August 23, 2023

# **Korea Emissions Trading Scheme (K-ETS)**

# Kim Seonghee<sup>1</sup>

Manager, Energy Efficiency Group, Climate Change and Energy Efficiency Unit Institute of Energy Economics, Japan

# 1. Climate change policy outline

The Republic of Korea set out its 2020 greenhouse gas emission reduction target (a 30% cut from the business-as-usual level) in 2009 and enacted the Basic Act on Low Carbon Green Growth (hereinafter referred to as the Basic Act) as a basic framework for reducing GHG emissions in January 2010. The Basic Act stipulated the formulation of a basic plan on climate change and energy, and the introduction of the GHG and Energy Target Management System, <sup>2</sup> a GHG emissions and energy consumption reporting system, and an emissions trading scheme (hereinafter referred to as ETS) as major policies. In 2012, the Act on the Allocation and Trading of Greenhouse Gas Emission Permits (hereinafter referred to as the Trading Act) was enacted, stipulating detailed rules for the ETS. Since January 2015, the ETS has been implemented.

In Korea under a presidential system, policy changes tend to accompany government changes. The Moon Jae-in administration between May 2017 and April 2022 focused on environmental policy, advocating the enhancement of air pollution countermeasures and a transition to renewable energy, as well as promoting nuclear and coal phase-out. Regarding the national GHG emission reduction target for 2030, its predecessor set out a 37% cut from the BAU level in 2015. In October 2021, however, the Moon administration revised the target into a 40% cut from 2018 and specified the target in law to make it difficult for any future administration to revise the target.<sup>3</sup> Nonetheless, the conservative Yoon Suk Yeol administration, which was launched in May 2022 after winning back the presidency in the March 2022 election, has announced policies such as the withdrawal of the nuclear phase-out, the appropriate, feasible spread of renewable energy, and priority given to incentives for companies rather than regulations. The First National Basic Plan for Carbon Neutral Green Growth Basic Plan,<sup>4</sup> formulated in April 2023, retained the national GHG emission

\_

<sup>1</sup> songhee@tky.ieej.or.jp

<sup>&</sup>lt;sup>2</sup> The GHG and Energy Target Management System, a system in which the government sets and manages GHG and energy reduction targets for companies and business sites of a certain size or larger, has been in effect since 2010. The system initially covered companies with annual GHG emissions of 125,000 tons of CO<sub>2</sub> equivalent or more and gradually expanded the coverage later to eventually include companies with annual GHG emissions of 50,000 t-CO<sub>2</sub>e or more. When the ETS was launched in 2015, companies with annual emissions of 125,000 t-CO<sub>2</sub>e or more were covered by the ETS, leaving smaller companies to be subject to the system, which was renamed GHG Target Management System.

<sup>&</sup>lt;sup>3</sup> In December 2019, the government replaced the target GHG emission cut from the BAU level with the cut from a base year and adopted a target of cutting GHG emissions in 2030 by 26.3% from 2018. In October 2021, however, the target was raised to a 40% cut. In order to prevent the downward revision of the target after a government change, the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (implemented in September 2021) provides that the government shall determine the GHG emission reduction target rate for 2030 within a range of 35% or more from 2018 by presidential decree (Article 8 (1)).

<sup>&</sup>lt;sup>4</sup> Relevant government agencies (April 2023), "National Strategy for Carbon Neutrality and Green Growth and First National Basic

reduction target for 2030, while lowering the reduction target for the industrial sector from 14.5% to 11.4% to ease the sector's burden.

### 2. ETS scheme design

#### 2.1. Overview

Since 2015, the K-ETS has been implemented for 69 subsectors in six sectors: industry, energy conversion, buildings, transportation, public, and waste.<sup>5</sup> The ETS is positioned as a major measure to achieve Korea's medium-term GHG emission reduction target. Basically, a five-year plan is set for implementing the ETS. However, the first six years of 2020 were designed as a transitional system operation period that was divided into the first phase (between 2015 and 2017) and the second phase (between 2018 and 2020). The third phase started in January 2021 and will last for five years. In the future, each phase will be set for every five years. The Korean ETS covers both direct and indirect emissions from the use of electricity and heat.

