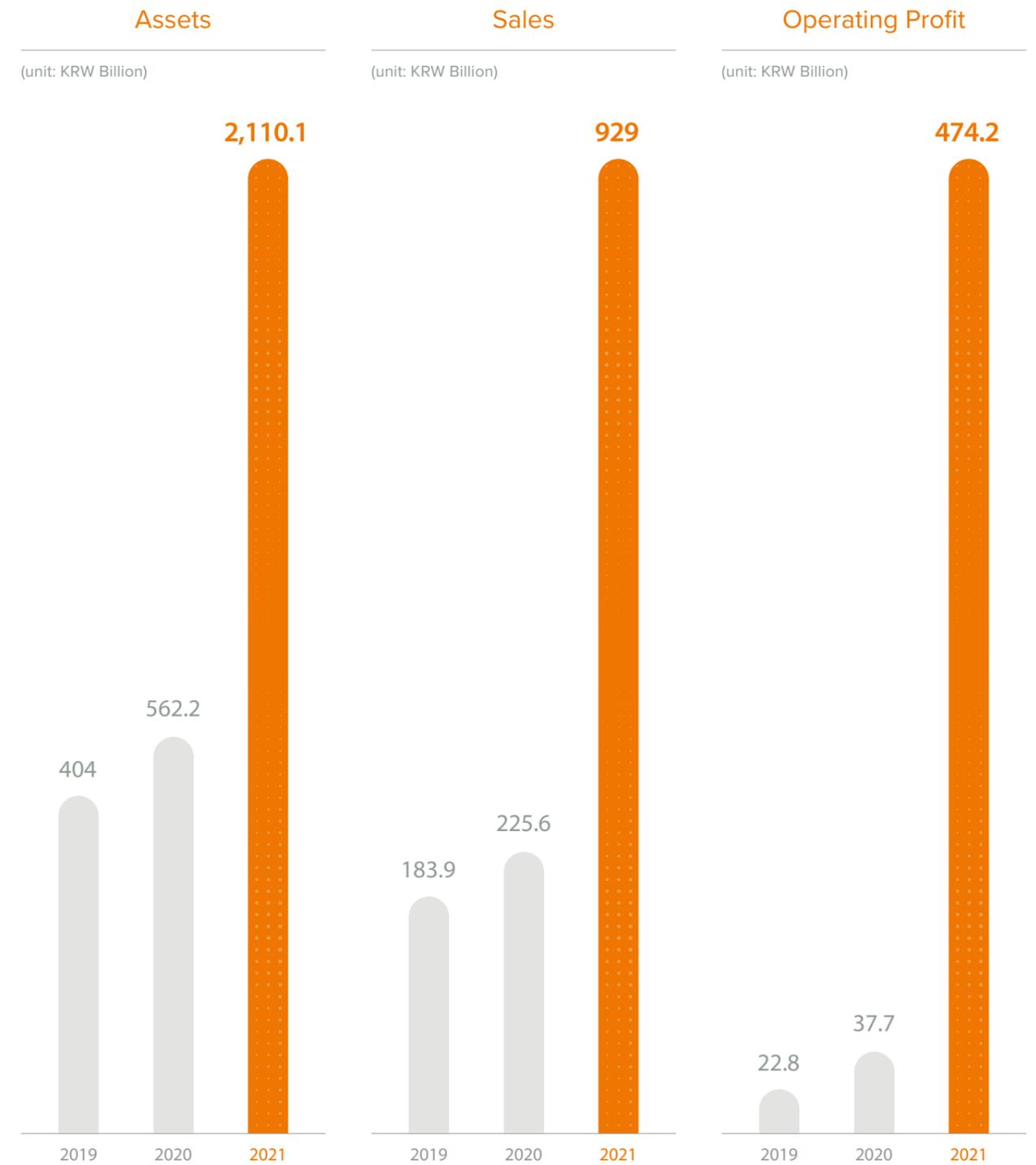
As a global vaccine hub, SK bioscience continues to improve human health and sustainable growth with CMO/CDMO businesses. We are exploring business directions with various global biotech companies, institutions and governments, building on the trust we have established in the global market over the past 20 years.

As an innovative partner in the global vaccine market, we continue sustainable growth through CMO/CDMO businesses. Our collaboration with AstraZeneca's COVID-19 vaccine CMO business during the pandemic lead to remarkable sales growth and the first supply of a COVID-19 vaccine in South Korea.

In addition, the Novavax COVID-19 vaccine CDMO business expanded vaccine choices for South Koreans.

With our advanced R&D technology and manufacturing facilities that adhere to strict global standards, we emerged as a global vaccine hub during the COVID-19 pandemic. In close relationships with global organizations such as the Bill & Melinda Gates Foundation, CEPI and IVI, as well as with international governments and biotech companies, we are determined to address the global vaccine supply inequality and take the lead in building a new portfolio to tackle the next pandemic.

Performance Highlights



GLOBAL INNOVATIVE PARTNER OF **VACCINE** AND BIOTECH

We are strengthening core competitiveness by expanding vaccine portfolio

SK bioscience is actively responding to the COVID-19 endemic phase and to the next pandemic by pursuing continuous growth fueled by our proprietary vaccine development capabilities. With bold and sustained investments in R&D and manufacturing infrastructure, we are preparing for the future by expanding our vaccine pipelines from the basic, COVID-19 and mRNA.

As the COVID-19 pandemic morphs into outbreaks of increasing mutations, we are moving to preemptive responses. With our proven vaccine platform, we are developing, next-generation vaccines in a variety of new forms and concepts, including: a universal vaccine to prevent the broadly protective vaccine against sabecovirus as well as its larger viral family; a combination vaccine that simultaneously targets influenza and COVID-19; a multivalent vaccine to address multiple variants of COVID-19; and an antiviral nasal spray to prevent COVID.

