

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

SK Telecom is a telecommunication company from South Korea, which operates wired and wireless telecommunication business. SK Telecom has taken the leaps towards a global leader, by demonstrating the best technologies at the international level in various fields such as Artificial Intelligence (AI), big data, IoT, mobility, and quantum password telecommunication based on 5G telecommunication technology.

SK Telecom pursues to grow with the society by contributing to the economic development and create social values. SK Telecom also aims to create both financial and social values based on our responsibility management system. SK Telecom established the responsibility management system focused on five areas such as ① customer-oriented management, ② shared growth, ③ social contribution, ④ transparent ethical management, and ⑤ environmental management, while actively practicing the social responsibility management.

As environmental issues such as climate change, energy and resource depletion have emerged as risks, the role of ICT companies in responding climate issues is becoming important. SK Telecom is enhancing its corporate efforts to realize social values and increase competitiveness. SK Telecom makes the best efforts to make our business activities environmentally friendly and preserve the environment such as: ① taking pre-emptive actions to climate change; ② improving the environmental management system; ③ creating a green corporate culture. SK Telecom introduced ISO14001 in 2011 (environmental management system) covering all business areas and makes continued efforts to minimize the negative business impacts on the environment. SK Telecom's all internal policies mandate compliance with environmental regulations as the basic rule. SK Telecom sets the detailed objectives of the environmental management activities and regularly evaluates the performance. SK Telecom makes efforts to achieve the green transition for our future generation under its environmental management goals and objectives.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Republic of Korea

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

KRW

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Director on board	1. Position on the governance and reasons for assigning responsibilities As the importance of ESG is rising, SKT newly established the ESG Committee at the board level that is the highest decision making body on the corporate climate issues. The ESG Committee is consisted of three external executives who have high expertise and insights on E (environment), S (Social), G (Governance) issues. One of the three executives was appointed as the head of the ESG Committee, to oversee and supervise the corporate climate change responses. The ESG Committee manages the main issues of climate change and makes decisions on important climate-related risks and opportunities that affect the corporate business significantly. 2. The level of responsibility When climate-related issues happen, the ESG Innovation Group analyzes and assesses the risks and opportunities and then reports the result to the CFO. The CFO reviews the impacts of the issues on our company and reports the key issues that can affect the business and finance significantly to the CEO and the ESG Committee. The ESG Committee reviews the main issues and makes the final decisions, which is reflected in our business management activities later. 3. Examples of decision making As many countries including Korea have committed to Net Zero recently, climate change is becoming an important factor to be considered not only in developing the economic and social policies but also in making investment decisions. Having recognized the growing impacts of climate change on our business activities and finance, SK Telecom established a system to review the main climate-related issues and make decisions through the ESC Committee. The main issues in 2020 were setting the Net Zero plan including the target year for achieving Net Zero, organizing GHG reduction measures in detail, and estimating the implementation costs which were reported to the CEO and the ESG Committee who decided to implement the Net Zero plan. As the result of the decision, SKT joined the SBTi on 29 January 2020 as the first domestic telecommunication company and set GHG reduction targets based on the 1.5 DS threshold which is the Net Zero standard. To achieve the targets, we identify, review, and reflect various reduction measures such as energy saving from telecommunication equipment, improving N/W efficiency, and shifting to renewable electricity.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans	<Not Applicable>	As climate change response is becoming increasingly important, so are the impacts of climate issues on our business and finance. Having continually found critical climate issues with the company, SK Telecom established the ESG committee at the board level to manage and make decisions on climate change, and reports the critical issues. The ESG Committee handles with major climate change issues which can affect the corporate finance, investment and business strategies significantly such as Net Zero and implementation of the RE100. They also continually discuss and decide the implementation plans, progress status, and performance of the corporate climate response. The ESG Committee reviews the financial and business strategies considering the impacts of climate change especially on the corporate annual budget, business plans, risk management policies and strategies and establishes the business directions.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

1. The roles and responsibilities of the CEO

The ESG Innovation Group at SK Telecom analyzes and evaluates climate-related risks and opportunities and reports the results to the CFO. The CFO reports to the ESG Committee and the CEO after reviewing the materiality of the climate-related issues. The CEO is informed about all important climate-related issues with the company and proposes key issues as the ESG Committee's meeting agendas together with his/her opinions on the issues. The CEO makes decisions on all non-material issues except for the key issues.

2. Monitoring methods of climate-related issues and the evaluation

The ESG Innovation Group at SK Telecom established a corporate-wide GHG inventory system (SKT-GHG) and manages the GHG emissions on a monthly basis. SK Telecom manages not only the GHG emissions but also environmental indicators such as water, waste, and resource consumption on a regular basis. Also, the ESG Innovation Group speedily collects and analyzes domestic and international carbon market trends and climate change regulations. In other words, the ESG Innovation Group monitors climate-related issues across five areas, which are: ① policy, ② market, ③ technologies, ④ reputation, and ⑤ physical environmental changes. When issues are identified, SK Telecom conducts a materiality assessment against two criteria - possibility of occurrence and severity of the results on the financial, regulatory and physical aspects. The results of the materiality assessment are reported to the CFO first, who selects important issues against the materiality assessment criteria and reports it to the CEO and the ESG Committee. The CEO is informed of all material issues of climate change and makes decision on all other issues except for the key issues. He proposes key issues as the ESG Committee meeting agendas together with his opinions on the issues and the ESG Committee makes the final decisions considering the materiality assessment results and opinions of the CEO.

3. Examples of the CEO's decisions on climate-related issues

The ESG Innovation Group at SK Telecom swiftly collects and analyses news and updates on the Korean Emissions Trading Scheme (KETS) and policies. Having witnessed the Net Zero commitments announced by advanced countries and global corporations as well as the strengthening climate regulations such as the introduction of the EU Carbon Border Adjustment Mechanism, the ESG Innovation Group recognized Net Zero commitment and implementation as both climate risks and opportunities in the mid and long term and conducted an assessment for more details. Based on the assessment result, the ESG Innovation Group decided Net Zero as an important climate issue and reported it to the CFO, CEO, and the ESG Committee in turn. SK Telecom joined SBTi Commitment and the RE100 in 2020 to deliver the corporate Net Zero commitment.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	One of the KPIs of the CEO is the Social Value outcomes including the GHG emissions reduction, which are calculated into monetary values. The CEO can receive monetary rewards in terms of bonuses or merit pay based on the accomplishment of the Social Value KPI.
Business unit manager	Monetary reward	Emissions reduction target	Business unit managers are the leading object of climate change work related to the Social Value KPI of the CEO and her/his individual KPI is the emissions reduction target on the emissions reduction projects in charge. She/he can receive monetary rewards in terms of bonuses or merit pay based on the accomplishment of her/his own KPI.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	2020-2023
Medium-term	3	10	2023-2030
Long-term	10	30	2030-2050

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

SK Telecom has established the financial and strategic materiality impact assessment criteria.

When making climate-related investments, we define material financial impact criteria by the case where the estimated investment cost in equipment exceeds KRW 5 billion.

On the business strategic aspect, we also measure the risk in three levels such as Low, Medium, and High, using the materiality matrix factored with two variables such as ① possibility of occurrence on the X axis and ② severity of the result on the Y axis. Cases graded as high (H) are defined as the issues creating material strategic impacts.

SK Telecom conducts climate-related risks and opportunities based on the financial and strategic impacts criteria, and designates and manages significant risk or opportunity areas if they satisfy more than one of the two criteria.

Particularly on the financial aspect, we define material financial impact with the cases where the estimated investment cost in equipment exceeds KRW 5 billion, when making investment in GHG reduction and renewable energy equipment. We also define material financial impact with the case where the estimated cost for investment in measures other than equipment exceeds KRW 1 billion, when making investment decision in development of GHG reduction technologies such as Single Ran and energy efficient telecommunication equipment.

On the strategic aspect, the materiality is assessed based on two criteria – possibility of occurrence and severity of the result. ① Possibility of occurrence is measured between 1 and 3 points reflecting ① the frequency of occurrence in the past (annually, more than once a month, and often (more than once a week)) and possibility of occurrence in the future (unlikely risks, likely risks and certain risks). ② Severity of the result is measured between 1 and 3 points reflecting the penalty level for non-compliance (fine, penalty, suspension of the business operations etc.), and the level of disruption in achieving the strategies and targets by departments/business divisions. Therefore, if the assessment result is scored between 5 and 9 points which is drawn by multiplying the two indicators which are ① possibility of occurrence, and ② severity of the result, the risks level is measured as high (H) and the case is defined as creating material strategic impacts.

SK Telecom conducts the materiality assessment of the identified climate-related risks and opportunities based on the criteria stated above, reports the assessment result following the established reporting system, and takes the response actions in line with the decisions made by the management and the ESG Committee.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

