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## Eco-friendly Activities



## Eco-friendly Data Centers

### Green Data Center Status

#### Pangyo Data Center

- High density/modular environment for Cloud services, network neutrality for multi-line connectivity, and easy and fast connectivity to Cloud services
- Providing customer network ownership through network neutrality
- High availability, high efficiency, state-of-the-art facilities and application of renewable energy



View of Pangyo DC

- Total floor area: 66,942m<sup>2</sup>
- 6 floors above ground, 4 floors below ground
- Computer room 18,512m<sup>2</sup>
- Capacity 70 MW

#### Daedeok Data Center

- Designed and built to meet major DC (Data Center) standards at home and abroad
  - DC operational confidence level Tier 3, with a foundation for power reliability and disaster response
- Acquired Green DC certification (2013~)
- Gaining availability with core facility N+1 or 2N configurations
- Large-scale expansion of solar power generation facilities to reduce greenhouse gas emission



View of Daedeok DC

- Total floor area: 13,223m<sup>2</sup>
- 4 floors above ground, 1 basement level
- Computer room 5,818m<sup>2</sup>
- Capacity 9MW



Green Data Center Certificate

### Green Data Center Operations

#### Greenhouse Gas Reduction by Increasing the Percentage of Renewable Energy Utilization

- A large-scale expansion of solar power generation facilities in the data center has been completed to expand renewable energy self-generation and new renewable energy technologies such as hydrogen fuel cells will also be invested in consideration of future market conditions and economic feasibility
- In addition to participating in green premium bidding, stable renewable energy utilization measures such as PPA and REC are being considered

※ Securing solar power generation facilities in available space of Daedeok DC (parking lot, rooftop) (560KW)  
Average annual power production of 80KW (Korea Electric Power Corporation can save 100 million won/year in electricity bills)



Solar Power Plant Installation in Daedeok DC

#### Greenhouse Gas Reduction through Eco-friendly Activities in Data Center

- High-efficiency data center operations by actively introducing high-efficiency facilities and new technology solutions
  - Introducing high-efficiency facilities such as modular uninterruptible power supply (UPS), pre-cooling refrigerator, inverter-type constant temperature and humidity chamber
  - Applying energy-saving air conditioning solutions such as application of water spray function in summer and installation of new high-heat upper surface containers, etc.
  - Operating facilities/power real-time management system, scientific efficiency activities by utilizing CFD solutions at all times
- Analyzing new cooling technologies (liquid cooling, etc.) for highly integrated IT equipment such as GPU/HPC
  - Reviewing application timing considering the expansion of the base and economic feasibility, such as accepting future customer needs
- Reviewing the establishment of a facility water recycling environment in DC to improve the water recycling rate
  - Promoting after technical review of recycling and detailed analysis of trade-off (from 2024)

# Conservation of Biodiversity

## Biodiversity Management

+ Biodiversity Policy

- Integrating the risks of biodiversity and forest degradation into the corporate risk management system.
- Revised biodiversity policy in March 2023 to maintain, enhance, and conserve biodiversity/ecosystems.
  - Clarified the scope of commitment, specified mid- to long-term goals, and established partnerships. The policy was reviewed at the board/executive level.
  - Explicitly stated that the policy applies to the headquarters, subsidiaries, and all domestic and international business sites. Encouraging suppliers and partners to comply with the policy to raise awareness of the importance of biodiversity conservation.
  - Establishing/implementing mid- to long-term goals for biodiversity protection
  - Striving for no net loss of biodiversity by 2050, ensuring operations do not harm or lead to loss of biodiversity.
  - Promoting investment and activities for biodiversity conservation, restoration, and expansion with a net positive impact by 2050.
  - Conducting assessments of biodiversity risks and impacts in the vicinity of business sites and local communities, and implementing hierarchical mitigation activities.
  - Establishing collaborative systems with various stakeholders, such as local communities and professional organizations, for the conservation of ecological environments. Making efforts to communicate management status and performance information.
- In the event of a significant risk to biodiversity during business operations, it is reported to the ESG Committee within the board for major decision-making processes.

## Forest Destruction Prevention

+ No-Deforestation Policy

- Revised forest conservation policy in March 2023 to recognize the seriousness of forest destruction caused by extreme climate change and to come up with specific responses to it. The policy was reviewed at the board/executive level.
  - Extending the scope of policy application to the headquarters, subsidiaries, and all domestic and international workplaces, and spreading the need for forest protection by encouraging suppliers and business partners to comply with the policy
  - Reviewing the implementation of appropriate measures, such as checking the risks of forest damage that may occur in the course of operation of the project and preparing a response system to protect/restore the relevant forest area in advance
  - Establishing/managing mid- to long-term goals to prevent forest destruction
    - : (Future Reformation) Actively promoting forest protection and afforestation in cooperation with stakeholders for sustainable forest protection by 2050

## CASE Biodiversity Conservation Activities

Based on SK Inc.'s biodiversity policy, each member company of the SK Group is engaged in various activities that align with their respective characteristics to promote environmental and biodiversity conservation.

SK Hynix is focused on minimizing negative impacts on the surrounding ecosystems and conducts monitoring of the nearby biological environment. It is also engaging in activities to restore the ecological functions for biodiversity conservation.

### • Installation and operation of biological monitoring devices:

A system that monitors effluent using organisms such as water fleas, algae, and bacteria to assess the toxic effects before discharge, thereby preventing negative impacts on aquatic ecosystems and biodiversity.



Biological monitoring

### • Aquatic ecosystem monitoring:

Since 2019, monitoring of aquatic ecosystems has been conducted at five locations, including Jukdangcheon and Bokhacheon. Real-time monitoring of the poor physical environment (topography, structures) and aquatic ecosystems (plants, mammals) is carried out for effective ecosystem management.