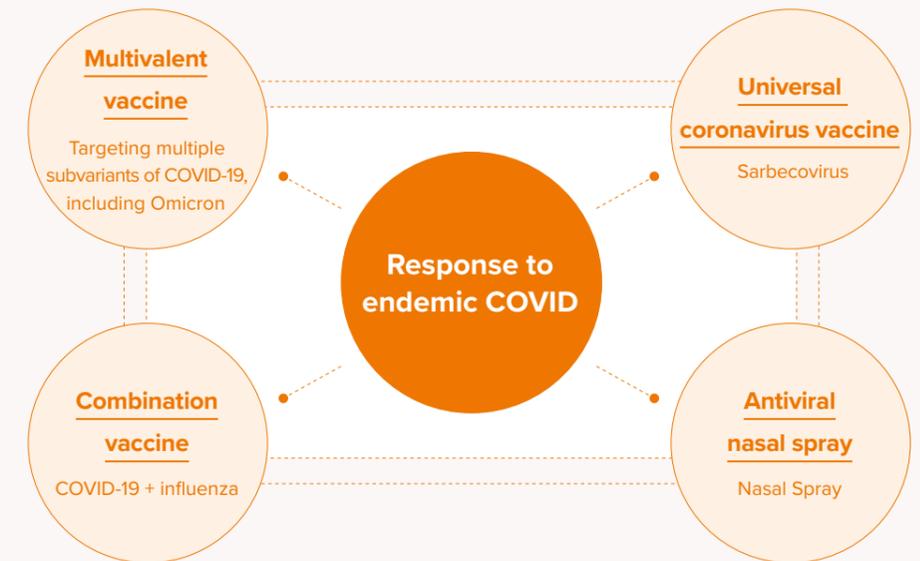
We are also aggressively investing in advanced infrastructure to address endemic COVID.

By serving as a development base for next-generation vaccines and biotechnology as well as an open innovation center to nurture top biotechnology talent and technology exchanges, our new Global R&PD Center in Songdo is designed as a global hub for the bio-industrial ecosystem. We are also expanding and improving our manufacturing facilities at L HOUSE in Andong.

As we manufacture the next-generation of innovative vaccines at L HOUSE, we are making the leap to become a hub for global vaccine and bio products.



Expanding product portfolio to address endemic COVID



Securing new formulations

- Developing new vaccine formulation technologies, such as nasal spray

Acquiring products/companies

- Acquiring products and businesses from international vaccine companies
- Acquiring companies with a basic vaccine portfolio