1. Methods for identification, assessment, and response to climate-related risks SKT has established a risk management system to preemptively identify and respond to climate-related risks and opportunities. SKT applies the company level risk management system to all sites under our direct operation. The ESG Innovation Group analyzes and assesses all environment- related issues based on regular monitoring. The ESG Innovation Group assesses the materiality through monitoring and analyzing climate-related risks and opportunities on the financial, regulatory and physical aspects across five categories of ① policies, ② market, ③ technologies, ④ reputation and ⑤ physical environment. The level of impacts of the identified climate-related risks and opportunities on the corporate business and finance are analyzed in the short, mid and long-term. When making climate-related investments, we define material financial impact criteria by the case where the estimated investment cost in equipment exceeds KRW 5 billion. On the business strategic aspect, we also measure the risk levels using the materiality matrix factored with two variables such as ① possibility of occurrence on the X axis and ② severity of the result on the Y axis, and define cases graded as high (H) are as the issues creating material strategic impacts. We designate and manage significant risk or opportunity areas if they satisfy more than one of the two criteria based on the assessment results against the financial and strategic materiality criteria. The ESG Innovation Group regularly identifies climate-related risks and opportunities, assesses the materiality following on the materiality criteria, and frequently reports the results to the CFO. The CFO makes decisions on the non-material issues among the reported agendas, and reports the material issues to the CEO and the key issues to the CEO and the ESG Committee. The CEO makes decisions on material issues and the ESG Committee makes final decisions on the key issues. Once a decision is made on climate-related risks and opportunities, relevant departments develop the response plans and reflect them in their business strategies, secure the budgets needed for the implementation and deliver the actions systematically. Among climate-related risks, the ESG Innovation Group is responsible for responding to the issues of "regulation and reputation," whereas the ICT Infrastructure Center or MNO support departments are responsible for responding to the issues of "technologies, market and physical environmental change." 2. Cases of process application for physical risks/opportunity assessment Increase in the air temperature, intensive heat and fire resulted from climate change causes physical impacts such as damaging the network equipment and creating troubles in the telecommunication services, which affects the SKT's business negatively. SKT's network equipment is installed across the country, and they are sensitive to weather changes such as high air temperature, intensive heat and fire. The ESG Innovation Group regularly monitors these climate change factors, conducts assessments following the risks and opportunities assessment and management guidelines, and reports the results to the CFO. As the example case, the wildfire in Andong, Gyeongsangbukdo in June 2020 caused damages to SKT's telecommunication equipment. The ESG Innovation Group acknowledged the impacts on the telecommunication equipment, conducted risk assessment of the physical environmental changes, and reported the result to the CFO. We established and operated an emergency response system in accordance with the CFO's decisions, as it was concluded that the issue was not material. In order to minimize the damages by the wildfire, we launched immediate responses on the corporate-level, by operating the emergency contact system between the headquarter office and the sites. Also, we deployed emergency response by adjusting the outputs by nearby base transceiver stations and swiftly recovered the damaged telecommunication equipment. As such, we minimized the damages from the Andong wildfire. 3. Cases of process application for transition risks/opportunity assessment Korea is implementing the Korean Emissions Trading Scheme and SKT has responded to the regulation since 2015 when the KETS was launched and SKT was designated as the KETS participant. Korea committed to 2050 Net Zero and plans to raise the '2030 NDC' before 2025. Accordingly, demands for the domestic emissions reduction are likely to grow and the pressures on domestic companies to reduce the emissions are also expected to increase. Due to the nature of the telecommunication business where providing stable service is essential, network-related telecommunication equipment has to be continually added, which will constantly increase SKT's GHG emissions. Since SKT is a telecommunication business, 99% of the GHG emissions are resulted from electricity consumption. Because electricity is the secondary energy generated from the primary energy source such as coals, natural gases, etc, there are limitations in reducing the emissions. Tens of thousands of telecommunication equipment have been added across the country since 2019 due to the activation of 5G service, and it has led to the increase in SKT's GHG emissions. Having limitations with reducing the GHG emissions, SKT emitted more GHGs over the cap defined by the government under the KETS regulation. As the direction had to be established for the regulation compliance such as buying or borrowing of the allowances, the ESG Innovation Group estimated the allowance purchasing costs based on the analysis of the market price and trends, and assessed the financial impacts of allowance borrowing. The ESG Innovation Group also conducted materiality assessment of the response options to solve the problem, and reported the result to the CFO. Since the issue is not classified as a material issue, the Group borrowed allowances from the future allocation following the CFO's decision. The company ended the issue by borrowing the allowance shortage in June 2020 (for the emissions in 2019). In order to improve these problems, SKT reviewed various GHG reduction technologies, and developed the 'Single RAN technology' that integrally operate telecommunication equipment. To be certified by the government for the amount of GHG reduction by the Single RAN technology, SKT developed a GHG reduction methodology equivalent to the CDM level which was later approved by the government. SKT became the first telecommunication company that registered a GHG reduction methodology applied to the telecommunication industry and possesses a GHG reduction technology officially acknowledged by the government. Moreover, GHG reduction performance achieved from applying the reduction technology was additionally reflected on the ex-ante free allocation in the third phase of the KETS and SKT received more allowances accordingly.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Example risks: KETS SK Telecom has responded to the regulation since 2015 when the KETS was launched and SK Telecom was designated as the KETS participant. Korea's '2030 Nationally Determined Contribution (NDC)' submitted in December 2019 includes the government's three key commitments such as: ① Target to reduce by 24.4% by 2030 against the emissions in 2017, ② Reduce the share of the overseas reduction while increasing the domestic reduction ambitions, ③ Making efforts to increase the 2030 ambition before 2025. As the president Moon Jae In emphasized the needs for strengthening the '2030 NDC' to achieve the '2050 Net Zero' at the Green Future session of the P4G Seoul Summit, the demands for domestic emissions reduction are likely to grow and the pressures on domestic companies to reduce their emissions are also expected to increase continuously. In the second phase of the KETS (2018-2020), the proportion of auctioning based allocation increased to 3%, which further increased to over 10% in the third phase. Because SK Telecom is subject to auctioning based allocation, our GHG reduction burden will become heavier. Considering SK Telecom's free allocation level in 2020 and the 10% of the allocation by auctioning, the cost is estimated at KRW 2,851,947,000 , if we did not respond to the KETS without any efforts to reduce the emissions. ※ The expected costs = SK Telecom's freely allocated allowance in 2020 X 10% X Carbon price = 1,032,485tons X 10% X KRW 35,000 /tons = KRW 3,613,697,500 SK Telecom belongs to the telecommunication industry – it is the foundation industry to support the national economic development, but also a regulated industry by the government both directly and indirectly. SK Telecom has to add its network equipment continually to ensure stable network services, but cannot easily stop providing or operating certain services under our own decision. Since SK Telecom is a telecommunication business, 99% of the GHG emissions resulted from electricity consumption, and there are limitations in reducing the GHG emissions because electricity is the secondary energy generated from the primary energy source such as coals, natural gases, etc. There is a high possibility that SK Telecom will be continually short of the allowance in the future, and the financial burden of purchasing the shortage will also increase over the time. Thus, SK Telecom manages the KETS as a climate-related risk.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, always included	Example risk: Net Zero and the RE100 In accordance with the Paris Agreement to respond to climate change, the international society conducts stocktaking of the accomplishment of the climate targets every 5 years. Every country submits increased GHG emissions reduction targets every 5 years and has to mandatorily report their national GHG inventory, achievement of their reduction target status, etc. In accordance with the Agreement, advanced countries such as the EU, China and Japan committed to 2050 Net Zero. Korea also released the '2050 Net Zero Implementation Strategies' in December 2020, and submitted the 'Low-Emission Development Strategy' reflecting the 2050 Net Zero targets to the international society. As the 2050 Net Zero has become increasingly important, the number of companies declaring the 'RE100' is increasing. The 'RE100' is an international campaign to encourage companies to shift their electricity source to 100% renewable energy such as wind or solar power by 2050. Although it is not a mandatory regulation defined by any laws or regulations, more and more companies commit to the 'RE100' as the ESG (environmental, social, governance) management is becoming important. Domestic companies are participating in the RE100 following American and European companies that led the RE100 in the early stage. Also, the Korean government laid the policy framework for the RE100 implementation and developed relevant policies and systems to operate the system. Achieving the RE100 is becoming an issue which is directly related to corporate competitiveness and could be used as a main criteria to judge companies' non-financial performance. There are no penalties to companies which failed to meet their targets, because the RE100 is based on the company's voluntary participation. However, once joined the RE 100, achieving the target is considered as a requirement for the companies reflecting the strengthening climate change response and increasing importance of the ESG. As SK Telecom committed to meeting the RE100 by 2050, we recognize and will manage the issue as a climate-related risk belonging to 'emerging regulations'.
Technology	Relevant, always included	Example risk: High-bandwidth frequency technologies SK Telecom developed high-bandwidth frequency technologies based on 5G and commercialized them to prevent telecommunication problems especially for the service providers transmitting massive volumes of data and industrial sites where continued connection is important. Features of 5G include enhanced mobile broadband (Embb), ultra-reliable and low latency communication (URLLC) and massive machine type communication (Mmtc). The Emmb (super-fast and high capacity) service provides faster data transmission speeds by using more frequency bandwidth compared to 4G and more antennas. The URLLC minimizes latency from the existing 10ms to 1ms. Lastly, the Mmtc targets to support 1 million connections per 1km2 for various residential and industrial users. The high- frequency bandwidth such as 5G is considered as a risk factor on the climate change aspect due to two features of the radio wave, which are straightness and diffraction. Straightness is a nature of radio waves going straight, which makes radio waves move the shortest distance from one point to another. Diffraction is a phenomenon in which parts of the radio wave are bent and received when facing obstacles such as mountains and buildings. High- bandwidth frequency can transmit data in a massive volume at a high speed based on the strong straightness, whereas its transmission coverage is narrow because the diffraction is weak. Therefore, more telecommunication equipment is needed for high- bandwidth frequency compared to low-medium frequency one which is slow in speed due to the weak straightness but has a wider transmission coverage because of the strong diffraction which makes it bends easily when facing obstacles. Because the high-bandwidth telecommunication equipment uses more electricity than the low-medium frequency ones, it is highly likely that GHG emissions will increase proportional to the use of high-bandwidth frequency. ue to the nature of the telecommunication industry, the most GHG emissions are from network equipment. Increased electricity consumption due to the capacity expansion of 5G network equipment leads to an increase in the GHG emissions. It is expected that the GHG emissions will continue to increase because telecommunication companies will continue to invest in 5G network equipment as the government speeds up for commercialization of 5G. This is a climate-related risk.
Legal	Not relevant, explanation provided	SK Telecom is subject to a domestic GHG regulation called the Korea Emissions Trading Scheme. SK Telecom manages the GHG emissions monthly, monitors and manages the GHG target achievement status, reduction volumes and the KETS issues on a regular basis. We also analyze the energy consumption trends and identify measures to reduce the consumption. We have always complied with the KETS, a cap based GHG regulation, as we have made hard efforts to manage and reduce the energy consumption through various GHG reduction activities such as upgrading the network equipment and retrofit with highly energy-efficient equipment. We constantly monitor both domestic and international GHG policy and industry trends, and manage the risks by establishing in-advanced response strategies in a systematic manner when risks are considered to affect our business. We believe that our non-compliance risks are low because we will be able to respond perfectly to climate change regulatory risks that can happen at present and in the future. We believe that our regulatory risks in the future are also low because any present and future climate regulatory risks are considered as risk factors which are assessed and managed accordingly with the results.
Market	Relevant, always included	Example risk: The smart market As climate-related risks have emerged as a major global issue, relevant regulations are strengthened while new policies such as the Green New Deal are established. In accordance with the changing energy regulations and smart energy trends, demands for energy services converged with ICT technologies are growing and the smart market based on ICT technologies is increasingly important. Following the Korean Green New Deal policy, the Korean government plans to establish smart energy platforms in seven smart industrial complexes and introduce clean and smart eco-factories, in order to create low carbon green industrial complexes through green transitions of major manufacturing industries and to reduce the pollution. Also, the government plans to establish intelligent smart grids to improve efficiency in the energy management. In particular, the government plans to establish big data platforms by installing smart power grids for 5 million households while implementing energy audits for old private buildings. Also, 5G based next generation markets such as augmented reality (AR), virtual reality (VR), artificial intelligence (AI) and automated driving are becoming activated. The AI-based self-driving cars that have been recently drawn attention to, can minimize emissions of environmental pollutants while driving. The demands for the smart market are expected to grow dramatically as climate change and environmental issues are becoming important. To respond to the growing smart market, it is essential for telecommunication companies to expand their 5G networks and to provide a wide range of services. The 5G business is highly likely to increase the GHG emissions as it requires installation of base transceiver stations twice as many as the ones for LTE. Even though the efficiency is high, the electricity consumption is also higher for 5G business compared to the one for LTE because of the high straightness that allows frequency to travel only for a short distance. As telecommunication industries increase the number of base transceiver stations for 5G business, they have to consider methods to improve the energy efficiency and reduce the GHG emissions. In short, they have to solve dual challenges which are expanding the network in parallel with the expansion of the smart market, while responding to climate-related issues. As a result, we selected and manage the growing smart market as a climate-related risk.
Reputation	Relevant, always included	Example risk: Insufficient response to the disclosure of non-financial information While the level of environmental awareness is growing internationally, companies are speeding up on the ESG management. ESG is non-financial information. In ESG, Climate change, carbon emissions, atmospheric and water pollution are included in the E (environment) category, and we are managing the CDP which is one of the ESG investment assessments criteria. The CDP discloses essential environmental information of market listed global corporations, such as their climate change response strategies. As the CDP is recognized as a highly reliable sustainability management index, failures in responding to the CDP can negatively affect the result of the company valuation by investors, which can create the risk of investment withdrawal. Investment withdrawal can result in a fall in the stock price and the value of the company. In 2020, the number of SK Telecom's issued stocks was 80,745,711. Poor response to the non-financial information disclosure can negatively affect the company valuation result, which can create the risks of investment withdrawals and falls in the stock price. For example, if the stock price falls by 10% due to investment withdrawal by major stakeholders such as the National Pension Service, a loss of 1.9217 trillion KRW is expected to incur applying a unit share price of 238,000 KRW, which was the stock price on 30 December 2020. ※ Expected loss = Total number of the company stocks issued X stock price as 30 December 2020 X 10% = 80,745,711 stock X KRW 238,000 /stock X 10% = KRW 1,921,747,921,800 As ESG assessment is becoming important, not only the National Pension Service but also MSCI (Morgan Stanley Capital International) index has become an important factor influencing corporate reputation. The MSCI index is a main index for global funds. If a company is added in the MSCI index or their weight in the index increases, net buying of the stocks by foreign investors is likely to increase. However, if the company is removed from the index, it will also increase net selling by the investors. Since the index is announced on the semi-annual and quarterly basis revealing the list of companies added and removed from the index, continued response to non-financial information disclosure is important. If disclosure of non-financial information is insufficient, net selling of the stocks by foreign investors would increase which damages the company financially.
Acute physical	Relevant, always included	Example risk: Abnormal weather events (typhoons/ heavy rains) by climate change Abnormal weather events resulting from climate change including heavy rains, typhoons and droughts occur more frequently in Korea, which increases the physical risks of our company's network equipment. For example, when network equipment is damaged by typhoons or heavy rains, the telecommunication services are in trouble which affects not only our clients but also the entire society. Since it is nearly impossible to entirely protect telecommunication base transceiver stations and equipment installed outdoors, there are risks of the equipment being damaged by flooding and strong winds. If base transceiver stations collapse by strong winds and torrential rain or a blackout happens by flooding, telecommunication services could be ceased and facilities can fail in islands where not easily accessible and difficult for us to promptly respond. The typhoon Bobbi in August 2020 can be a representative example. As Bobbi, a large typhoon accompanied with strong winds, moved northwards to Korea and caused a great deal of damages nationwide including human casualties, flooding of houses and farmland. Some of our telecommunication facilities were also damaged by it such as flooded network equipment and failures in the telecommunication service. In 2020, KRW 6.45 billion was incurred for recovering the damages caused by the typhoon Bobbi, especially for purchasing new materials and reconstruction. Since telecommunication equipment can be damaged by typhoons every year, SK Telecom manages the risk by establishing a telecommunication disaster response system. We conduct safety checks on telecommunication equipment in the regions prone to damages by strong winds and torrential rains, secure and check the status of emergency recovery supplies such as self-powered vehicles and power generators. In addition, we practice entering islands not easily accessible when a typhoon occurs and establish an emergency contact system in the islands. SK Telecom plans to accurately acknowledge emergency situations and take quick actions on site through an operation of the 'disaster management system' that reports disaster situations in one-stop. SK Telecom recognizes and manages short-term changes in the physical environment as a climate-related risk in order to minimize the damages by typhoons.
Chronic physical	Relevant, always included	Example risk: Abnormal weather events (droughts/ wildfire) by climate change Abnormal weather events resulting from climate change including heavy rains, typhoons and droughts occur more frequently in Korea, which increases the risks to our company's network equipment. Climate change increases the atmospheric temperature and makes the air drier year by year. Droughts and wildfires are more prone to occur due to the dried air conditions. Risks of shortage in water supply and water sources exist. Also, the dry air can damage telecommunication equipment and create troubles in the production which can be developed as a significant risk to our company's business, considering the geographical feature of Korea which is mountainous and full of forests. The wildfire that occurred in Andong, Gyeongsangbukdo, in April 2020 could be an example. The wildfire broke out in some villages which damaged four houses. Approximately 1,000 people had to escape urgently, and the Korean Railroad Corporation temporarily ceased the train operation. Also, spreads of the fire sparks travelling on the strong winds put cultural heritages in an emergency situation while the central highway was blocked as the wildfire continually spread out of control. Our company was also affected by the wildfire in Andong as part of our telecommunication equipment was lost or completely destroyed. The reconstruction cost for recovering the damage was calculated at approximately KRW 143 million. The frequency of wildfire occurrence continually increases and telecommunication equipment is damaged by wildfire every year. SK Telecom designated and manages wildfire as a main physical risk.