Although free emission permits have been allocated to alleviate the industry sector's burden regarding the reduction of GHG emissions, the percentage share for free emission allowances has been gradually lowered. The share was 100% in the first phase, 97% in the second, and 90% in the third. Some emission permits are allocated to a liable entity through auctions held regularly by the government.

As a flexibility mechanism, surplus emission permits can be carried over to the next compliance year and if emission permits are insufficient, a portion of allocated emission permits can be borrowed from the next compliance year within a single phase. In the first phase, there were no restrictions on banking volume, however, supply shortages of emission permits have led to the introduction of restrictions on banking volume to encourage companies to sell surplus emission permits to the market. For banking and borrowing restrictions, see the appendix table at the end of the text.

Figure 1 shows pre-allocations, final allocations, certified emissions, and the number of liable entities designated between 2015 and 2021. Liable entities need to apply to the government for allocations four months before the start of a phase. The final allocation amount will be adjusted reflecting a number of changes including new entrants, additional allocation, allocation revocation, and succession of rights and obligations that occur in that compliance year. The trend of annual certified emissions shows that emissions were increasing despite the K-ETS introduction, before decreasing in 2019 for the first time. In 2020, emissions decreased due to the impact of the economic recession caused by the COVID-19 outbreak. In 2021, however, emissions increased by 6.6% from 2020 due to an economic recovery and an increase in the number of liable entities in the third phase.

Plan."

<sup>&</sup>lt;sup>5</sup> In 2015, the K-ETS covered 23 subsectors in five sectors: industry, energy conversion, buildings, transportation, and waste.

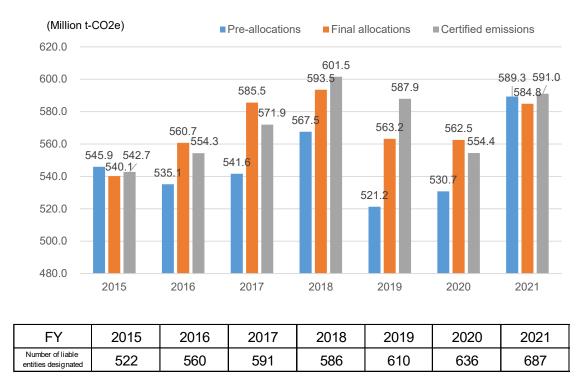


Figure 1 Changes in the number of liable entities designated, allocations and certified emissions (2015-2021)

Source: Prepared by the author from each year's edition of the Korean Emissions Trading System Report by the Greenhouse Gas Inventory and Research Center of the Korea Ministry of the Environment

#### 2.2. Allocation methodology

Allocation methods consist of grandfathering, under which emissions permits to liable entities are based on historic emissions, and benchmarking, under which emissions permits are allocated based on the emissions efficiency of their facilities. From the viewpoint of equitability and incentives for investment in emission reductions, subsectors applying the benchmarking method have gradually increased. The number of subsectors for the benchmarking method rose from 3 in the first phase to 7 in the second and 12 in the third (Table 1).

Cul

Table 1 Subsectors for benchmarking-based allocation

Phase	Subsectors for benchmarking
First phase	Oil refinery, Cement, Aviation
(2015-2017)	
Second phase	Oil refinery, Cement, Aviation, Integrated energy supply (residential),
(2018-2020)	Integrated energy supply (industrial), Waste
Third phase	Oil refinery, Cement, Aviation, Integrated energy supply (residential),

(2021-2025)	Integrated energy supply (industrial) Waste, Steel, Petrochemical,
	Buildings, Paper and wood

Source: Korea Ministry of the Environment (September 2020) National Emission Allowance Allocation Plan for the Third Phase of the GHG Emissions Trading Scheme

When the grandfathering method is used for calculating allocations, actual reductions in the base period <sup>6</sup> are reflected, with some allocation coefficients <sup>7</sup> used, in order to improve the equitability of allocations.