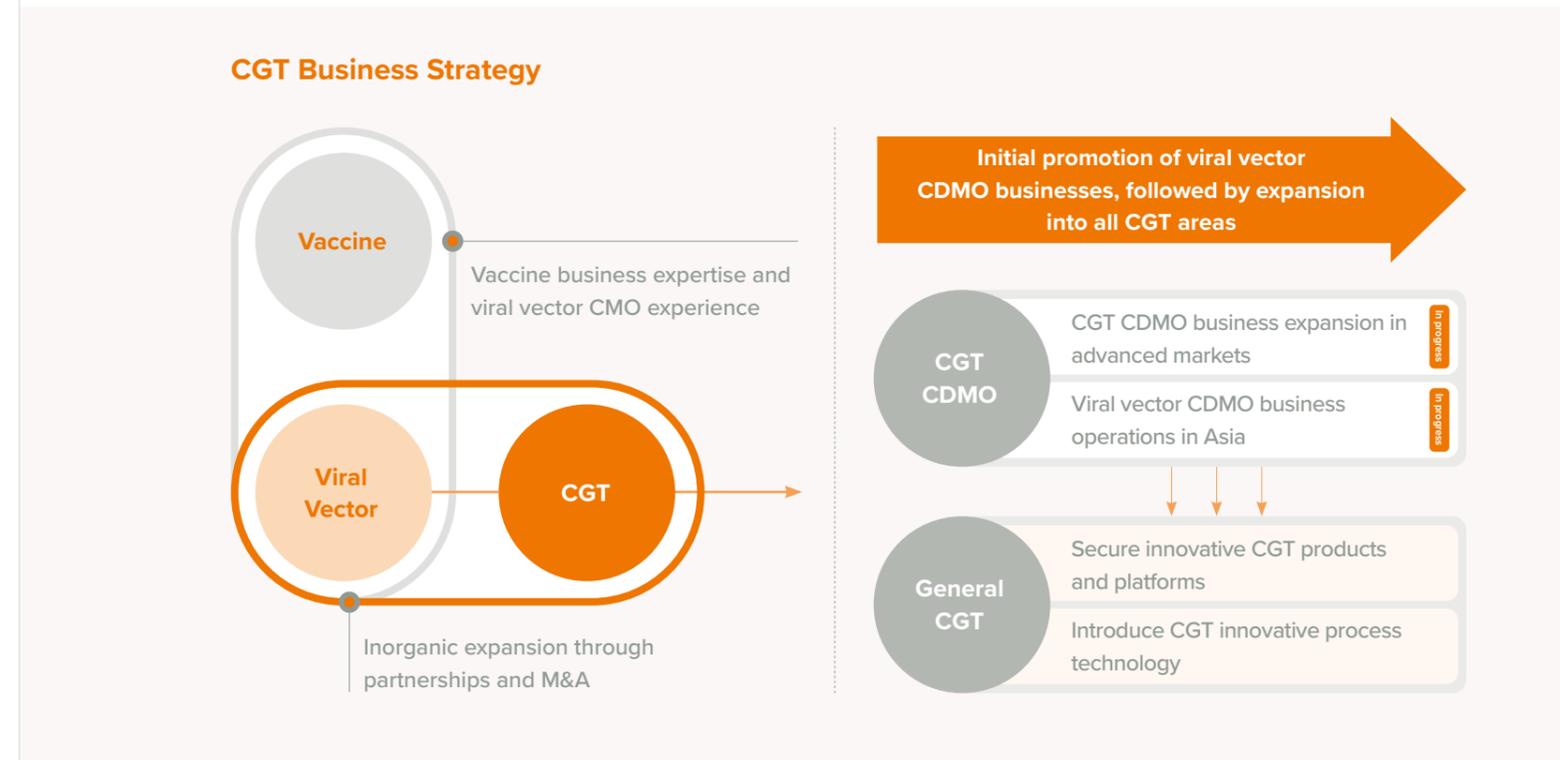
GLOBAL INNOVATIVE PARTNER OF VACCINE AND BIOTECH

We are investing in future value to secure growth.

SK bioscience is securing innovative capabilities to respond to the next pandemic. These preemptive measures and ability to overcome challenges are creating new opportunities and improving the fundamentals of our business and management.

We focus on business innovation in order to become more competitive in response to the next pandemic. The innovation includes digital transformations to improve business efficiency and ESG management that considers sustainability at every stage of business. In this rapidly changing environment, such innovation will raise our profile and increase the value of our business.

We also focus on technological innovation. To acquire cell and gene therapy (CGT) technology, advanced biotechnology with high-growth potential, we will make strategic investments and enter into M&A with international vaccine and biotech companies. Those initiatives will set the foundation for sustainable growth and new opportunities. We will keep growing as an expert global innovation partner in vaccines and biotech to meet the needs of our current and future customers.

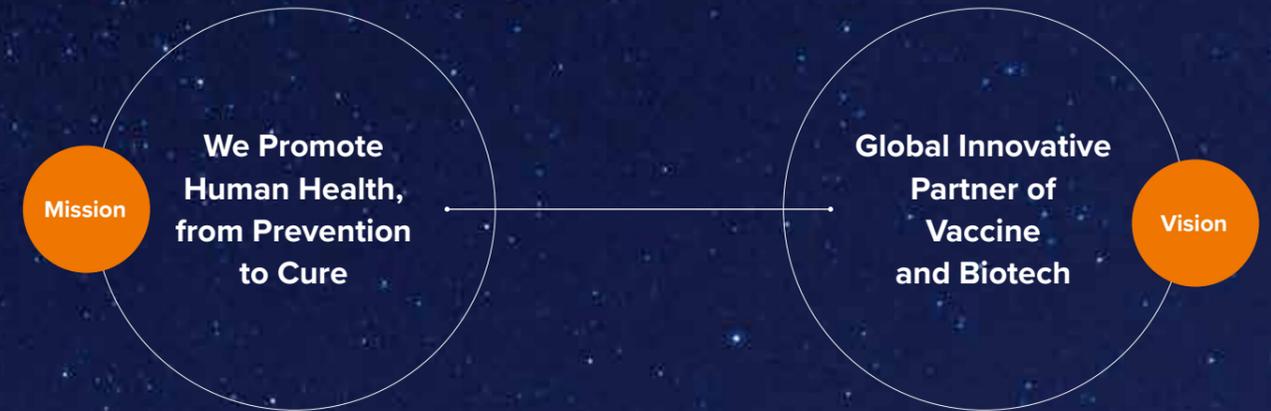


AT A GLANCE



Vision & Mission

We are committed to Promoting Human Health from prevention to cure as we develop and distribute biopharmaceuticals that include vaccines. We are harnessing our proprietary technology and global network to grow as a Global Innovative Partner of Vaccine and Biotech.



Business Areas

We operate a domestic and international business in advanced technology vaccines, the driving force for the future of life science. Collaborating with domestic and international companies and institutions, we strive to find solutions that will improve lives.

In-house vaccine development and manufacturing	<ul style="list-style-type: none"> • Research and develop in-house vaccines such as COVID-19 vaccines in cooperation with global organizations and companies • Immediate mass manufacturing of vaccines through L HOUSE in Andong, a world-class vaccine plant
Global joint development and technology transfer	<ul style="list-style-type: none"> • Joint development and technology transfer through the full vaccine development process, from candidate discovery to clinical trials, licensing and sales - Offering fast product development solutions - Open innovation with global partners
Global CMO/CDMO business	<ul style="list-style-type: none"> • Joint research into vaccine development with global companies and institutions while operating CMO/CDMO businesses using our experience, technology and flexible manufacturing system for various platform developments
Domestic business	<ul style="list-style-type: none"> • Joint sales and CMO/CDMO businesses with domestic and international companies for greater convenience in administering vaccines and expanding the domestic vaccine market by using our sales and marketing infrastructure

MILESTONES

SKBS 1.0 / Scaling Up

Entering the South Korean Vaccine market

- 2001**
 - Acquired Dongshin Pharm (vaccines, blood products)
- 2005**
 - Established the vaccine R&D center

Highpoints of original technology

- 2015**
 - Launched SKYCellflu, South Korea's first cell-cultured trivalent influenza vaccine
- 2016**
 - Launched SKYCellflu Quadrivalent prefilled syringe, world's first cell-cultured quadrivalent influenza vaccine
- 2017**
 - Launched SKYZoster Inj., world's second shingles vaccine
 - Signed an agreement with international organization PATH to develop and manufacture rotavirus vaccine for developing countries