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.****Identifier**

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Other, please specify (increasing financial burden by the KETS)
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Since SK Telecom is a telecommunication business, 99% of the GHG emissions are resulted from electricity consumption. Because electricity is the secondary energy generated from the primary energy source such as coals, natural gases, etc, there are limitations in reducing the emissions. Also, due to the nature of the telecommunication business where providing stable service is essential, network-related telecommunication equipment has to be continually added which eventually increases the GHG emissions every year. However, the demands for low carbon transition are growing as the target for minimization of the global temperature rise was strengthened from 2°C to 1.5°C following the recommendations from the IPCC Special Report. GHG reduction targets are becoming strengthened globally. The Korean government committed to Net Zero by 2050 and plans to raise the ambition for the '2030 Nationally Determined Contribution (NDC). Under these trends, the demands for the domestic emissions reduction are likely to grow and the pressures on domestic companies to reduce the emissions are also expected to increase. SK Telecom responds to the KETS, a domestic GHG regulation as a company classified as non-carbon-leakage sector. The emissions volume will continually increase due to the nature of telecommunication business, while the free allocation volume is likely to decrease because of the increasing demands for low carbon transition. This will lead to increasing reduction burdens on our company. In fact, SK Telecom was short of emissions allowances during the second phase of the KETS, and the situation is expected to continue in the third phase. Classified as the non-carbon-leakage sector, SK Telecom's GHG credit burden will increase due to the increased volume of purchased allowance reflecting that the percentage of auctioning will increase from 3% to 10% in the third KETS phase. As SK Telecom actively invests in various GHG reduction activities to respond to the KETS regulations, it is expected the direct costs will also increase.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

5705525000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

SK Telecom has responded to the KETS regulation since 2015 when designated as a KETS participant company. SK Telecom borrowed 2,343 and 60,977 tons of allowances in 2018 and 2019 respectively, and purchased 71,654 tons of allowance in 2020 due to a shortage of allowances needed to comply with the target of the second phase of the KETS (2018-2020). Having identified and implemented various GHG reduction measures, SK Telecom reduced about 92,084 tons of GHG in 2020. SK Telecom's financial risk in 2020 was estimated at KRW 5,705,525,000 (applying the internal carbon price at KRW 35,000/ton), taking into account the financial loss to incur in case where GHG reduction activities were not implemented. * Financial loss = (SK Telecom's GHG reduction volume in 2020 (ton CO₂) + The purchase volume of SK Telecom's 2020 GHG emission allowances (ton CO₂) X Internal carbon price (KRW/ton CO₂) = (91,361 ton CO₂ + 71,654 ton CO₂) X KRW 35,000 / ton CO₂ = KRW 5,705,525,000

Cost of response to risk

56055000000

Description of response and explanation of cost calculation

SK Telecom continually monitors Net Zero policy trends such as the KETS and the RE100 and the impacts on our business. As a participant in the KETS, we implement various reduction activities such as CDM projects to meet the emission limits determined by the government and solve the allowance shortage issue. For example, we supplied 4.32 million cook stoves in dry areas in the central north region of Myanmar, and signed an agreement with the local people to reduce 106 K tons of CO₂e every year. We also reduced 38 tCO₂e by installing solar panels in the Future Management Institute in Icheon and Seongsu office building to switch the corporate power source into renewable energy. We make continued efforts to identify new GHG reduction projects by seeking advice from professional groups. We also try to minimize financial risks of KETS regulation on our company by monitoring the supply and demand status of the KETS market every month, and deploying appropriate strategies such as banking, borrowing, buying, and selling. The investment cost for responding the KETS in 2020 was estimated at KRW 56,055,000,000 * Management costs: Investment in GHG reduction projects + Consulting fees = KRW 54,825,000,000 + KRW 1,230,000,000 = KRW 56,055,000,000

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback
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Primary potential financial impact

Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

As the level of environmental awareness is growing internationally, companies are speeding up on the ESG management. ESG (environment, social, governance) is non-financial information that is one of the important indicators to be considered in making investment decision on companies. As the importance of this non-financial information disclosure is rising, we manage the CDP as one of the criteria of ESG investment assessments. The CDP discloses essential environmental information of public companies in the stock market around the world, such as climate change responding strategies. As the CDP is recognized as a highly reliable sustainability management assessment index, failures in responding the CDP can negatively affect the result of the company valuation by investors, which can lead to the risk of investment withdrawal. As ESG assessment is becoming important, MSCI (Morgan Stanley Capital International) Index has become an important factor influencing corporate reputation. As an international stock market index presented by Morgan Stanley Capital International, MSCI is highly influential because it is used as a main index for global funds. If a company is added in the MSCI index or their weight in the index increases, net buying of the stocks by foreign investors is likely to increase. However, if the company is removed from the index, it will also increase net selling by the investors. Since the index is announced on the semi-annual and quarterly basis revealing the list of companies added and removed from the index, continued response to the non-financial information disclosure is important. SK Telecom is included in the MSCI index. SK Telecom's weight in the MSCI doubled from 0.064% to 0.124% in August 2020, which brought positive effects to the company. However, if we fail to respond to environmental or climate related issues, it will lower the company's weight in the MSCI or remove us from the index. This can create financial risks to the company as investors can withdraw their investment, which will affect the stock price and the value of the company negatively. Insufficient response to non-financial information disclosure such as CDP and DJSI can reduce the corporate reputation and reduce the stock price. Based on an assumption that the stock price drops by 10%, the expected loss is KRW 1,921,747,921,800 having applied the stock price on 30 December 2020 which was KRW 238,000 per share.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1921747921800

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Poor response to the non-financial information disclosure can negatively affect the company valuation result, which can create the risks of investment withdrawal, falls in the stock price and the corporate values. In 2020, the number of SK Telecom's issued stocks was 80,745,711. If the stock price falls by 10% due to investment withdrawals by main shareholders such as the National Pension Service, a loss of KRW 1,921,747,921,800 is expected to incur applying KRW 238,000 per share which was the closing price on 30 December 2020. * Expected loss = Total number of shares issued by the company X Stock price on 30 December 2020 X 10% = 80,745,711 shares X KRW 238,000/share X 10% = KRW 1,921,747,921,800