Otters in Icheon Jukdangcheon

### • Agreement for the Conservation of Endangered Species in Yeongdong Region:

A collaboration agreement was signed in December 2020 with the Geumgang River Basin Environmental Office, environmental organizations, and others to protect and restore the endangered species 'Red-Spotted Blue Butterfly' in Yeongdong-gun, Chungcheongbuk-do. Following the release of 80 individuals of the 'Red-Spotted Blue Butterfly' in May 2021, financial support of 30 million KRW per year and participation in habitat restoration activities will continue until 2023.



Parnassius bremeri

SK Innovation aims to combat climate change and preserve biodiversity in valuable forest areas. SK Innovation collaborate with government agencies and professional organizations to carry out ongoing ecosystem restoration projects.

### • Mangrove Forest Restoration Project:

Since 2018, SK Innovation has been conducting mangrove forest restoration projects in the Mekong region of Southeast Asia, where excessive development has led to degradation. In 2019, SK Innovation established and operated a social enterprise in collaboration with government agencies, professional organizations, and local residents. By 2022, SK Innovation has restored 52 hectares of damaged areas by planting 160,000 mangrove trees (with a cumulative restoration area of 188 hectares) and estimated a reduction of approximately 6,000 tons of carbon dioxide. In 2023, SK Innovation plans to expand the restoration project by adding an additional 38 hectares with tree species that have high carbon reduction effects.

## [Special Page] Biodiversity Risk Assessment

SK Telecom integrates the management of risks related to biodiversity conservation into its enterprise-wide risk management process. On a practical level, any biodiversity-related risks and opportunities are immediately reported to the Chief Legal Officer (CLO). Subsequently, these risks and their significance to the company are reported to the CEO, the Board of Directors, and the ESG Committee for timely decision-making. For building and operating network infrastructure, SK Telecom follows a risk assessment process based on the TNFD (Task Force on Nature-related Financial Disclosures) and LEAP (Leadership for Environment and Development) Framework. In the initial stages, the Value Chain is analyzed to understand the location where our infrastructure is installed and the activities taking place in that area for biodiversity conservation. If our activities and infrastructure installation location have a high level of importance and impact on biodiversity conservation, we evaluate and implement risk mitigation measures that allow us to sustain biodiversity conservation while minimizing any negative impact on customer service quality.

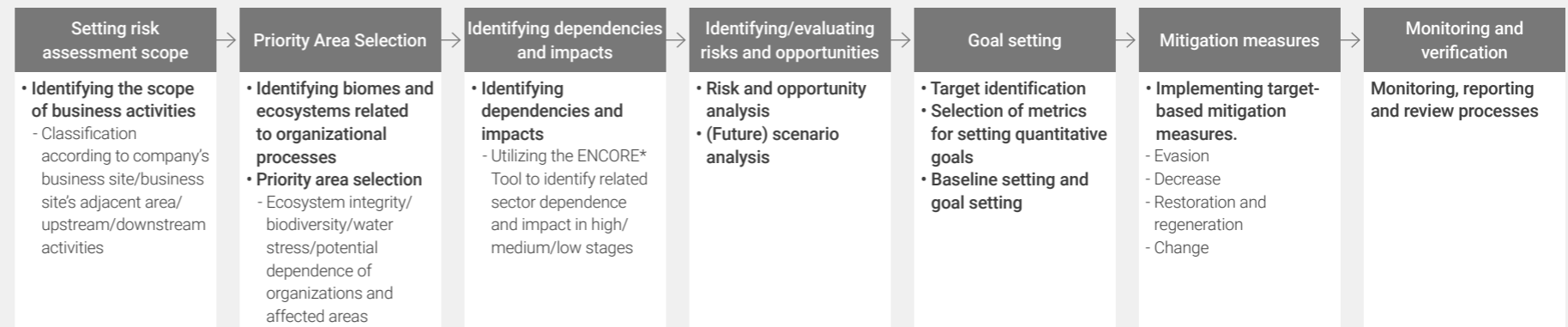
\* TNFD (Taskforce on Nature-related Financial Disclosures): Taskforce on Nature-related Financial Disclosures

\*\* LEAP (Locate, Evaluate, Assess, Prepare) Framework: An approach to calculate/evaluate each company's nature-related financial information in TNFD

### Biodiversity Risk Management Reporting System



### Biodiversity Risk Assessment Process



\* ENCORE (Exploring Nature Capital Opportunities, Risks and Exposure) Tool: A tool assisting companies to understand and visualize the impact of changes in the natural environment caused by economic activities.

### Example of Biodiversity Conservation Risk Evaluation (location, dependence, impact based evaluation)

SKT business activities (business operation area)	Location Evaluation		Regional characteristics/dependence/influence	Materiality and Risk Assessment Result	Mitigation measures
	Ecological Landscape Conservation Area	Wildlife Sanctuary			
5G service provided in Namsan area, Seoul (Yejang-dong, Jung-gu, Seoul)	0	X	Namsan Pine Forest Area with Quercus mongolica Community	High	Facilities to avoid ecological preservation areas
5G service provided in Donggang area (Mitan-myeon, Pyeongchang-gun, Gangwon-do)	0	X	Habitat of endangered species such as otters and musk deer	High	5G shared network
Old antenna replacement business (nationwide)	X	X	Waste generated by replacement antennas	Medium	Waste recycling
5G Quality Enhancement at Seoul Subway City Hall Station (Seosomun-ro, Jung-gu, Seoul)	X	X	Equipment installation in downtown facilities (impact level '0')	Low	-