When emission allowance allocations to companies are decided, allowances for auction (10% of total allowances in the third phase) are subtracted from the company's account and transferred to the government's accounts for auction in the allowance registry. Auctions are held by the government regularly. Unsold allowances are canceled at the end of each phase or carried over.

In consideration of international competition, all allowances are allocated free of charge to subsectors with a value of 0.002 (0.2%) or more for trade intensity<sup>8</sup> multiplied by the cost incurred. In the third phase, 28 sub-sectors were subjected to free allocations.

#### 2.3. Offset Credits

In the K-ETS, emission reductions implemented by covered entities outside their organizational boundaries are referred to as "external reductions". Credits generated from external reductions can be used for compliance with the K-ETS. External reductions are divided into domestic and overseas reductions and subjected to government approval and registration through application according to the prescribed methodology.

- · Domestic reductions: Reductions outside liable entities' organizational boundaries
- Overseas reductions: Reductions through overseas CDM (Clean Development Mechanism) projects implemented directly by domestic companies, etc. 9

Korea Offset Credits (KOCs) are issued for approved domestic and overseas external reductions. KOCs are tradable, but they must be converted into Korea Credit Units (KCUs) to be used for K-ETS compliance. Only liable entities can apply for converting KOCs into KCUs. KCUs are

<sup>&</sup>lt;sup>6</sup> The base period for each ETS phase is the three-year period beginning four years prior to the start of the phase. For example, the base period for Phase 3 is 2017-2019.

<sup>&</sup>lt;sup>7</sup> Emissions from relevant emission activities, sectoral or sub-sectoral emission characteristics, or emission reduction potential, shares of emissions in relevant sub-sectors, etc. are comprehensively considered to decide whether to use any allocation coefficients.

<sup>&</sup>lt;sup>8</sup> The calculation method for cost incurred and trade intensity is stipulated in the enforcement decree of the Trading Act (Article 19, Appendix 1).

Trade intensity: (average annual export value + average annual import value) / (average annual sales value + average annual import value)

Cost incurred: (average annual emissions × average market price of emission allowances) / (average annual value-added production)

9 If an international emission reduction scheme is established to recognize Korean reductions in accordance with the Paris Agreement, however, reductions under the scheme will be certified as external reductions.

limited to 5% of liable entities' annual budget in the third phase. 10

Figure 2 shows the trading volume and annual average transaction prices of all emission permits (Korean Allowance Units (KAUs), KCUs, and KOCs) from the first phase to August 2022 of the third phase. Total trading volume came to 257.2 million tons, or about 6,225.8 billion won. Annual trading volume was limited to 5.7 million tons in 2015 before increasing to 12 million tons in 2016, 26.3 million tons in 2017, and 47.5 million tons in 2018. Thus, trading volume soared by more than 100% every year. Trading volume for KAUs totaled 216.8 million tons, accounting for about 84.3% of the total trading volume, followed by 36.3 million tons (14.1%) for KOCs and 4.1 million tons (1.6%) for KCUs. No trading was seen in KCUs between 2018 and 2021. The average annual trading price of KAUs accounting for more than 80% of the total trading volume increased significantly every year, from 12,044 won (1 yen is 9.08 won) in 2015 to 30,713 won in 2020, but it fell due to the COVID-19 outbreak before rising back slightly in 2022. In the first and second phases, only liable entities were allowed to participate in transactions. From December 2021, however, securities companies were allowed to take part in transactions to vitalize the market.