Cost of response to risk

1230000000

Description of response and explanation of cost calculation

SK Telecom understands the importance of disclosing non-financial information and manages the risks with advisory supports from expert groups on non-financial issues such as DJSI and CDP. Reflecting their advice, we improved weaknesses in our response to climate change, strengthened the responding system, and expanded the list of information subject to the information disclosure. Having been listed in the DJSI World's Index in the past twelve consecutive years, which ranks the top 10% of the world's leaders in sustainability management performance, SK Telecom recorded the longest record amongst domestic companies and as the first case as a telecommunication company from Asia. We disclose the CDP information every year as well as the climate-related information through various reports such as sustainability management report. From 2020, we transparently disclose information following the TCFD framework in our annual report, and make various efforts to improve our performance in climate change mitigation and adaptation. * Management cost: climate-related including KETS consulting fees + CDP consulting fees + DJSI consulting fees = estimated at KRW 1,230,000,000

Comment**Identifier**

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology	Other, please specify (risks of lack of response due to creation of new markets)
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Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

SK Telecom developed high-bandwidth frequency technologies based on 5G and commercialized them to prevent telecommunication problems especially for the service providers transmitting massive volumes of data and industrial sites where continued connection is important. Features of 5G include enhanced mobile broadband (Embb), ultra-reliable and low latency communication (URLLC) and massive machine type communication (Mmtc). The Emmb (super-fast and high capacity) service provides faster data transmission speeds from 100 Mbps up to 20 Gbps by using more frequency bandwidth compared to 4G and more antennas. The URLLC minimizes latency from the existing 10ms to 1ms. Lastly, the Mmtc targets to support 1 million connections per 1km² for various residential and industrial users. The high-bandwidth frequency such as 5G is considered as a risk factor on the climate change aspect due to two features of the radio wave, which are straightness and diffraction. Straightness is a nature of radio waves going straight, which makes radio waves move the shortest distance from one point to another. Diffraction is a phenomenon that parts of the radio wave are bent and received when facing obstacles such as mountains and buildings. High-bandwidth frequency can transmit data in a massive volume at a high speed based on the strong straightness, whereas its transmission coverage is narrow because the diffraction is weak. Therefore, more telecommunication equipment is needed for high-bandwidth frequency compared to low-medium frequency one which is slow in speed due to the weak straightness but has a wider transmission coverage because of the strong diffraction which makes it bends easily when facing obstacles. In addition to increased costs for the equipment installation, it is highly likely that GHG emissions would also increase proportional to the use of high-bandwidth frequency because high-bandwidth frequency telecommunication equipment uses more electricity than low-medium frequency ones. SK Telecom installed 2,815,932 base transceiver stations nationwide that led to a huge increase in the GHG emissions due to the increase in the electricity consumption together with increased investment costs.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1220472048607

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

5G business is highly likely to increase the GHG emissions as it requires installation of more base transceiver stations because of the diffraction which allows data transmission in a short distance range whereas the high straightness allows transmission of a massive amount of data at a fast speed. In addition to increased costs for the equipment installation, it is highly likely that GHG emissions would also increase proportional to the use of high-bandwidth frequency because high-bandwidth frequency telecommunication equipment uses more electricity than low-medium frequency ones. KRW 1,220,472,048,607 of additional loss is expected to incur, based on the calculation of the investment costs incurred for new equipment such as 5G and facilities in 2020. * Expected costs = the total numbers of new equipment X average unit price = 2,815,932 unit X KRW 433,417/unit = KRW 1,220,472,048,607

Cost of response to risk

40000000000

Description of response and explanation of cost calculation

In order to mitigate the risks related to 5G technologies, SK Telecom has been trying to develop energy efficiency measures for the telecommunication equipment and GHG emission reduction technologies. We reduced electricity consumption by integrating 3G and LTE network equipment and upgrading (Single RAN technology). We reduced the emissions through telecommunication technologies and received certification from the Ministry of Environment for the first time. Single RAN technology can reduce electricity consumption by 53% compared to the previous technology. SK Telecom invested KRW 40,000,000,000 and applied the Single RAN technology to all base stations and repeaters across 78 cities in the country including Seoul and had 1,117 tons of GHG reductions certified by the Ministry of Environment. * Management costs: The number of base stations and repeaters applied with Single RAN technology X the Single RAN investment cost per unit of base stations and repeaters = 78 x KRW 512,820,513 / Unit = KRW 40,000,000,000

Comment**C2.4****(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

No

C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	SKT has a process to identify, respond to, and assess climate-related risks and opportunities in line with the TCFD framework. We identify and manage climate-related risks and opportunities affecting our business through conducting climate change scenario analysis and reflecting the materiality assessment results. When climate-related issues occur, the ESG Innovation Group analyzes and assesses the risks and opportunities and then reports the result to the CFO. The CFO reports to the CEO and the ESG Committee after reviewing the materiality of the climate-related issues. The CEO is informed about all material climate-related issues with the company and proposes key issues as the ESG Committee's meeting agendas together with his/her opinions on the issues. The CEO makes decisions on all non-material issues except for the key issues. SKT identifies climate-related opportunities across five aspects such as ①policy, ②technologies, ③market, ④reputation and ⑤physical environmental changes. The identified climate change opportunities are assessed based on the company's materiality assessment. SKT recognizes significant opportunity areas if an issue satisfies more than one of the financial and strategic impact criteria affecting the company materially. The material financial impact criteria is defined by the case where the estimated investment cost in equipment exceeds KRW 5 billion. The material strategic impact criteria is defined if the case is graded as high (H) in accordance with the assessment matrix which measures the risk levels considering ①possibility of occurrence and ②severity of the result. Following the process of identifying climate-related opportunities as stated above, we found various opportunity areas such as: ①T Map; ②ICT based smart/green solutions (EMS, futuristic smart grid demonstration business etc.); ③AI based electricity consumption monitoring technologies; and ④Eco JeJu project. However, we concluded that it is difficult to acknowledge the identified areas as material opportunities considering that the areas did not satisfy the materiality assessment criteria and it is still an early stage of opportunity discovery. However, SKT will continue identifying and assessing climate-related opportunities, creating more opportunity areas, and disseminating the identified areas. We will also make efforts to select and manage material opportunity areas by improving the internal assessment criteria and expanding the scope of the identification.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	Yes, in the next two years	No, we do not intend to include it as a scheduled AGM resolution item	Following the Paris Agreement on climate change, the Korean government submitted '2050 LEDS (Low Emission Development Strategies)' reflecting Net Zero target to the international society. As such, demands for the domestic GHG reductions are likely to grow, and the pressures on domestic companies to reduce the emissions are also expected to increase continually. SK Telecom will implement low carbon transition plans within the next two years in line with the government's guidelines and consider the RE100 and Net Zero for the implementation. Since 99% of our GHG emissions are caused from using electricity, we can conclude that Net Zero is almost accomplished if the RE100 is achieved, which was the reason why we joined the RE100 campaign. We will establish the RE100 implementation plan, deploy systemic response, and disclose our performance of the RE100 implementation transparently through the CDP. We will also establish and manage the Net Zero targets through the SBTi, which is an internationally recognized initiative.