2001

2001 - 2005

2012 - 2014

2015 - 2017

2018

2018 - 2019

Planning for growth

- 2012**
 - Built L HOUSE Vaccine Manufacturing Site
- 2013**
 - Earned LEED Gold certification for L HOUSE Vaccine Plant, a global green building certification program run by the US Green Building Council
 - Signed a contract with the International Vaccine Institute (IVI) to develop and supply a typhoid conjugate vaccine
- 2014**
 - Established a strategic partnership with Sanofi Pasteur to co-develop next-generation pneumococcal conjugate vaccine
 - Received KGMP sustainability certification for L HOUSE Vaccine Plant

Moving into the global healthcare market

- 2018**
 - Established SK bioscience, subsidiary spinoff of SK chemicals' VAX business unit
 - Launched SKYVaricella Inj., South Korea's second chickenpox vaccine
- 2019**
 - Received WHO Prequalification (PQ) certification for SKYCellflu Trivalent/Quadrivalent cell-cultured influenza vaccines
 - Received WHO PQ certification for SKYVaricella Inj. chickenpox vaccine
 - Began exporting SKYCellflu to Asian markets

SKBS 2.0 / Making the Quantum Jump

Taking off as a global innovative partner of vaccine and biotechnology

- 2020**
 - Began COVID-19 vaccine development, GBP510
 - Signed COVID-19 vaccine CDMO agreement with Novavax
 - Signed COVID-19 vaccine CMO agreement with AstraZeneca
 - Secured funding from the Bill & Melinda Gates Foundation to develop COVID-19 vaccine
 - Initiated phase 2 clinical trial for next-generation pneumococcal conjugate vaccine co-developed with Sanofi Pasteur
 - GBP510, COVID-19 vaccine candidate selected for Wave 2 vaccine (CEPI)
 - Exported SKYVaricella Inj. chickenpox vaccine to Turkiye
- 2021**
 - Signed licensing and purchase agreement for NVX-CoV2373 (Novavax, KDCA [Korea Disease Control and Prevention Agency])
 - Listed on KOSPI (Korea Composite Stock Price Index) market
 - Obtained EU-GMP certification for COVID-19 vaccine manufacturing facility
 - Signed MOU to expand L HOUSE and purchase additional sites in Andong-si, Gyeongsangbuk-do
 - Established the Park MahnHoon Award, a veritable vaccine Nobel Prize, with the International Vaccine Institute (IVI)
 - Secured funding to develop sarbecovirus vaccine candidate GBP511 from CEPI
 - Achieved the largest-ever sales and operating profit
- 2022**
 - Obtained additional EU-GMP certification for COVID-19 vaccine manufacturing facility
 - Received Turkiye-GMP certification for influenza, chickenpox, shingles vaccines manufacturing facility
 - Signed advance purchase agreement for SKYCovione with the KDCA
 - Began phase 3 clinical trial of GBP510 booster shot
 - Obtained license with Novavax for COVID-19 vaccine Nuvaxovid from the MFDS
 - Began to develop nasal spray-type antiviral drug (International AIDS Vaccine Initiative, the Bill & Melinda Gates Foundation)
 - Hosted the first ceremony of the Park MahnHoon Award
 - Obtained an export license by MFDS for typhoid conjugate vaccine and received WHO PQ certification
 - Exported SKYVaricella Inj. chickenpox vaccine to Latin American market through the European Commission's international public procurement market
 - Published the first ESG report
 - Obtained license for SKYCovione Multi Inj. from the MFDS, South Korea's first COVID-19 vaccine

2020

2021

2022

2022

SKBS 3.0 Next Generation

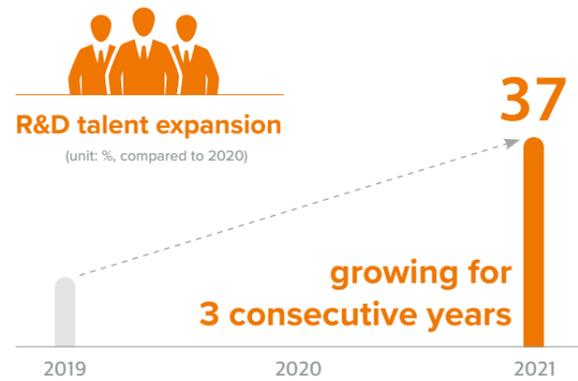
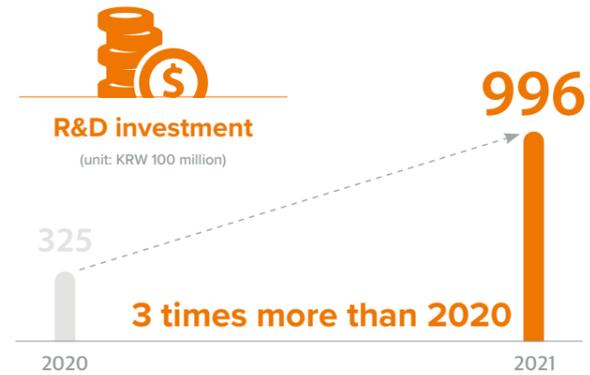
KEY COMPETENCIES

LEADING THE WAY

SK bioscience is prepared for the next generation of challenges because of the differentiated competitiveness we have achieved over the years. Building on our proud history of being the first and the best to develop proprietary vaccines, we will continue to pioneer breakthroughs with innovative technology and a world-class manufacturing infrastructure.