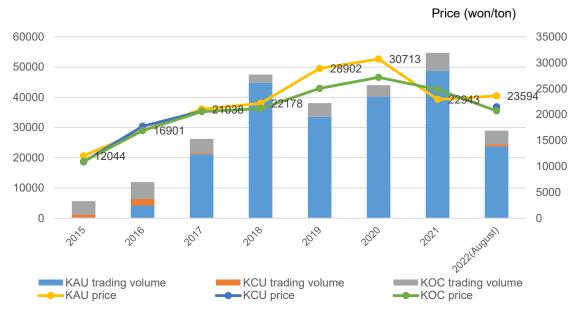


Figure 2 Trading Volume and transaction prices by emission allowance (2015-August 2022)

Source: Prepared by the author from "2022 Korean Emissions Trading System Report" by the Greenhouse Gas Inventory and

Research Center of the Korea Ministry of the Environment

\_

<sup>&</sup>lt;sup>10</sup> Initially, offset credits were limited to 10% of liable entities' annual budget, with overseas credits limited to 50% of offset credits. In March 2021, however, the offset credit limit was lowered from 10% to 5%, with a limit on overseas credits lifted.

<sup>&</sup>lt;sup>11</sup> As of July 2023, the FY2022 KAU price declined further to 9.950 won/ton temporarily. In preparation for the KAU22 settlement (covered entities' submission of emission permits to offset their emissions) in August, massive surplus allowances might have flowed into the market. The decline may also be attributable to an economic slowdown and the supply of surplus emission allowances above the banking limit.

## 2.4. Monitoring, reporting, and verifying of emissions

The details of how to monitor, verify, and report emissions to the government are provided in the guidelines for reporting and certification of emissions for the allocated GHG emission allowance trading scheme (Ministry of the Environment Notification No. 2021-10, implemented on January 1, 2021). Liable entities calculate annual emissions by corporation, business site, equipment unit, and emission activity, prepare detailed emissions statements, have them verified by third-party verification organizations, and submit them to the Minister of the Environment electronically within three months after the end of the relevant fiscal year. The Ministry of the Environment confirms and certifies the submitted statements, but the Minister of the Environment can outsource certification to a contractor (Figure 3). The Ministry of the Environment also undertakes the disclosure of statements submitted by companies, publishing relevant company names, their emissions, verification organization names, energy consumption, etc. on the website of the National Greenhouse Gas Management System (https://ngms.gir.go.kr/main.do) every year.

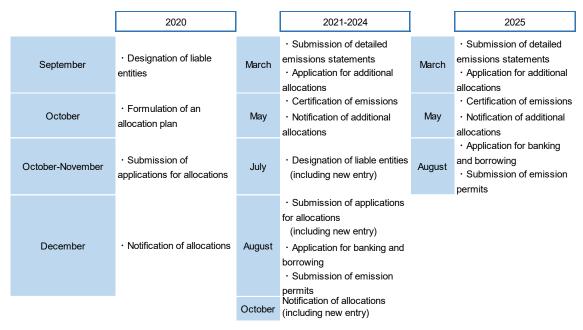


Figure 3: Main schedule for the third phase

Source: Created by the author from the website of the Korea Environment Corporation 12

# 2.5. Relationship with other policies

The K-ETS is not directly linked to other systems such as taxation. Korea's energy tax system seeks to secure adequate transportation fuel consumption and improve air pollution. It was introduced as a transportation tax in 1993 and completely revised in 2006 into a transportation, energy,

<sup>&</sup>lt;sup>12</sup> Korea Environment Corporation, "Greenhouse Gas Emissions Trading Scheme" website https://www.keco.or.kr/web/lay1/S1T164C1007/contents.do

and environment tax. The tax is designed not to combat global warming, but to raise financial resources for projects to expand transportation facilities, such as roads and railways, foster public transportation, develop energy resources, and improve air pollution and other environmental problems. On the other hand, a subsidy program is implemented to cover up to 50% of investment in emission reduction equipment to support ETS target company. The subsidy program covers purchasing, installment, test operation, consulting, and other costs for emission reduction equipment, such as renewable energy, waste heat recovery, and energy-efficient facilities.<sup>13</sup>

## 3. Implications for Japan's GX ETS

The characteristic of the K-ETS is that, although the framework is given by the Trading Act, details are provided by the enforcement decree, presidential decrees, guidelines, etc., and can be revised or changed in a timely manner according to the operation status of the scheme. The flexibility in system design and operation had the advantage of allowing K-ETS participants to easily undergo the trial-and-error process, especially in the early stages of the scheme. However, frequent rule changes have increased uncertainties about the scheme, making it difficult for companies to make bold investments in emission cuts. If sufficient information or data are not available for relevant sectors, how to fairly make initial emission allowance allocations is important. In Korea, there were many lawsuits over the appropriateness of pre-allocations. Other major challenges include how to encourage companies to reduce emissions and find appropriate price levels to avoid excessive burdens on them as allowance prices fluctuate wildly.

