International Carbon Action Partnership
ETS Detailed Information

# Korea Emissions Trading Scheme

## General Information

| | |
|---|---|
| Summary | **Status:** ETS in force<br><br>**Jurisdictions:** Republic of Korea<br><br>On 1 January 2015, the Republic of Korea launched its national ETS (KETS), the first nation-wide Cap-and-Trade program in operation in East Asia. The ETS covers approximately 525 of the country's largest emitters, which account for around 68% of national GHG emissions. The KETS covers direct emissions of six Kyoto gases, as well as indirect emissions from electricity consumption. The KETS will play an essential role in meeting Korea's 2030 NDC target of 37% below BAU emissions.<br><br>In the first two years of operation, trade under the KETS has been limited. In 2016, efforts have been made to increase the supply of allowances in the Korean market to ease the pressure on market participants. Firstly, the share of allowances companies can borrow for compliance was doubled (from 10% to 20%). Secondly, an additional 900,000 allowances were offered from the Allowance Reserve at a floor price of around EUR 12. Finally, 2.3 million Korean Offset Credits were also added to the market.<br><br>Website of the Korean Ministry of Environment<br>Presentation by the Korea Environment Corporation at the ICAP Side Event at the UNFCCC COP19 (November 2013) |
| Overall GHG emissions (excluding LULUCF) | **Emissions:** 694.5 $MtC0_2e$ (2013)<br><br>Official data of the Greenhouse Gas Inventory & Research Center of Korea (GIR) |
| Overall GHG emissions by sector | Sector Name — MtCO2e<br>Fuel combustion (excl. Transport) — 513.4<br>Transport — 88.3<br>Fugitive emissions — 4.6<br>Industrial processes — 52.6<br>Agriculture — 20.7<br>Waste — 14.9 |
| Overall GHG reduction target | **BY 2020:** 30% below BAU.<br><br>**By 2030:** 37% below BAU (536 MtCO2e, NDC pledge). This represents a 22% reduction below 2012 GHG levels. |
| Type of ETS | Mandatory with voluntary opt-in |
| Cap and trajectory | **Type of Cap:**<br><br>**Phase one (2015-2017):** 1,687 MtCO2e, including a reserve of 89 million tCO2e for market stabilization measures, early action and new entrants.<br><br>2015: 573 MtCO2e, 2016: 562 MtCO2e, 2017: 551 MtCO2e |

| | |
|---|---|
| | Caps for phase two and three have not yet been announced. |
| Carbon Price | *Current Allowance Price (per t/CO2e):* KRW 20,650 (approx. USD 18.28) (secondary market price of 21 September 2017) |

## ETS Size

| | |
|---|---|
| Emissions covered by the ETS | 0.68 |
| GHG covered | $CO_2$, $CH_4$, $N_2O$, PFCs, HFCs, $SF_6$ |
| Sectors covered and thresholds | **Phase one (2015-2017):** 23 sub-sectors from steel, cement, petro-chemistry, refinery, power, buildings, waste and aviation sectors.<br><br>**Inclusion thresholds:** Company >125,000 tCO2/year, facility >25,000 tCO2/year |
| Number of liable entities | 525 business entities including 5 domestic airlines.<br><br>Business entities eligible for the allocation of emissions allowances specified in the relevant allocation plan under Article 5 (1) 3. |
| Point of regulation | Downstream |

## Phases & Allocation

| | |
|---|---|
| Compliance period | One year |
| Trading period | **Phase one:** Three years (2015-2017)<br><br>**Phase two:** Three years (2018-2020)<br><br>**Phase three:** Five years (2021-2025) |
| Allocation | **Phase one (2015-2017):** 100% free allocation, no auctioning.<br><br>Most sectors will receive free allowances based on the average GHG emissions of the base year (2011-2013). Three sectors (grey clinker, oil refinery, aviation) will be allocated free allowances following benchmarks based on previous activity data from the base year (2011-2013).<br><br>During Phase one about 5% of total allowances are retained in a reserve for market stabilization measures (14 MtCO2e), early action (41 MtCO2e), and other purposes including new entrants (33 MtCO2e). In addition, any unallocated allowances and withdrawn allowances will be transferred to the reserve.<br><br>**Phase two (2018-2020):**97% free allowances, 3% auctioned.<br><br>**Phase three (2021-2025):**Less than 90% free allowances, more than 10% auctioned.<br><br>Energy-intensive and trade-exposed (EITE) sectors will receive 100% of their allowances for free in all phases. EITE sectors are defined along the following criteria:<br>1. additional production cost of >5% and trade intensity of >10%; or<br>2. additional production cost of >30%; or<br>3. trade intensity of >30% |