TECHNOLOGY LEADERSHIP



Innovative R&D Drives Unlimited Possibilities for the Bio-Industry

Continuous investment in R&D has allowed us to develop advanced technology and to recruit excellent researchers. We have developed a cell-cultured quadrivalent influenza vaccine, a shingles vaccine, a chickenpox vaccine and more. Such achievements also led us to joint development of a next-generation pneumococcal vaccine with Sanofi Pasteur, a leading international vaccine company. In 2022, we succeeded in developing South Korea's first COVID-19 vaccine, which demonstrated not only our innovative technological capabilities but also secured the nation's vaccine sovereignty. Looking ahead, we are focusing on vaccine pipelines for endemic COVID as well as for the next pandemic. We are also working to develop state-of-the-art advances, such as an mRNA vaccine platform and CGT technology.



Proprietary COVID-19 vaccine SKYCovione Multi Inj. (Brand name in EU/UL : SKYCovion)

Funded by the Bill & Melinda Gates Foundation and CEPI (The Coalition for Epidemic Preparedness Innovations) and supported by the South Korean government, SKYCovione was co-developed by the Institute for Protein Design (IPD) at the University of Washington School of Medicine and SK bioscience while applying GlaxoSmithKline's AS03 adjuvant. It is a recombinant protein-based vaccine with proven immunogenicity and safety through phase 3 clinical trials. Available for refrigerated distribution and long-term storage, SKYCovione offers a good option for developing countries that cannot meet requirements for expensive ultracold storage.



PIPELINE

SK bioscience is creating a diverse vaccine pipeline by developing innovative technologies based on our firm commitment to in-house vaccines. Capitalizing on our development capabilities and experience, we are developing next-generation vaccines that demonstrate our leadership and will accelerate entry into the global market.

					Basic Research / Preclinical	Phase I Clinical Trial	Phase II Clinical Trial	Phase III Clinical Trial	Commercialization
 <p>COVID-19 RESPONDING ENDEMIC</p>	COVID-19 Vaccine	CEPI	BMGF	GSK IIVI IPD South Korean government	●	●	●	●	✓ Obtained license from the MFDS
	Combo Vaccine (COVID-19 + Flu)				✓				
	Universal Coronavirus Vaccine (Sarbecovirus)	CEPI	IPD ²⁾		✓				
	Nasal Spray*	IAVI ³⁾	BMGF ¹⁾		✓				
	COVID-19 mRNA Vaccine*	To be announced			✓				
 <p>PREMIUM</p>	Next-Gen Pneumococcal Vaccine	Sanofi					✓ U.S		
	RSV Vaccine				✓				
	Cancer Immunotherapies, Obesity Vaccines, etc				✓				
	Typhoid Conjugate Vaccine	IVI ⁵⁾	BMGF					✓	Earned a biologics license for export
 <p>BASIC</p>	Cervical Cancer Vaccine (4-/10-valent)							✓	
	Rotavirus Vaccine						✓	Phase I/II Clinical Trial	
	iNTS ⁶⁾ Vaccine* (Non-Typhoidal Salmonella)					✓			
	Hepatitis A, Recombinant Herpes Zoster Vaccines, etc.				✓				
	Others				✓	In-house development and introduction from home and abroad in progress			

1) Bill & Melinda Gates Foundation
 2) Institute for Protein Design
 3) International AIDS Vaccine Initiative

4) International Vaccine Institute
 5) Invasive Non-Typhoidal Salmonella
 * Collaboration Project

OPERATION EXCELLENCE



Advanced Manufacturing Capabilities with Efficiency and Expertise

We operate exceptionally efficient manufacturing based on our expertise and a differentiated system supported by integrated technology at our state-of-the-art facilities. Our L HOUSE Vaccine Plant offers superior manufacturing solutions and operational standards that meet the varied needs of customers. Our manufacturing quality is proven by our collaboration with a range of global companies. For example, experience and quality powered the global distribution of South Korea's COVID-19 vaccine. With continuous expansion of infrastructure and upgrades to manufacturing technology, we are increasing manufacturing capacity and abilities to diversify product portfolio.

MANUFACTURING INFRASTRUCTURE & QUALITY CONTROL

As the largest vaccine plant in South Korea, L HOUSE is capable of mass product manufacturing. Advanced capacity of L House enables business expansion with global companies, including for COVID-19 vaccine CMO, CDMO and more. SK bioscience also manufactures high-quality products that comply with strict international standards throughout the entire manufacturing process, from raw material purchases to manufacturing, quality control, shipment and distribution.

L HOUSE

L HOUSE is a manufacturing base optimized for mass manufacturing and distribution of vaccines. We are currently expanding a new site of more than 1 million square meters as we pursue CDMO and CMO projects with worldwide partners. This will not only increase our manufacturing capacity but also secure the core infrastructure to manufacture next-generation vaccine products, including new platforms such as mRNA. L HOUSE is on track to become a global vaccine manufacturing hub.

EU-GMP Certification

L HOUSE is certified with WHO prequalification (PQ). We earned EU-GMP certification for our COVID-19 vaccine manufacturing facility, the first EU GMP certified vaccine facility in South Korea, thus proving our high-quality international management expertise. In addition, L HOUSE is preparing for cGMP certification from the US FDA (Food and Drug Administration), which will pave the way for entry into such advanced markets as North America.



MANUFACTURING SYSTEM

The core of our differentiated manufacturing capabilities is an efficient and high-level vaccine manufacturing system. Our rapid processing abilities speed productivity while maintaining stable quality during mass manufacturing.

Pioneering Single-Use Systems for Commercial-Scale Vaccines

We introduced the single-use system for the first time in South Korea, which uses a disposable incubator without other equipment washing to enable a complete aseptic technique on a commercial scale. The single-use system shortens the time for turn over and process development, allowing for flexible and rapid response to customer needs.