<References>

"Act on the Allocation and Trading of Greenhouse Gas Emission Permits (Enacted on September 4, 2021, and implemented on March 25, 2022)"

(https://www.law.go.kr/LSW/lsInfoP.do?lsiSeq=235581#0000)

"Enforcement Decree of the Act on the Allocation and Trading of Greenhouse Gas Emission Permits (Implemented on March 25, 2022)"

(https://www.law.go.kr/LSW/lsInfoP.do?lsiSeq=241541#0000)

Greenhouse Gas Inventory and Research Center (2020), "2018 Korean Emissions Trading System Report"

(http://www.gir.go.kr/home/board/read.do?pagerOffset=40&maxPageItems=10&maxInd exPages=10&searchKey=&searchValue=&menuId=20&boardId=37&boardMasterI d=9&boardCategoryId=)

Greenhouse Gas Inventory and Research Center (2021), "2019 Korean Emissions Trading System

<sup>&</sup>lt;sup>13</sup> Article 35 of the Trading Act stipulates that auction revenues can be used for tax incentives, financial aid, subsidies, and other support measures for investment and technological development for cutting emissions.

Report"

- (http://www.gir.go.kr/home/board/read.do?pagerOffset=10&maxPageItems=10&maxInd exPages=10&searchKey=&searchValue=&menuId=20&boardId=42&boardMasterI d=9&boardCategoryId=)
- Greenhouse Gas Inventory and Research Center (2022), "2020 Korean Emissions Trading System Report"
- (http://www.gir.go.kr/home/board/read.do?pagerOffset=10&maxPageItems=10&maxInd exPages=10&searchKey=&searchValue=&menuId=20&boardId=37&boardMasterI d=9&boardCategoryId=)
- Greenhouse Gas Inventory and Research Center (2023), "2022 Korean Emissions Trading System Report"
- (http://www.gir.go.kr/home/board/read.do?pagerOffset=0&maxPageItems=10&maxInde xPages=10&searchKey=&searchValue=&menuId=20&boardId=79&boardMasterId =9&boardCategoryId=)
- Relevant government agencies (April 2023), "National Strategy for Carbon Neutrality and Green Growth and First National Basic Plan"
- (https://www.2050cnc.go.kr/base/board/read?boardManagementNo=4&boardNo=2236&searchCategory=&page=1&searchType=&searchWord=&menuLevel=2&menuNo=15)
- Korea Ministry of the Environment (2020), "National Emission Allowance Allocation Plan for the Third Trading Phase (Draft) (September 2020)"
- (https://ngms.gir.go.kr/link.do?menuNo=30100201&link=/cm/bbs/selectBoardList.do%3 FbbsType%3D2)
- Korea Ministry of the Environment (2021), "Guidelines for Reporting and Certification of Emissions for the Allocated GHG Emission Allowance Trading Scheme (January 2021)
- (https://ngms.gir.go.kr/link.do?menuNo=30100301&link=/cm/bbs/selectBoardList.do%3 FbbsType%3D3%26bbsId%3DBBSMSTR\_000000000032%26nttId%3D2121)
- Korea Ministry of the Environment (2021), "Guidelines for Allocation and Cancellation of Greenhouse Gas Emission Permits (implemented on December 20, 2021)"
- (https://www.law.go.kr/LSW/admRulLsInfoP.do?admRulSeg=2100000207503)