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
RCP 2.6 RCP 4.5 RCP 6 RCP 8.5 IEA B2DS Nationally determined contributions (NDCs) Other, please specify (IEA 1.5DS)	1) Reasons for applying the scenario, input data, assumptions, and the applied methodologies We conducted scenario analysis of climate change, having applied two aspects which are physical and transitional aspects. On the physical aspect, we analyzed four scenarios such as RCP 2.6, RCP 4.5, RCP 6.0 and RCP 8.5, and analyzed the effects of RCP scenario results on SK Telecom. For the transition scenarios, we also reviewed IEA B2DS and IEA 1.5DS scenarios recognized by the SBTi, and compared them with NDC scenario. We used data from the Korea Meteorological Administration for analyzing the financial impacts of RCP scenarios and the regional data of physical environmental changes such as temperature and precipitation for analyzing the financial impacts of RCP 2.6, RCP 4.5, RCP 6.0 and RCP 8.5. In analyzing the IEA B2DS and 1.5DS scenarios, we assessed the reduction target level following the SBTi methodology, forecasted the future emissions reflecting the past GHG emissions and the energy trends, and compared the result with the reduction potentials to check the feasibility of the target. We also reviewed whether the reduction targets comply with the NDC and are in parallel with the national GHG target. In analyzing the IEA B2DS and 1.5DS scenarios, we assessed the reduction target level following the SBTi methodology, forecasted the future emissions reflecting the GHG emissions in the past 10 years and the energy trends, and compared the result with the reduction potentials to check the feasibility of the target. We also reviewed whether the reduction targets comply with the NDC and are in parallel with the national GHG target. 2) Scenario analysis scope We established the mid-term target by 2030 and long term target by 2050 following the timelines of the mid-long term targets set by the SBTi and the Korean government. The organizational boundaries applied for the targets include all domestic business sites and the scope of operational boundary includes Scope 1, 2, and 3. 3) The scenario analysis results We decided to set the Net Zero target, reflecting the international trends, RCP scenarios, IEA scenarios, and NDC. We established the targets based on RCP 2.6 and IEA 1.5DS, and decided our mid and long-term targets at 45.7% reduction by 2030 and 100% reduction by 2050 respectively against the 2019 emission level. Calculated based on the SBTi methodology for the telecommunication sector, the targets are in line with the internationally required levels on GHG emissions reduction and the government's targets. SK Telecom joined the SBTi in 2020 in order to prove the reliability and conformity of the targets in line with the international standards and will verify the appropriateness of the target. 4) Methods of reflecting the scenario analysis result in the business targets and strategies Since 99% of our GHG emissions are sourced from electricity, we look for the opportunities of investment to reduce them in electricity powered equipment. SK Telecom joined the RE100 in 2020 to find the measures to achieve the RE100, identified various reduction technologies to reduce the electricity usage by equipment, reflected the measures in the business strategy and made investment. 5) Impacts of scenario analysis results on the business targets and strategies In 2020, we invested more than KRW 40 billion in the Single RAN based GHG reduction project that integrates two telecommunication network equipment into one, in order to reduce the electricity consumption from telecommunication network equipment. As a result, we reduced about 8,600 tons of GHG emissions. We also participate in the Green Tariff system where we can purchase renewable electricity through and plans to continually invest in shifting the electricity source to renewable energy by 100% through participating in the RE100.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	1. Impacts on the Business (Opportunities) As climate change risks are rising as well as the demands for energy services adopting ICT, green businesses such as new smart energy services using ICT technologies and the equipment development emerged as an area of strategically material opportunities. SKT reduces GHG emissions and responds to the climate-related issues by utilizing ICT technologies. SKT implements 5G based energy efficiency projects focused on ICT based smart/green solutions such as Tmap navigation, EMS, smart and green solutions based on 5G in order to identify new opportunities of climate change. (Risk) The high-frequency bandwidth such as 5G requires more telecommunication equipment because the diffraction is weak and the transmission coverage is narrow while transmitting data in a massive volume at a high speed based on the strong straightness. Because high-bandwidth frequency telecommunication equipment uses more electricity than low-medium frequency ones, the GHG emissions would increase proportionally which is a risk factor. We make efforts to reduce GHG emissions in order to be responsible for the GHG emissions caused from the energy use by our telecommunication equipment. The role of ICT companies in responding to climate issues is becoming important. Delays in introduction of ICT technologies can cause damages to the corporate revenue. SKT has enhanced our efforts on the corporate environmental management, and tries to bring green transition for our future generations under the environmental management vision of realizing the ICT based sustainable future and the 2050 Net Zero target. Based on the result of the climate-related risks/opportunities analysis, we concluded the impact level is medium(M) and expect it to affect the company over the long-term until 2050. 2. Example Decision SKT makes great deal of efforts for GHG reduction through low carbon products. As an example, we commercialized T Map using ICT technologies and provide environmentally and socially friendly services reducing GHG emissions and preventing car accidents. SKT expects that using T Map contributes to reducing 1 million tons GHG emissions in our society annually as our real-time navigation technology helps to reduce the car drivers' driving distance and time.
Supply chain and/or value chain	Yes	1. Impacts on the Business SK Telecom defines the requirements of compliance with the social responsibility including responding to climate change in the ESG Codes of Conduct for our business partners who have contractual arrangements with us and recommends them following our ESG Codes of Conduct. SK Telecom has strengthened the sustainable supply chain management with its supply chain policies consisting of 10 requirements. SK Telecom's business partners have to practice environmentally friendly management and comply with international standards and laws as well as internal regulations on environmental protection. Also, suppliers are recommended to establish an environmental management system audited independently by a third party. As climate-related regulations are strengthened following the 2050 National Net Zero commitment, demands from stakeholders are also increasing. As it is required to set the targets covering not only Scope 1 and 2 but also Scope 3, we have to establish the GHG reduction target and manage the emissions from the upstream and downstream as covered in Scope 3. To manage the Scope 3 emissions, we will set Net Zero targets focused on directly controllable emission category such as procurement of products and services, fuel or energy-related activities, waste generation from operation, commuting by staff, and leased assets of upstream and franchises. Based on SK Telecom's materiality assessment results of climate-related risk/opportunity, the impact level was concluded as low (L) which is expected to affect the company over the mid-term until 2030. 2. Example Decision In responding to climate change, SK Telecom manages not only the performance of our GHG emissions, energy-saving, and resource-saving but also the supply chains related to SK Telecom's business. SK Telecom develops equipment in collaboration with the telecommunication equipment suppliers on power consumption by the equipment, in order to minimize the power consumption and GHG emissions. As an example, SK Telecom requested Samsung Electronics, a supplier of 5G antennas to SK Telecom to design and manufacture more energy-efficient telecommunication equipment. Through this collaborative efforts has been leading to save electricity payment and GHG reduction.
Investment in R&D	Yes	1. Impacts on the Business As climate-related risks are rising as a global agenda, climate -related regulations such as the KETS regulation and renewable energy dissemination policy are strengthened. The demands for energy services adopting ICT are growing in line with the Korean Green New Deal policies and smart energy trends, which has brought green businesses such as new smart energy services using ICT technologies and the equipment development as an area of strategically material opportunities. Considering the growth in the smart energy market, SK Telecom invests in the related equipment and S/W such as EMS, self-driving cars, smart home, and smart factory. The ICT market grows over time thanks to the development of the telecommunication industry. Because future industries will be driven by ICT technologies, delays in the R&D investment and technology development of ICT based energy solution can negatively affect the corporate revenue as the demand for energy management is rising. Based on SK Telecom's materiality assessment results of climate-related risks/opportunities, the level of impacts was concluded as medium (M), which is expected to affect the company over the short or mid-terms until 2050. 2. Example Decision As a mobile service provider, SK Telecom possesses huge business opportunities and nationwide infrastructure. SK telecom studies and develops smart energy solutions which is a smart energy management system using IoT, as a new business area where telecommunication networks can be utilized. Applicable to all sectors using electricity such as buildings, factories, houses, smart energy solutions are the technology that can improve energy efficiency based on real-time energy management and reduce GHG emissions based on demand-side energy management. SK Telecom invests significantly in R&D focused on utilizing IoT and invested KRW 597.2 billion in R&D in 2020.
Operations	Yes	1. Impacts on the Business As demands for GHG reduction have increased in line with the low carbon transition plan and the KETS, the probability of climate-related risks that affect the company and the impact level increased. As climate change issues become significant, SK Telecom responds to climate-related issues at corporate level and reflects GHG reduction technologies in the company's business strategies to fulfill the corporate social responsibility over the company's impacts on the society and environment. The emissions target demanded under the KETS is expected to be strengthened. As our emissions volume will continually increase due to the nature of telecommunication business, we reflect the GHG reduction technologies in the business strategies from the aspect of the business site operation. Based on the SK Telecom's materiality assessment results of climate-related risk/opportunity, the impact level was concluded as Medium (M) which requires continued development and application of GHG reduction technologies over the long-term until 2050. 2. Example Decision We reduced electricity consumption by integrating 3G and LTE network equipment and upgrading (Single RAN technology), which was later certified by the Ministry of Environment for the first time in the domestic telecommunication industry. Single RAN technology (Single Radio Access Network) is an integrated operation of 3G/LTE equipment by replacing hardware or upgrading software. SK Telecom registered a GHG offset methodology for the first time in the telecommunication industry and received 1,117 tons of additional allowances during the 3rd phase of the KETS (2021-2025), as the GHG reduction performance from application of the Single RAN technology to all our base stations and repeaters across 78 cities in the country including Seoul was recognized by the Ministry of the Environment. Also, we have installed and managed solar panels in Future Management Research Institute in Icheon and Seongsu office buildings to switch the corporate power source to renewable energy as part of the response to the RE100. Through the solar panel installation, we have reduced 81 MWh of electricity in 2020 which is equivalent to 38 tons of GHG emissions reduction every year.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs	1. Impacts of climate-related risks and opportunities on the financial plan As climate-related risks are rising as a global agenda, climate-related regulations such as the KETS regulation and renewable energy dissemination policy are strengthened. Following the "Act on the Allocation and Trading of Greenhouse-Gas Emission Permits", the Korean government has operated the KETS on the national level targeted at companies, organizations and local governments since 2015. The KETS is a policy authorizing the government to place emissions caps (allocation of free allowances) on GHG emitting companies and allowing the KETS participants to buy the shortage of their allowances from other companies if their emissions exceed the cap. SK Telecom has responded to the regulation since 2015 when SK Telecom was designated as the KETS participant. Since the second phase of the KETS (2018 ~ 2020), SK Telecom has been short of the emission allowances. Having expected a shortage of emission allowances, we purchased 71,000 tons of allowances, the cost of which is estimated at KRW 1.31 billion applying KRW 18,497 for the unit price (the average price of the 2020 allowances during the period of 2020.01.02~2021.06.25). As we are a telecommunication company, reducing GHG emissions is challenging. Also, the reduction burden is expected to be heavier in the future as SK Telecom is classified as a Non Carbon Leakage industry. The emissions purchase costs are recognized as emission liability in our accounting book which can create financial pressures. Also, SK Telecom joined the RE100 to achieve Net Zero in 2020. The RE100 is for companies to use electricity 100% sourced from renewable energy, which we recognize and manage as climate-related risk/opportunity. We plan to purchase electricity through the Green Tariff (Green Premium System) that is promoted by the government to achieve the RE100. The Green Tariff (Green Premium System) is a system that consumers buy renewable energy by paying a green premium additionally on top of the normal electricity charges to the Korean Electric Power Corporation. It allows you to purchase renewable energy by participating in the Green Premium bidding process announced by the Korean Electric Power Corporation. These costs of renewable energy consumption are reflected as part of the water, lighting, and heating expenses. The expenses indicate the total costs spent on water, lighting and heating as a part of SG&A (Selling, general and administrative expenses). Therefore, the cost spent on the manufacturing has to be reflected in the production costs. In other words, if renewable energy purchase costs increase to achieve the RE 100, the costs are reflected in the finance through the accounting book, which can create pressures on the corporate finance. To respond to these climate-related risks and opportunities, SK Telecom installed and manages solar panels in the Future Management Research Institute in Icheon and Seongsu office buildings as part of the RE100 activity. We will expand our assets and contribute to GHG emissions mitigation through equity investment in renewable energy businesses and proving the use of renewable energy. For the solar power generation project implemented in the Future Management Research Institute in Icheon and Seongsu office buildings, we invested KRW 100 million and make efforts to widely apply the solar power projects at the corporate level by continually investing in solar power projects. 2. The period affected by climate-related risks and opportunities Following the Paris Agreement, the Korean government submitted the '2050 Low Emission Development Strategies (LEDS)' in December 2020 which includes 2050 Net Zero targets to the international society. Demands for domestic GHG reduction are likely to increase while climate-related regulatory risks such as the KETS and the RE100 will continually affect the company until 2050 which is the target year of the long-term goal.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

N/A

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

1005593

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

45.7

Covered emissions in target year (metric tons CO2e) [auto-calculated]

546036.999

Covered emissions in reporting year (metric tons CO2e)

1039994

% of target achieved [auto-calculated]

-7.48570357587388

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

SK Telecom submitted the commitment letter on 29 January 2020 to participate in the SBTi and established the reduction target following the SBTi criteria. However, we selected the answer "Haven't been approved by the Science-Based Target Initiative", as we have not conducted validation of our target. We established our target to reduce GHG emissions by 45.7 % compared to the 2019 emissions level.

Target reference number

Abs 2

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2019

Covered emissions in base year (metric tons CO2e)

1005593

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2050

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO2e) [auto-calculated]

0

Covered emissions in reporting year (metric tons CO2e)

1039994

% of target achieved [auto-calculated]

-3.42096653417436

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

SK Telecom submitted the commitment letter on 29 January 2020 to participate in the SBTi and established the reduction target following the SBTi criteria. However, we selected the answer "Haven't been approved by the Science-Based Target Initiative", as we have not conducted validation of our target. We established our long term target to reduce GHG emissions by 100 % compared to the 2019 emissions level.

Target reference number

Abs 3

Year target was set

2020

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 3 (upstream & downstream)

Base year

2019

Covered emissions in base year (metric tons CO2e)

10924765

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2050

Targeted reduction from base year (%)

20

Covered emissions in target year (metric tons CO2e) [auto-calculated]

8739812

Covered emissions in reporting year (metric tons CO2e)

9486821

% of target achieved [auto-calculated]

65.8112096690409

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

1.5°C aligned

Please explain (including target coverage)

SK Telecom established target to reduce the scope 3 GHG emissions by 20% from the total by 2050 compared to the 2019 level.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs2

Target year for achieving net zero

2050

Is this a science-based target?