Adopting a Multi-Modular System for Diverse Vaccine Types

Equipped with 9 suites (8 culture suites, 1 cell bank) and a comprehensive facility for vaccine manufacturing, including cell culture, bacterial culture and gene recombination, L HOUSE has excellent manufacturing capacity for a wide range of vaccines. We offer optimized manufacturing systems for each vaccine type to achieve the greatest cost-effectiveness.



Introducing the single-use system

- Great for speedy process development and scaling up
- Cost-effective owing to quick turnaround time, easy validation and fewer cleaning requirements

Diverse platforms

- Diverse vaccine manufacturing in a suite
- Flexible and rapid response to clinical materials supply and commercial manufacturing changes

Future expansion

- Flexible expansion for capacity increases

Multi-Modular System for Diverse Vaccine Types

<p>Fermentation E coli/Yeast Polysaccharide</p>	<p>Commercial</p> <ul style="list-style-type: none"> • SKYCellflu • SKYZoster Inj. • SKYCovione 	<ul style="list-style-type: none"> • SKYVaricella Inj. • SKYTyphoid Inj.
	<p>Protein conjugate DT/CRM197/TT</p>	<p>In-house R&D</p> <ul style="list-style-type: none"> • Next generation PCV • Sarbecovirus • Rotavirus
<p>Cell culture Suspension adherent microcarrier</p>	<p>Partnership R&D</p> <ul style="list-style-type: none"> • Typhoid • HPV • Sarbecovirus • COVID-19 	
<p>Recombination</p>		

TRUSTED PARTNERSHIP

SK bioscience is embracing global collaboration to promote health and lead the global vaccine and biotech market. Harnessing partnerships built on superior technology and manufacturing capacity, we are expanding our CMO and CDMO businesses. In joint research and development, we are working closely with a range of partners within the bio-ecosystem, including global initiatives, companies and governments. We will consolidate our collaboration as we grow into a global vaccine hub by capitalizing on our joint development, commissioning projects, technology transfer, strategic M&A and open innovation.

Partnerships in Response to COVID-19

Our commitment to develop biopharmaceuticals to prevent and treat viruses that pose a threat to humanity led to a range of international collaboration.

Expanding CMO/CDMO Partnerships

- AstraZeneca COVID-19 vaccine CMO (2020~2021)
- Novavax COVID-19 vaccine CDMO, licensing and commercial manufacturing (2020~2022)

All-Around Cooperation for COVID-19 Vaccine Development

- Funding from the Bill and Melinda Gates Foundation and CEPI
- Joint development with the Institute for Protein Design at the University of Washington School of Medicine
- Applying adjuvant AS03 of a global pharmaceutical company GSK
- Supporting South Korea's Pan-Government Support Committee for COVID-19 treatment and vaccine development
- Advance purchase agreement to provide 10 million doses to the Korea Disease Control and Prevention Agency
- Building a global supply hub with strong collaborations with local governments and companies around the world to provide vaccine

Bolstered by our proven technology and expertise, we are aggressively exploring partnerships with a range of global pharmaceutical companies and institutions for technology cooperation and joint development.



PRODUCT PORTFOLIO



SKYCovione Multi Inj. (Recombinant protein vaccine for COVID-19)

South Korea's first developed COVID-19 vaccine, SKYCovione is a recombinant protein-based vaccine, which has been evaluated to have efficacy and safety. Unlike mRNA vaccines that require ultra-cold chain logistics and have very short stability, SKYCovione can be refrigerated at 2–8 degrees Celsius for transport and can be stored for a longer period. We expect long-term demand to rise because SKYCovione can play a key role in increasing vaccination rates in developing countries where the imbalance in vaccine supply and demand continues.



SKYTyphoid Multi Inj. (Typhoid conjugate vaccine)

Jointly developed with the International Vaccine Institute, SKYTyphoid Multi Inj., is a typhoid conjugate vaccine. It is a polysaccharide-protein conjugate vaccine developed by conjugating the polysaccharide of typhoid bacteria, which acts as the antigen, to the diphtheria toxin protein (diphtheria toxoid), which acts as a carrier. Compared to existing live oral vaccines or polysaccharide vaccines, it offers higher superior immunogenicity with a single dose and provide longer-term prevention. Owing to its conjugation technology, children ages 6 months to 2 years can receive the vaccine.



SKYCellflu Quadrivalent (Cell-culture-derived influenza vaccine)

South Korea's only cell culture-derived influenza vaccine and a world-first launch, SKYCellflu Quadrivalent is a cell-culture-derived Influenza vaccine. Unlike the conventional technique of using fertile chicken eggs, it is manufactured in a state-of-the-art sterile incubator that eliminates the need for antibiotics or preservatives. That's a significant benefit for patients with egg allergies or hypersensitivity to antibiotics. Manufacturing time is also cut nearly in half, allowing for rapid Manufacturing. Its innovation and reliability have garnered high market share.

SK bioscience has a broad ranging product portfolio.

Our self-developed vaccines are manufactured with rigorous quality controls and recognized for their high market shares. In addition, we are expanding our vaccine portfolio to provide more customer choices and secure new growth drivers.

SKYCellflu Trivalent (Cell-culture-derived influenza vaccine)

In 2015, SKYCellflu Trivalent was the first cell-culture-derived influenza vaccine developed in South Korea. It is manufactured in a state-of-the-art sterile incubator that eliminates the need for antibiotics or preservatives and avoids using fertile chicken eggs, which can be dangerous for people allergic to eggs. It is the first in the world to acquire the World Health Organization Pre-Qualification (PQ) certification.