## Flexibility

| | |
|---|---|
| Banking and borrowing | Banking is allowed without any restrictions. Borrowing is allowed only within a single trading phase (maximum of 10% of entity's obligation in 2015. Increased to 20% in 2016 and 2017), but not across phases. |
| Offsets and credits | **Phase one (2015-2017) and Phase two (2018-2020):**<br><br>**Qualitative limit:** Only domestic credits from external reduction activities implemented by non-ETS entities - that meet international standards - may be used for compliance. Domestic CDM credits (CERs) are allowed in the scheme. Eligible activities include those eligible under the CDM and Carbon Capture and Storage (CCS). However, only activities implemented after 14 April 2010 are eligible.<br><br>**Quantitative limit:**Up to 10% of each entity's compliance obligation.<br><br>**Phase three (2021-2025):** Up to 10% of each entity's compliance obligation with a maximum of 5% coming from international offsets. |
| Provisions for price management | The Allocation Committee may decide to implement market stabilization measures in the following cases:<br>1. The market allowance price of six consecutive months is at least three times higher than the average price of the two previous years.<br>2. The market allowance price of the last month is at least twice the average price of two previous years and the average trading volume of the last month is at least twice the volume of the same month of the two previous years.<br>3. The average market allowance price of a given month is smaller than 40% of the average price of the two previous years.<br><br>In 2015 and 2016, the price threshold is KRW 10,000 (EUR 7).<br><br>The stabilization measures may include:<br>1. Additional allocation from the reserve (up to 25%).<br>2. Establishment of an allowance retention limit: minimum (70%) or maximum (150%) of the allowance of the compliance year.<br>3. An increase or decrease of the borrowing limit (currently up to 20%).<br>4. An increase or decrease of the offsets limit (currently up to 10%).<br>5. Temporary establishment of a price ceiling or price floor.<br><br>In 2016, the Allocation Committee increased the borrowing limit from 10% to 20%. Furthermore, an additional nine million allowances were made available from auction at a reserve price of 16,200 KRW (EUR 12). Less than a third of allowances were sold. |

## Compliance

| | |
|---|---|
| Monitoring, Reporting, Verification (MRV) | **Reporting Frequency:**Annual reporting of emissions must be submitted within three months from the end of a given compliance year (by the end of March).<br><br>**Verification:** Emissions must be verified by a third-party verifier.<br><br>**Other:** Emissions reports are reviewed and certified by the Certification Committee of the Ministry of Environment within five months from the end of a given compliance year (by the end of May).<br><br>If the liable entity fails to report emissions correctly, the report will be disqualified. |
| Enforcement | The penalty shall not exceed three times the average market price of allowances of the given compliance year or KRW 100,000/ton (EUR 70). |

## Other Information

| | |
|---|---|
| Institutions involved | In 2016, responsibility for the Korean Emissions Trading Scheme (KETS) moved from the Ministry of Environment to the Ministry of Strategy and Finance. |
| Linkage with other schemes | No information available yet. |

## Disclaimer

Copyright © 2012 by International Carbon Action Partnership (ICAP). All rights reserved. The content provided by the ICAP ETS map is protected by copyright. You are authorized to view, download, print and distribute the copyrighted content from this website subject to the following condition: Any reproduction, in full or in part, must credit the International Carbon Action Partnership (ICAP) must include a copyright notice. If you have any questions please contact info@icapcarbonaction.com.
Developed and designed by Lucid.Berlin
The initial data as of December 2012 was compiled by the ICAP Secretariat for ICAP jurisdictions and by Ecofys for non-ICAP jurisdictions. Since then, the ICAP Secretariat has continuously updated the data for the ICAP and non-ICAP jurisdictions. Information compiled in the ICAP ETS Map is based on official and public information, as much as possible, and focuses on cap-and-trade systems for greenhouse gas emissions. The ETS map thus does not aspire to monitor all climate policy instruments. This website presents interim results of a continuous working process. Although the information contained therein is assembled with utmost care, ICAP and Ecofys cannot be held liable for the timeliness, correctness and completeness of the information provided.

Please refer to the imprint on the website of the International Carbon Action Partnership regarding links to external websites, liability and privacy policy.