Contact: report@tky.ieej.or.jp

# Appendix: K-ETS Outline

	3 T	T F ' ' T 1' O 1
	Name	Korea Emissions Trading Scheme
Outline	Legal ground (Names of laws)	Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (2010) (formerly, the Basic Act on Low Carbon Green Growth (2010))
	(INAMICS OF IAWS)	Act on the Allocation and Trading of Greenhouse Gas Emission Permits (2012)
	Outline	Domestic emissions trading scheme covering six sectors: industry, energy conversion, buildings, transportation, public, and waste
	Supervisory authorities	Ministry of the Environment, competent government agencies for each sector
	Commencement	January 2015
	Trading phases	1st phase (2015-2017), 2nd phase (2018-2020), 3rd phase (2021-2025), followed by five-year phases
Targets	Units	(1) companies (corporations) as organizations, but companies, business establishments, and facilities are required to report emissions and energy consumption to the government.
	Major requirements for targets	Business operators with average annual GHG emissions of 125,000 t-CO <sub>2</sub> eq or more for the past three years, or business establishments with average annual GHG emissions of 25,000 t-CO <sub>2</sub> eq or more. Voluntary participation by others is allowed.
	Target GHGs	6 gases (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> ) and indirect emissions are covered.
	Emissions (direct and indirect)	Direct and indirect emissions
	Coverage	3rd phase (2021-2025): 685 companies in 69 sub-sectors, covering 73.5% of emissions
How to set targets	Allocation method <sup>14</sup>	<ul> <li>Based on past GHG emissions, emission cuts, expected sub-sector growth, carbon intensity, trade intensity, etc.</li> <li>Free allocations for third and later phases account for 90% or less of total allocations.<sup>15</sup></li> <li>Allocations are based on the emission standard (grandfathering) method and the emission efficiency standard (benchmarking) method.</li> <li>【Subsectors for benchmarking】</li> <li>1st phase: 3 subsectors (oil refinery, cement, aviation) → 2nd trading phase: 7 subsectors (1st phase targets + Integrated energy supply (residential), Integrated energy supply (industrial), Waste) → 3rd trading phase: 12 subsectors (2nd phase targets + Steel, Petrochemical, Buildings, Paper and wood)</li> <li>In response to liable entities' applications for allocations, allocations are made to business operators within caps for sectors/subsectors to which the companies belong.<sup>16</sup></li> <li>Subsequent adjustments, such as allocation additions and cancellations are allowed. Additions are made mainly for new facilities<sup>17</sup>.</li> </ul>
Flexible measures	Banking/ borrowing	Banking 18  Allowances can be carried over to the next fiscal year in a phase or to the first fiscal year of the next phase (approval by competent government agencies is required).  [1st phase]  If banking covers more than 10% of the average annual allocations in the first phase plus 20,000 tons, the equivalent of the excess will be deducted from allocations for the second phase to help vitalize the market (applicable from August 2018).  [2nd phase]

 $<sup>^{\</sup>rm 14}\,$  National Emission Allowance Allocation Plan for the Third Trading Phase (September 2020)

Article 18, Paragraph 3 of the Enforcement Decree
 Article 12 of the Trading Act, Article 17 of the Enforcement Decree
 Articles 16 and 17 of the Trading Act, Article 29 of the Enforcement Decree

<sup>&</sup>lt;sup>18</sup> Articles 18 and 32 of the Trading Act, Article 46 of the Enforcement Decree, third allowance allocation plan