Yes, and we have committed to seek validation of this target by the Science Based Targets initiative in the next 2 years

Please explain (including target coverage)

SK Telecom joined the SBTi which is international accepted to set Net Zero targets. Therefore, we will set targets based on SBT's 1.5DS standard and we are planning to set Net Zero targets through those targets. The target is to reduce the absolute emission 100% compare to the GHG emission 1,005,576 tCO2eq of the baseline year (2019) and reduce the GHG emission to 0 tCO2eq by 2050.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	1	19
Implementation commenced*	1	724
Implemented*	12	91361
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes	Machine/equipment replacement
---	-------------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

23310

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

5165000000

Investment required (unit currency – as specified in C0.4)

50680000000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

Reduced 23,310 tCO2eq of GHG emissions in 2020 through three projects including replacing inverters, freezers, and 3G Modernization.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization
---	----------------------

Estimated annual CO2e savings (metric tonnes CO2e)

68012

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

15071000000

Investment required (unit currency – as specified in C0.4)

3770000000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Reduced 68,012tCO2eq of GHG emissions in 2020 through 6 GHG reduction activities such as improvement of the lighting operation and the operation time for cooling and heating, improvement of the air blower in shower rooms and pumps, improvement of operation time for exhaust fan, 2G Fade-out, and LTE Power Saving

Initiative category & Initiative type

Low-carbon energy generation	Solar PV
------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

38

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

8000000

Investment required (unit currency – as specified in C0.4)

305000000

Payback period

>25 years

Estimated lifetime of the initiative

16-20 years

CommentReduced 38tCO₂eq of GHG emissions in 2020 through two solar power generation projects in Seongsu and FMI**Initiative category & Initiative type**

Transportation	Company fleet vehicle replacement
----------------	-----------------------------------

Estimated annual CO₂e savings (metric tonnes CO₂e)

1

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

262921

Investment required (unit currency – as specified in C0.4)

70000000

Payback period

>25 years

Estimated lifetime of the initiative

6-10 years

CommentGHG emissions reduction volume was calculated following the replacement of existing vehicles with electric cars, which is estimated at 1tCO₂eq in 2020**C4.3c****(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Compliance with regulatory requirements/standards	We have an obligation to verify and submit our GHG emissions data annually. To comply with the emission cap, we must either reduce GHG emissions or purchase allowances for the emissions exceeded the cap. Therefore, we invest in GHG emissions reduction activities and implement them to comply with the K-ETS.

C4.5**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

C4.5a**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.****Level of aggregation**

Product

Description of product/Group of products

To reduce GHG emissions, SK Telecom uses less raw materials for the cell phones production through the eco-phone businesses, which are: phone recycling (eco-phone, re-work) which is a simple commercialization of existing products; phone refurbishing (renewed phones). - Eco-phone business: We redistribute second-hand cell phones through purchase/quality check/ outbound release/ commercialization processes. - Re-work business: We conduct quality checks of secondhand cell phones (functionality/ performance/visual presentation), re-produce the functional used products through commercialization (cleansing, packaging, and replacing some parts), and supply them to individuals or companies (groups) at low prices. - Phone refurbishing (renewed phones) business: We replace PCB parts, the screen and case of used phones, check the quality and visual presentation, and supply the products for lower prices than new ones.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

% revenue from low carbon product(s) in the reporting year

1.2

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

SK Telecom's revenue from eco-phone business was calculated by applying the unit revenue at KRW 500,000 per phone to the total number of eco/re-worked/renewed phones sold in 2020. The total number of eco-phones and re-worked phones sold was 287,751 and the renewed phones sold was 2,856. The revenue generated from the eco-phone business is 1.2% of SK Telecom's total revenue in 2020. SK Telecom reduced 15,760 tons of CO₂ from the eco-phone businesses (eco-phone, re-work, renewed phone) in 2020. - GHG emissions reduction from the eco-phone & re-work businesses = emissions reduction from eco-phone & re-worked phones (kg tCO₂eq/each) X the total number of eco-phones & re-worked phones sold in 2020 = 54.6 X 287,751 = 15,711.2 tCO₂eq - GHG emissions reduction from the renewed phone business = GHG emission reduction by each renewed phone (kg CO₂eq/each) X the total number of renewed phones sold in 2020 = 16.9 X 2,856 = 48.34 tCO₂eq

Level of aggregation

Product

Description of product/Group of products

SK Telecom provides energy management services (EMS: BEMS/FEMS) for buildings, factories, lighting, and demand-side energy management, to help save energy by optimizing the energy consumption. These services are the core of the smart grid technology, which contribute significantly to low carbon transition.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

% revenue from low carbon product(s) in the reporting year

0.02

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

SK Telecom's revenue from the EMS (BEMS/FEMS) business in 2020 was KRW 2,549,380,409 which is 0.02% of the company's total revenue in 2020. SK Telecom reduced 10,602 tons of greenhouse gases through the EMS business in 2020. - GHG reduction from FEMS = 4,168 tCO₂eq - GHG reduction from BEMS = 6,434 tCO₂eq

Level of aggregation

Product

Description of product/Group of products

SK Telecom encourages GHG reductions on the customers' side through the e-billing business that converts paper bills to electric bills. We also make various efforts to increase the number of customers receiving e-bills, by providing mileage points and discounts on the user fees.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

% revenue from low carbon product(s) in the reporting year

0.07

% of total portfolio value

<Not Applicable>

Asset classes/ product types

<Not Applicable>

Comment

By converting paper-bills to e-bills, we mitigate GHG emissions while reducing the costs. 8,721,981 sheets of paper bills were saved. Based on the assumption that each sheet of the paper bill costs KRW 1,000, the revenue from the e-billing business shared 0.07% of the SK Telecom's total revenue in 2020. SK Telecom reduced 25.1 tons of GHG emissions from the e-billing business in 2020.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
6604

Comment

Scope 2 (location-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
998989

Comment

Scope 2 (market-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

IPCC Guidelines for National Greenhouse Gas Inventories, 2006
ISO 14064-1
Korea GHG and Energy Target Management System Operating Guidelines

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
6133

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
1033861

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
2645868

Emissions calculation methodology
Calculated the Scope 3 emissions from the products and services purchased by SK Telecom in 2020. * Scope 3 emissions calculation methodology: Purchase cost x CO2 emissions factor by industry.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Calculated the Scope 3 emissions from the products and services purchased by SK Telecom in 2020.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1183439

Emissions calculation methodology
Calculated the Scope 3 emissions from the capital goods which were not taken into account in the calculation of the Scope 3 emissions from the purchased goods and services from SK Telecom's total purchased goods and services. * Scope 3 emissions calculation methodology: Purchase cost x CO2 emissions factor by industry.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Calculated the Scope 3 emissions from the capital goods which were not taken into account in the calculation of the Scope 3 emissions from the products and services purchased by SK Telecom.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

739

Emissions calculation methodology

Calculated the GHG emissions from the production process to supply the Scope 1 energy that SK Telecom purchased and used. * Scope 3 emissions calculation methodology: Purchased Scope 1 energy volume x the emission factor from production.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Calculated the emissions from the production process to supply the Scope 1 energy purchased by SK Telecom.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

The emissions from upstream transport and logistics are trivial, which share only a small percentage in the total scope 3 emissions. The emissions are excluded from the calculation because it was not material against the materiality criteria .

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

600

Emissions calculation methodology

Scope 3 emissions from the landfill and incineration of wastes generated by SK Telecom. * Scope3 emissions calculation methodology : Landfill and incineration × emission factor from the waste treatment process.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Scope 3 emissions from the landfill and incineration of wastes generated by SK Telecom.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

768

Emissions calculation methodology

Calculated the scope 3 emissions from the mobility for domestic and international business travels by SK Telecom. * Scope3 emissions calculation methodology : Distance by the means of transportation × emission factors by the means of transportation.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Calculated the scope 3 emissions from the mobility for domestic and international business travels by SK Telecom.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

9369

Emissions calculation methodology

Calculated the scope 3 emissions from the means of transportation by SK Telecom's staff for commuting to the workplace. * Scope3 emissions calculation methodology : Distance by the means of transportation by staff× emission factors by the means of transportation.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Calculated the scope 3 emissions from the means of transportation by SK Telecom's staff for commuting to the workplace.

Upstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

13480

Emissions calculation methodology

Calculated the emissions from the assets leased by SK Telecom. * Scope3 emissions calculation methodology : Total emissions from the buildings x lease percentage.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Calculated the emissions from the assets leased by SK Telecom.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We do not calculate the emissions for this category because we do not directly any products/services transported in downstream as a telecommunication service provider.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We do not calculate the Scope 3 emissions for this category because we do not directly sell nor provide services.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We do not calculate the Scope 3 emissions for this category because we do not directly sell nor provide services.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO₂e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

We do not calculate the Scope 3 emissions for this category because we do not directly sell nor provide services.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Since SK Telecom reports the emissions from all leased assets for downstream included in Scope 1 and 2, we do not have other emission sources to be reported in Scope 3.

Franchises

Evaluation status

Relevant, calculated

Metric tonnes CO2e

74271

Emissions calculation methodology

Calculated the scope 3 emissions from SK Telecom's franchises. * Scope3 emissions calculation methodology : Electricity usage by franchise x Electricity emission factor.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Calculated the emissions from the assets leased by SK Telecom. Calculated the Scope 3 emissions from SK Telecom's franchises.

Investments

Evaluation status

Relevant, calculated

Metric tonnes CO2e

5558286

Emissions calculation methodology

Calculated the scope 3 emissions from the businesses invested by SK Telecom in 2020. * Scope 3 emissions calculation methodology : Investment costs x Emission factors by industry.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Calculated the emissions from the assets leased by SK Telecom. Calculated the scope 3 emissions from the businesses invested by SK Telecom in 2020.

Other (upstream)

Evaluation status

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Other (downstream)

Evaluation status

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000001017

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

1039994

Metric denominator

Other, please specify (Operating profit)

Metric denominator: Unit total

1023067000000

Scope 2 figure used

Location-based

% change from previous year

3.78

Direction of change

Decreased

Reason for change

SK Telecom's unit GHG emissions per operating profit decreased by 3.78% in 2020 from the level in 2019, due to the various GHG reduction activities such as integration of network equipment, development and adoption of highly energy-efficient telecommunication equipment, retrofit of old air conditioners, and adjustment of cooling and heating temperature inside buildings. - GHG emissions in 2019 : 1,005,593 tCO₂e, Operating profit in 2019 (KRW) : 951,803,000,000, emissions per operating profit : 0.000001057 - GHG emissions in 2020: 1,039,993 tCO₂e, Operating profit in 2020 (KRW) : 1,023,067,000,000, emissions per operating profit : 0.000001017 Difference from the previous year : (emissions per operating profit in 2020 – emissions per operating profit in 2019) / emissions per operating profit in 2019 X 100 = -3.78%

Intensity figure

8.9e-8

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

1039994

Metric denominator

unit total revenue

Metric denominator: Unit total

11746630000000

Scope 2 figure used

Location-based

% change from previous year

0.56

Direction of change

Increased

Reason for change

SK Telecom's unit GHG emissions per revenue increased by 0.56% in 2020 from the level in 2019, due to the activated 5G market and an increase in the telecommunication network, although the company delivered various GHG reduction activities such as integration of network equipment, development and adoption of highly energy-efficient telecommunication equipment, retrofit of old air conditioners, and adjustment of cooling and heating temperature inside buildings. - GHG emissions in 2019 : 1,005,593 tCO₂e, Revenue in 2019 (KRW) : 11,416,342,000,000, emissions per revenue: 0.000000088 - GHG emissions in 2020: 1,039,993 tCO₂e, Revenue in 2020 (KRW) : 11,746,630,000,000, emissions per revenue: 0.000000089 Difference from the previous year : (emissions per revenue in 2020 – emissions per revenue in 2019) / emissions per revenue in 2019 X 100 = +0.56%