SKYZoster Inj. (Herpes zoster live attenuated vaccine)

The world's second and South Korea's first shingles vaccine (herpes zoster), SKYZoster Inj. is a premium vaccine.

The vaccine is a live attenuated varicella-zoster virus, which has been rigorously proven safe by specialized nonclinical trial institutes. After launch, the vaccine has become a leading product in meeting rising demand for herpes zoster treatments.



SKYVaricella Inj. (Live Varicella virus vaccine)

A chickenpox vaccine, SKYVaricella Inj. was developed with our own bioprocess technology. Its immunogenicity and safety have been confirmed in a global phase 3 clinical trial conducted in children ages over 12 months to under 12 years at 19 clinical institutions in domestic and abroad. It was certified by WHO PQ, only the second time in the world for a vaccine, and won the bid for export to Latin America from the Pan American Health Organization (PAHO), an international United Nations organization.





ESG MANAGEMENT

HEALTHIER LIFE, SUSTAINABLE FUTURE

SK bioscience is creating social and business value to build better lives for everyone.

Our responsible practices help us to grow and also reward stakeholders. We strive to address today's worldwide environmental and social challenges. Therefore, we established an ESG management strategy with a dedicated team to implement sustainability in every business area. We expect to emphasize environmental management as we respond to climate change and nurture a bio-industrial ecosystem that protects health. SK bioscience is pursuing sustainable growth that can be shared with future generations.

ENVIRONMENT

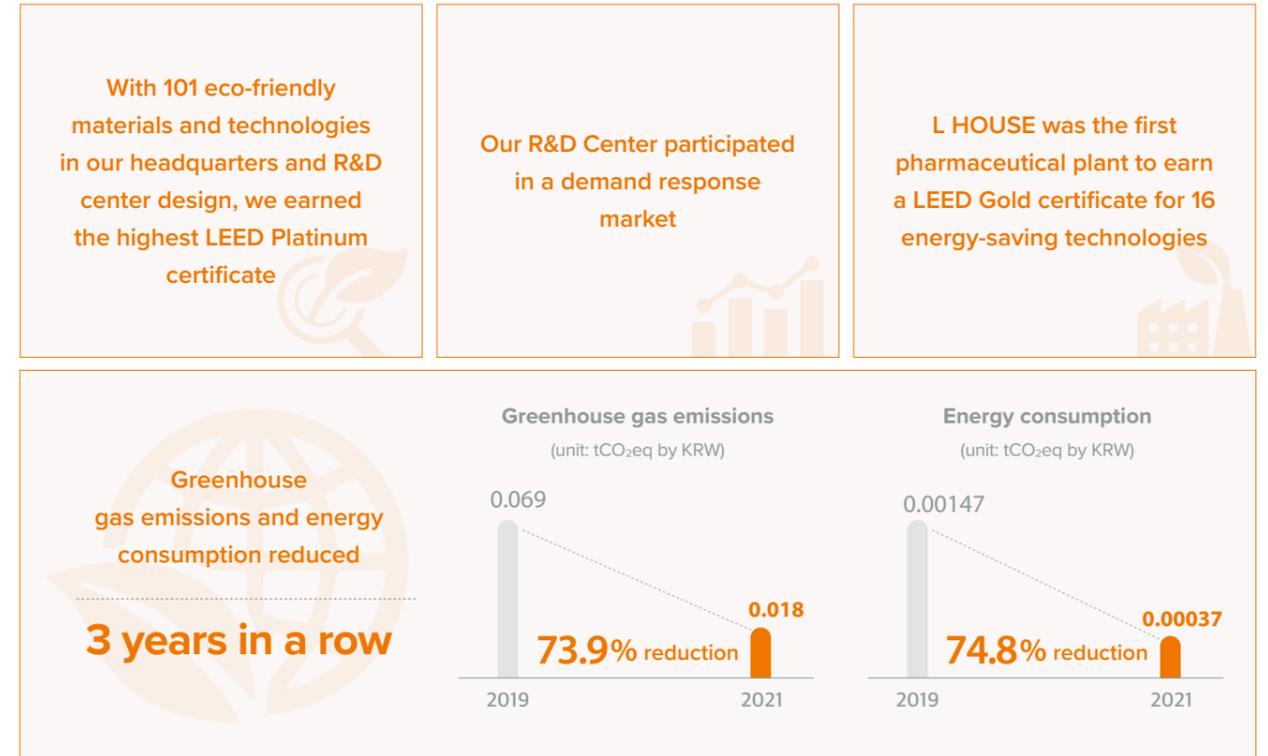
By adopting SHE (Safety, Health and Environment) policies as our business foundation, SK bioscience seeks to coexist with nature and people as we minimize environmental impact throughout operations, from R&D to manufacturing and from distribution to disposal. We established an environmental management system and built a specific carbon neutrality roadmap to help meet the climate change challenges we face today.

Energy Consumption Management and Reduction

We are considering eco-friendly design, construction and technologies at every business site to reduce energy consumption. In designing our headquarters in Pangyo and the R&D center, we incorporated 101 eco-friendly materials and technologies. Our L HOUSE introduced a range of energy-saving equipment during the manufacturing process. Our energy consumption is systematically managed and constantly monitored.

Waste and Pollutant Management

We are committed to eco-management of wastewater and hazardous substances generated during manufacturing processes. We strictly monitor and manage the level of waste generated that may harm the environment. To reduce air pollutants caused by burning fossil fuels, we have replaced boilers in the manufacturing process with LNG, an eco-friendly fuel. In addition, we introduced a Biokill System to eliminate biological hazards that may arise during manufacturing, and we make sure to reduce water contamination before discharge.