Market	systems (status of	
	Links with other	_
	Trading type	Competitive trading, negotiation trading
		price) / (average annual value-added production)
	countermeasures	(average annual sales value + average annual import value)  Cost incurred: (average annual emissions × average market emission allowance
	Carbon leakage	Note) Trade intensity: (average annual export value + average annual import value) /
		intensity multiplied by the cost incurred.
		All allocations are free for subsectors with a value of 0.002 (0.2%) or more for trade
		• Setting temporary upper and lower price limits
		maximum of 150% of the company's annual emission allowances)
		current year's emission allowances of the relevant allocation target company,
		<ul> <li>Additional allocation of up to 25% of reserves</li> <li>Set a limit on the ownership of emission allowances (minimum of 70% of the</li> </ul>
		Market stabilization measures
	mechanism)	No. 1 177
	surveillance	average in the previous two years, etc.
	prices, market	• The average emission allowance price in the last month is less than 60/100 of the
	and lower limit	price of the previous two years), etc.
	(setting upper	emission allowance price in the last month is more than twice as high as the average
	Price measures	average trading volume in the same month of the previous two years, or the average
		• A rapid increase in trading volume in a short period due to a surge in demand (when the average trading volume of one month is more than twice as high as the
		previous two years for six consecutive months.
		• Emission allowance prices are three times higher than the average price of the
		Criteria for triggering market stabilization measures
		[Market stabilization measures <sup>21</sup> ]
		limit is set at 5%.
	Offset credits <sup>20</sup>	into emission permits, which can be used for compliance. However, the offset credit
		• Emissions reduction credits generated outside covered entities can be converted
		$\times$ 0.5)) for the second to fourth years. Borrowing is not allowed for the fifth (final) year.
		borrowed out of emission allowances to be submitted in the previous performance year
		borrowing limit for the previous year - (percentage share of emission allowances
		of emission allowances to be submitted by the relevant company ×{emission allowance
		[2nd phase]: Borrowing is allowed for up to 15% [3rd phase]: Borrowing is allowed for up to 15% in the first year and up to the number
		[1st phase]: Borrowing is allowed for up to 20%
		Borrowing is allowed only within each phase.
		Borrowing <sup>19</sup>
		allowances (KAUs) and offset allowances (KCUs) for each of the 3rd and 4th phases.
		Banking is allowed for the equivalent of net sales for annually allocated emission
		[3rd phase]
		of emission allowances.
		for banking. However, there is no restriction for companies holding only small amounts
I		three times the net sales volume in 2018 and double the net sales in 2019 being allowed

Article 28 of the Trading Act, Article 45 of the Enforcement Decree, third emission allocation plan
 Guidelines for assessing the validity of external emission reductions and certifying emissions (implemented on May 21, 2021)
 Article 23 of the Trading Act, Article 38 of the Enforcement Decree

	Registry / MRV Methods	<ul> <li>Submission of a detailed emissions statement (specifying company size, fuel and raw material consumption, production volume, emissions, equipment capacity, equipment quantity, and equipment operating rates).</li> <li>External organizations verify emissions statements.</li> <li>Emissions are certified by an emissions certification body.</li> </ul>
	Background of K-ETS introduction (explaining discussions leading to introduction and differences between initial and final plans)	<ul> <li>Since pre-allocations (caps) in the first phase (2015-2017) were linked closely to the 2020 national emission reduction target of 30% from the 2020 business-asusual level, the government and the industry were at odds over the calculation of the BAU level in 2020.</li> <li>The industry requested revisions to the scheme (the revision of pre-allocations, the postponement of the scheme's launch until 2020, etc.).</li> <li>The Ministry of the Environment, which had jurisdiction over the K-ETS then, proposed a compromise plan that included measures for easing emission reduction burden by subsector, conditions for implementing market stabilization measures (setting the price cap at 10,000 won), the active use of flexible measures, the reestimation of the 2020 BAU level, and other burden reduction measures.</li> </ul>
How to report		Covered entities submit emissions statements and verification reports by the third party to competent authorities.
Penalties	Compliance costs	[Surcharge] The penalty is 100,000 won or less, three times the average price of emission allowances.
Effects, recent develop ments, etc.	Use of auction revenues	Auction revenues are put into the energy and resources special account.
	Recent developments	<ul> <li>August 2022: Announcement of the strategy for promoting international GHG emission reduction projects</li> <li>December 2022: Announcement of a proposal to improve the K-ETS</li> <li>April 2023: Formulation of the first draft basic plan for national carbon-neutral green growth.</li> </ul>