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	6054	IPCC Second Assessment Report (SAR - 100 year)
CH4	19	IPCC Second Assessment Report (SAR - 100 year)
N2O	60	IPCC Second Assessment Report (SAR - 100 year)
HFCs	0	IPCC Second Assessment Report (SAR - 100 year)
PFCs	0	IPCC Second Assessment Report (SAR - 100 year)
SF6	0	IPCC Second Assessment Report (SAR - 100 year)
NF3	0	IPCC Second Assessment Report (SAR - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Republic of Korea	6133

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By facility

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
SK T-Tower	1009	37.566455	126.98503
SK Namsam New Building	134	37.556704	126.975876
SK Muuido Training Center	72	37.400364	126.421303
SK Gwangju Songjeong Building	36	35.140231	126.801675
SK Gwangju Usan Building	63	35.162129	126.810125
SK Guro Building	33	37.500447	126.874945
SK Naich Gym	259	37.226108	127.311402
SK Daegu Bonri building	79	35.84016	128.545071
SK Daegu Sincheon Building	20	35.86459	128.60084
SK Daegu Jungdong Building	9	35.837544	128.621133
SK Daegu Taepyeong Building	38	35.884018	128.581048
SK Daejeon Dunsan Building	282	36.347177	127.384101
SK Daejeon Busa Building	5	36.313695	127.431972
Marketing Team	0	37.566455	126.98503
SK Mapo T-Town Building	40	37.54758	126.95386
SK Myungryun Building	0	37.336029	127.949088
SK Future Management Lab	584	37.267326	127.398894
SK Boramae Building	407	37.491988	126.926097
SK Headquarter	2067	37.566455	126.98503
SK Busan Data Center	21	37.40383	127.10294
SK Busan Buam Building	170	35.165011	129.050796
SK Busan Anrak Building	53	35.196415	129.103349
SK Bundang Building	85	37.380725	127.115756
SK Seoul National University Research Building	49	37.466355	126.960587
SK Seongsu Building	152	37.546126	127.062803
SK Suyu Building	24	37.629743	127.025265
SK Wonju Building	47	37.344838	127.928538
SK Incheon Building	66	37.44566	126.702633
SK Jangan Building	55	37.564188	127.064178
Nationwide infrastructure equipment	55	37.566455	126.98503
SK Jeonju Building	79	35.824986	127.148532
SK Jeju Building	66	33.492251	126.489358
SK Cheongju Building	46	36.634849	127.463557
SK Chungju Indeongsan Supecs Center	8	37.067577	128.002916
SK Pangyo Building	20	37.40383	127.10294

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Republic of Korea	1033861	0	2219115	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
SK T-Tower	5935	0
SK Namsan Building	792	0
SK Muuido Training Center	378	0
SK Gwangju Songjeong Building	818	0
SK Gwangju Usan Building	4133	0
Guro Building	201	0
SK Naich Gym	276	0
Daegu Bonli Building	1235	0
Daegu Sincheon Building	1261	0
Daegu Jungdong Building	802	0
Daegu Taepyeong Building	3307	0
Daejeon Dunsan Building	24211	0
Daejeon Busa Building	2954	0
Marketing Team	1107	0
Mapo T-Town	135	0
Myeongryun Building	492	0
Future Management Research Institute	791	0
Boramae Building	25545	0
Headquarter	2017	0
Busan Data Center	6667	0
Busan Buam Building	3652	0
Busan Anrak Building	868	0
Bundang Building	20805	0
Seoul National University Research Building	513	0
Seongsu Building	29703	0
Suyu Building	7103	0
Wonju Building	1859	0
Incheon Building	4556	0
Jangan Building	1425	0
Nationwide infrastructure equipment	873000	0
Jeonju Building	2167	0
Jeju Building	1650	0
Cheongju Building	1446	0
Chungju Indeongsan Supecs Center	350	0
Pangyo Building	1707	0

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	38	Decreased	0.004	SK Telecom installed and manages solar panels in Seongsu office buildings and Future Management Research Institute in Icheon in order to switch the corporate power source to renewable energy. The GHG reduction from renewable power generation in 2020 was 38tCO2eq, which was down by 0.004% from the 2019 level. The methodology for calculating the GHG reduction percentage is as below. → GHG emissions reduction percentage = {Reduction in 2020 (38tCO2eq) ÷ GHG emissions in 2019 (1,005,593tCO2eq)} × 100 = Reduction by 0.004%
Other emissions reduction activities	91323	Decreased	9.08	SK Telecom has made various efforts to reduce GHG emissions such as equipment retrofit, process optimization, and replacement of company's vehicles, and actively participates in GHG reduction activities energy year. The resulted GHG emissions reduction in 2020 was 91,323tCO2eq, down by 9.08% from the 2019 level. The methodology for calculating the GHG reduction percentage is as below. → GHG emissions reduction percentage = {Reduction in 2020 (91,323tCO2eq) ÷ GHG emissions in 2019 (1,005,593tCO2eq)} × 100 = Reduction by 9.08%
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output		<Not Applicable >		
Change in methodology		<Not Applicable >		
Change in boundary		<Not Applicable >		
Change in physical operating conditions		<Not Applicable >		
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?
Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?
More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	28839	28839
Consumption of purchased or acquired electricity	<Not Applicable>	0	2216781	2216781
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	2334	2334
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	81	<Not Applicable>	81
Total energy consumption	<Not Applicable>	81	2247954	2248035

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3357

MWh fuel consumed for self-generation of electricity

1517

MWh fuel consumed for self-generation of heat

1583

MWh fuel consumed for self-generation of steam

257

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

0.0754

Unit

metric tons CO2e per GJ

Emissions factor source

National Guidelines on GHG emissions/energy target management which uses the IPCC Fourth Assessment Report (SAR - 100 year)

Comment

Fuels (excluding feedstocks)

Liquefied Natural Gas (LNG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

14736

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

849

MWh fuel consumed for self-generation of steam

13887

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

0.0562

Unit

metric tons CO2e per GJ

Emissions factor source

National Guidelines on GHG emissions/energy target management which uses the IPCC Fourth Assessment Report (SAR - 100 year)

Comment

Fuels (excluding feedstocks)

Kerosene

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3446

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

25

MWh fuel consumed for self-generation of steam

3421

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

0.0723

Unit

metric tons CO2e per GJ

Emissions factor source

National Guidelines on GHG emissions/energy target management which uses the IPCC Fourth Assessment Report (SAR - 100 year)

Comment

Fuels (excluding feedstocks)

Propane Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

422

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

65

MWh fuel consumed for self-generation of steam

357

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Emission factor

0.0632

Unit

metric tons CO2e per GJ

Emissions factor source

National Guidelines on GHG emissions/energy target management which uses the IPCC Fourth Assessment Report (SAR - 100 year)

Comment

Fuels (excluding feedstocks)

Petrol

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization
5500

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
5500

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.0723

Unit
metric tons CO2e per GJ

Emissions factor source
National Guidelines on GHG emissions/energy target management which uses the IPCC Fourth AssessmentReport (SAR - 100 year)

Comment

Fuels (excluding feedstocks)
Jet Kerosene

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
1378

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
1378

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.0721

Unit
metric tons CO2e per GJ

Emissions factor source
National Guidelines on GHG emissions/energy target management which uses the IPCC Fourth AssessmentReport (SAR - 100 year)

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	81	81	81	81
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

AS_GHG_SK0000_EN2020.pdf

Page/ section reference

P. 1

Relevant standard

Korean GHG and energy target management system

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

AS_GHG_SK0000_EN2020.pdf

Page/ section reference

P. 1

Relevant standard

Korean GHG and energy target management system

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3 (upstream & downstream)

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

SKT2020AnnualReportENG.pdf

Page/section reference

P. 222

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C1. Governance	Other, please specify (Climate change responsibilities)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C2. Risks and opportunities	Other, please specify (Risks and opportunities)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C3. Business strategy	Other, please specify (Business strategies by climate change)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C4. Targets and performance	Emissions reduction activities	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C5. Emissions performance	Other, please specify (Baseline year emissions)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C6. Emissions data	Other, please specify (Emission data)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C7. Emissions breakdown	Other, please specify (Emission details)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C8. Energy	Energy consumption	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C11. Carbon pricing	Other, please specify (Carbon pricing)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf
C12. Engagement	Other, please specify (Engagement)	CDP Response Verification Guideline	The accuracy of the question confirmed through the CDP verification CDP Climate Change 2021 Information Response_Verification Statement_ENG_SK Telecom_R1.pdf

CDP Climate Change 2021 Information Response_Verification Statement_00_SK000_R1.pdf
 CDP Climate Change 2021 Information Response_Verification Statement_00_SK000_R1.pdf
 SK000 CDP 00000_2021_Rev.2.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Korea ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Korea ETS

% of Scope 1 emissions covered by the ETS

100

% of Scope 2 emissions covered by the ETS

100

Period start date

January 1 2020

Period end date

December 31 2020

Allowances allocated

1032485

Allowances purchased

7494

Verified Scope 1 emissions in metric tons CO₂e

6133

Verified Scope 2 emissions in metric tons CO₂e

1033861

Details of ownership

Facilities we own and operate

Comment

We purchased emission allowances in the KETS market to meet the emissions cap set under the KETS.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

1. The KETS compliance strategies

The KETS is a market-based carbon regulation where the government allocates free allowances to GHG emitting companies and the companies can trade the surplus and shortage of their allowances. SK Telecom sets the GHG emissions reduction targets in line with the freely allocated emissions cap, identifies the GHG reduction measures to achieve the target, and applies the reduction technologies. To efficiently respond to the KETS regulation, the ESG Innovation Group manages the company's GHG emissions and the performance, monitors the domestic carbon prices and analyzes the trends and characteristics, and makes forecasts. Reflecting the analysis results, SK Telecom establishes the KETS compliance strategies such as banking, borrowing, buying and selling of allowances.

2. Examples of the strategy application

SK Telecom implemented various GHG reduction measures such as replacing old equipment with highly energy-efficient ones and improving operation of equipment. However, since the telecommunication business became subject to allowance auctioning, the volumes of free allowance allocated to SK Telecom decreased. SK Telecom developed single RAN technology reflecting the result of an analysis of the company's future GHG emissions which forecasted allowance shortage. Single RAN technology (Single Radio Access Network) is an integrated operation of 3G/LTE equipment by replacing some hardware or upgrading software. We reduced the emissions through developing telecommunication technologies without applying the conventional reduction measures of changing the energy sources, and it was later certified by the Ministry of Environment for the first time. Single RAN technology can reduce electricity consumption by 53% compared to the conventional technology. SK Telecom applied the technology to all base stations and repeaters across 78 cities in the country including Seoul and had 1,117 tons of GHG reductions certified by the Ministry of Environment.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive energy efficiency
Drive low-carbon investment

GHG Scope

Scope 1
Scope 2

Application

SK Telecom uses an internal carbon pricing system to incentivize investment and make decisions on energy conservation activities and low carbon projects to be applied to large power consuming facilities and equipment such as base stations and telecommunication equipment. We use the internal carbon price for evaluating the performance of energy conservation and low carbon investment projects.