Hazardous Chemicals Management

L HOUSE built its inventory to protect employees, surrounding ecosystems and nearby communities from exposure to hazardous chemicals. Our system monitors a Material Safety Data Sheet (MSDS) when any new chemicals are introduced. We also provide continuous education for employees to prevent accidents and raise awareness of the potential dangers of hazardous chemicals.

Greenhouse Gas Emissions Management and Reduction

By 2030, we expect to reduce L HOUSE direct and indirect emissions by 50% while we work on more detailed implementation measures. We are making progress. Our strengthened measures reduced greenhouse gas emissions in 2021 by 73.9% compared to that of 2019. To guard against increased emissions, we will continue to invest in green energy facilities. We will disclose our greenhouse gas reduction goal and strategy in keeping with the recommendations of the international Financial Stability Board's Task Force on Climate-Related Disclosures. We further expect to participate in joint global initiatives starting with our declaration of support for the TCFD in August 2022.

SOCIAL

We envision a world in which we can grow together with the society. By building workplaces that offer diverse growth opportunities in safe environments, creating a virtuous circle of ecosystems that connects people and technologies and revolutionizes the bio-industry, and growing together with our partners, we share our social values. We promise a sustainable world for tomorrow.

Warmhearted Professional

We operate a variety of programs to attract top talent and inspire innovation. Our ideal candidate is an individual who exemplifies a “warmhearted professional.” We strengthened the recruitment network to identify such individuals and we operate internship programs at universities around the world to foster global competencies. We also ensure equitable opportunities in recruiting and nurturing talented women.

Safe and Healthy Workplaces

We are committed to creating workplaces where employees can work healthfully in safe environments. With our firm belief in SHE (Safety, Health and Environment), the basis of our management principles, we are identifying and reducing workplace risks in advance. We conduct routine joint inspections and provide SHE education for all employees and visitors as part of our commitment to safety first. We aim to prevent even the smallest hazards that may threaten safety.



Sustainable Win-Win Growth with Partners

Relying on win-win cooperation with our partners, we are building trust and improving productivity and competitiveness. We operate a win-win growth support program based on fair trade that protects the rights of our partners. SK Win-Win Academy assists our partners with various education and training programs that help strengthen their competitiveness. We also identify and support biotech startups that may advance technology development and manufacturing innovation in the bio-ecosystem and expand the bio-industry.

Building a Global Bio-Ecosystem

With the ESG mission of “Protecting People’s Health by Building a Global Bio-Ecosystem,” we support social contribution programs in three major areas: cultivating global biotech talent; building win-win community relationships; and promoting healthy lives. We are striving to solve the inequalities in vaccine supply by nurturing global bio talent as we face the threat of the next pandemic. We are also creating a hub to develop a global bio-ecosystem workforce as we support basic research that includes investing in the RIGHT Fund (Research Investment for Global Health Technology), a nonprofit private-public partnership that funds R&D into infectious diseases in developing countries; sponsorships for the International Vaccine Institute (IVI); and support for industry-academia research programs. At the same time, we are striving to build a bio-ecosystem in which we can grow together with stakeholders.

Female employee ratio



37

(unit: %, as of 2021)

Female team leader ratio



19

(unit: %, as of 2021)

Social donations in 2021



Sponsored the Park MahnHoon Scholarship since 2021



Support for the Department of Bio-Vaccine Engineering, Andong National University

GORVERNANCE

As global ESG management standards become increasingly advanced, SK bioscience is building innovation in governance. By establishing an ESG Committee that reports to the Board of Directors, we ensure that ESG management is embedded throughout our business processes, from management strategy to implementation, to achieve sustainable growth. Through transparent and sound governance, we are becoming a trusted company.

ESG Vision and Strategy

ESG VISION	HEALTHIER LIFE, SUSTAINABLE FUTURE			
ESG STRATEGY	Building eco-friendly management system	Being Reliable partner for society	Creating social value through business	Implementing sustainable governance
ESG GOAL	Enhancing the environmental management system	Expanding talent/ human rights management	Creating social value through business	Internalizing ESG management
	Addressing climate change by moving toward net zero	Creating community social value	Building a global bio-ecosystem	Strengthening Board-centered management

Transparent Board Composition and Operation

We established a transparent and sound governance structure by appointing informed outside directors who exemplify diversity and independence, gender parity and specific areas of desirable expertise. By separating the CEO position from the Chairman of the Board, we ensured Board independence, enhanced the roles of outside directors and strengthened Board functions. With that in mind, we recently established specific Guidelines for Board of Director Diversity and Outside Director Independence. As we consider the global trend toward ESG, we are emphasizing Board-centered responsibility management with the revised Corporate Governance Charter.

Operations of the ESG Committee, under the Board of Directors

In 2021, we established the ESG Committee and Nomination and Compensation Committee. The ESG Committee reviews and shares direction and performance of ESG strategy in regular meetings. When necessary, the committee places issues on the Board agenda to gain decision-making assistance for ESG management. In addition, we are actively internalizing ESG management by incorporating ESG elements into the company's KPIs.

Ethics and Compliance Management

We established a code of ethics that considers various stakeholders. By codifying the principles and guidelines of ethical management, we provide clear and consistent standards for all employees. We regularly conduct ethics education for employees. In addition, new hires must undergo compliance education.



Published by
SK bioscience Co., Ltd.

www.skbioscience.co.kr

82-2-2008-2200

310, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, South Korea

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SKB-PO01-202209-01