Actual price(s) used (Currency /metric ton)

35000

Variance of price(s) used

SK Telecom monitors the domestic and international climate change policies and carbon markets, analyzes the domestic carbon price trends and the liquidity, and evaluates the value of the internal carbon price. SK Telecom's internal carbon price, which is used in analyzing the level of profits against investment in low carbon projects, also reflects the cost of energy efficiency projects and the cost volatility of the RE100 implementation as SK Telecom joined the RE100 and established the implementation roadmap. The SK Telecom's internal carbon price is estimated at KRW 35,000 for now, which can change later depending on changes in domestic KETS policies, supply and demand situations of allowances in the carbon market, and changes in the RE100 implementation costs.

Type of internal carbon price

Internal fee

Impact & implication

SK Telecom decided the internal carbon price on a trial basis reflecting research results on social costs of GHG emissions and uses the price for making decisions on GHG reduction projects such as investments in replacing old equipment with highly energy-efficient ones and renewable energy projects. Firstly, we conduct cost-benefit analysis considering the emission allowance purchase cost, energy efficient equipment investment cost, and internal carbon price. We also use the internal carbon price in calculating the RoI (Return on Investment) of renewable energy projects' investment, as the demands for low carbon activities are increasing. As an example, in 2020, SK Telecom used our internal carbon price in calculating the annual GHG reduction volumes, cost savings, and the investment amount to achieve the RE100 at the decision-making stage before the declaration of the RE100. As such, we have established a systematic approach to implement GHG reduction projects by utilizing the internal carbon price.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism

% of suppliers by number

19

% total procurement spend (direct and indirect)

81

% of supplier-related Scope 3 emissions as reported in C6.5

13

Rationale for the coverage of your engagement

SK Telecom collaborates with its partners across the business operation such as development and supply of network devices, establishment and operation of network infrastructure, and development and provision of platform contents, etc. We designate the key suppliers' group considering 1) their relevance to our company's key businesses and the reliability, 2) high transaction volumes, 3) impacts on the unsubstitutable business by exclusive technologies and the business dependence. As of 2020, 177 companies among the 1,179 registered vendors are categorized as the Tier 1 key suppliers' group while another 44 companies are categorized as the Non-Tier 1 key suppliers' group. SK Telecom possesses policies and processes for sustainable supply chain management targeted at key suppliers subject to engagement, and constantly reviews the climate-related risks of the supply chain. We define suppliers' social responsibility requirements in the ESG Codes of Conduct for Business Partners. In the supply chain policies consisted of 10 requirement areas, the environmental management part requires our suppliers to practice environment-friendly management, comply with international standards and regulations as well as internal regulations on environmental protection, and deliver third-party audits.

Impact of engagement, including measures of success

1. Detailed explanation related to climate change supply chain engagement SK Telecom's ESG Codes of Conduct for Business Partners is applied to all our business partners having contractual arrangement with the company. SKT recommends our suppliers adopt SKT's ESG management principles as their codes of conduct. The suppliers can prevent climate-related risks on their finance, reputation and business, and eventually build sustainable win-win partnership with us, by practicing SKT's responsibility management and implementing the ESG Codes of Conduct for Business Partners. SKT requests the business partners to practice environmental performance management, ensure sustainability of their business, and build the capacity to respond to climate change based on the ESG Codes of Conduct. 2. Cases To minimize GHG emissions, SKT requested telecommunication equipment suppliers to develop energy efficient equipment. For example, SKT requested Samsung Electronics, a supplier of 5G antennas to SKT, to provide the products designed to reduce GHG emissions and increase the energy efficiency in the production process. As the result, we saved electricity charges thanks to cooperation of Samsung Electronics to improve energy efficiency as well as the GHG emissions. 3. Methodology to measure the success We implement a process of selecting sustainable suppliers in three steps. Firstly, we conduct screenings of newly registered vendors based on the electronic contract system. At this stage, we recommend the suppliers comply with the requirements of the agreement on the SKT's ESG policies for the Business Partners and requirements on the supply chain policy written in the contract agreement. Depending on the results of a series of screenings, either the suppliers are registered as new vendors or their contractual relationships with SK Telecom are terminated. When registering new vendors, we conduct pre-screenings by applying the ESG elements for supply chain such as environment, social, etc. The rate of delivering ESG audits of the supply chain also continually increases. We conducted pre-screenings of all newly registered vendors and will continue our efforts to expand the pre-screening to all our vendors by 100% by 2022. Through this process, we continually assess whether our climate-related responses are implemented properly.

Comment

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

1. Definition of other partners in the value chain

SK Telecom's other partners in the value chain can be defined as social enterprises.

2. Case studies of climate change engagement strategies targeting other partners in the value chain

(1) SK Telecom responds to climate-related issues not only from the client side but also by working with social enterprises. By actively engaging in resource recycling and reducing plastic wastes through a social enterprise called Happy Connect, we protect the environment and contribute to reducing GHG emissions. Happy Connect launched the 'ha:bit eco alliance,' which is a coalition to promote good habits of reducing plastic use and create a sustainable environmental ecosystem. 'ha:bit eco alliance' started an environmental project that encourages using tumblers or personal mug cups at cafes for reducing the usage of disposable plastic cups and encouraging the use of reusable cups. This project will be implemented on a trial basis started with the Starbucks shop in Jeju where reusable cups will be provided and the used cups will be returned at a kiosk in either Starbucks or Jeju airport. If the usage of reusable cups increases across all Starbucks shops in Jeju through the project, it saves 5 million disposable cups which will eventually reduce GHG emissions and protect the environment.

(2) SK Telecom provides IT services for public benefits through a social enterprise called Happy ICT. Happy ICT is a social enterprise established by SK C&C and SK Telecom which develops and operates ICT, and provides ICT solutions by hiring disabled people since its establishment. Through Happy ICT, SK Telecom builds its role as a leading company investing in businesses creating virtual values and increasing social values through continued studies of sustainable business models. One of climate-related response activities by Happy ICT is recycling or re-commercializing second hand PCs and laptops. The second hand PCs and laptops donated to Happy ICT are sent to a recycling factory and examined whether they are reusable or recyclable. Resources assessed as reusable through this process are re-sold through the re-commercialization process. This activity creates GHG emissions reduction effects from reduced electronic wastes.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

- Direct engagement with policy makers
- Trade associations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (K-ETS)	Support with minor exceptions	SK Telecom was designated as a KETS participant in 2015 when the policy became effective, and has responded to the regulation since then. We actively participate in public hearings, round-table dialogues and consultation meetings, and suggest our opinions about the policy. The government amended part of the "Act on the Allocation and Trading of Greenhouse-Gas Emission Permits"(i.e. ETS laws) in June 2020, to operate the third phase (2021-2025) of the KETS. SK Telecom identified some problems of the amended law, particularly with the free allocation and auctioning policy design, and requested for the improvement and recommended revisions of the law to the government	SK Telecom reviewed the proposed amendment for the law by the Environment and Labor Committee the of the National Assembly and agreed that stating the list of industries belonged to the 100% free allocation sector would be a stumbling block to manage the KETS flexibly. We provided our opinions that certain industries applied with unclear criteria in selecting the carbon leakage sector should be determined by the presidential decree instead of the list being written in the revised law. We also agreed with the government's policy direction of expanding auctioning in the 3rd phase of the KETS, reflecting the cases of the EU-ETS and in other countries. However, as regulating both direct and indirect emissions can double the burdens, we proposed to apply free allocation on indirect emissions and amend the law accordingly.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

KDCC

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

KDCC is a one of the industrial associations representing the telecommunication and data center in Korea. We discussed various issues related to KETS and the telecommunication industry such as the level of free allocation to industries, required for achieving our business targets and the national targets. On the behalf of all telecommunication companies, KDCC discusses with the government departments and policymakers.

How have you influenced, or are you attempting to influence their position?

We actively participate in the KDCC studies and provide supports through data sharing, consultation meetings, opinions collection, and thesis paper development, etc.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

SK Telecom makes corporate-wide efforts to fulfill the corporate social responsibility over the company's impacts on the society and environment. SK Telecom's ESG Innovation Group monitors climate-related risks and opportunities, energy and GHG emissions trends, GHG reduction activities and the domestic and international trends of climate change and ETS. The ESG Innovation Group analyzes and assesses the risks and opportunities and then reports the result to the CFO. The CFO manages all issues affecting the corporate environmental management by reviewing the materiality of climate-related issues and making decisions, and reports key issues to the CEO. The CEO makes decisions to respond to material climate-related issues, and reports key issues to the ESG committee which affect the business and finance significantly. The ESG Committee makes final decisions considering the materiality assessment results and the CEO's opinions. With the process established to identify, assess, and respond to climate-related issues, SK Telecom reflects the corporate vision, policy, direction and the management's decisions to maintain consistent engagement activities and climate change strategies. Also, we provide opinions through KDCC on the directions for telecommunication companies to adapt and respond to climate change and share the SK Telecom's GHG reduction technologies with telecommunication companies to support the GHG reduction target setting and dissemination of the GHG reduction technology. Also we conduct engagement activities targeted at policy makers on the policy directions to reduce domestic obstacles to Net Zero and the RE100 implementation.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

[SK텔레콤](2021.03.17).pdf

Page/Section reference

p.84(Other : energy reduction), p.416(It is demonstrated that one of SK's target businesses is environment'related business), p.481~482(Emission, Other index : energy consumption)

Content elements

Emissions figures

Other metrics

Other, please specify (energy reduction, It is demonstrated that one of SK's target businesses is environment'related business)

Comment

Other metrics : energy consumption

Publication

In mainstream reports

Status

Complete

Attach the document

[SK텔레콤](2021.05.17) (1).pdf

Page/Section reference

p.80(Other : RE100, Enviironmental vision including cliamte change) p.339(Emissions, Other index : energy consumption)

Content elements

Emissions figures

Other metrics

Other, please specify (energy reduction, It is demonstrated that one of SK's target businesses is environment'related business)

Comment

Other metrics : energy consumption

Publication

In voluntary sustainability report

Status

Complete

Attach the document

SKT2020AnnualReportENG.pdf

Page/Section reference

p. 65 & p. 103~111, p. 138~143, p.221~223, p. 252~255

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Other, please specify (GHG reduction performance, Environmental Expenditure and Investment)

Comment

Other metrics : energy consumption

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

We submit the RE100 reporting spreadsheet including the one of SK Broadband, the subsidiary of SK Telecom. Please refer to the attachment.

RE100-reporting-spreadsheet 2021_SK Telecom.xlsx

RE100-reporting-spreadsheet_2021_SK Broadband.xlsx

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CFO	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors Customers	Public

Please confirm below

I have read and accept the applicable Terms