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GHG Emissions Trading in Korea

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Korean ETS at a glance

Compliance period	Phase I (2015~2017); II (18~20); III(21~25); IV(26~30)
Cap	Phase I: 1,685.6 MtCO ₂ e ; Phase II: 1,777.1 MtCO ₂ e; Phase III: 3,048 MtCO ₂ e
GHG covered	CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆ Indirect emission from power and heat purchases ❖ To overcome incomplete pass-through of carbon price in the short and medium term and to widen coverage of carbon pricing
Sectors covered	Industry, Power, Transportation, Building, Waste
Threshold	Companies of more than 125,000 tCO ₂ e per year Installations of more than 25,000 tCO ₂ e per year
Types of trading units	Korea Allowance Unit (KAU), Korea Offset Credit (KOC), Korea Credit Unit (KCU)
Allowance Allocation	Grandfathering based on recent 3 year historical emission Benchmarking based on average emission intensity Auction: 3% (Phase II); 10% (Phase III)
Banking & Borrowing	Strict limits to (inter- & intra-phase) banking; Limited borrowing within phases
Leakage prevention	Free allocation for EITE sectors: Cost increase over 5% and trade dependency over 10% or either of them over 30% (Phase I~II), The product of cost share and trade dependency over 2% (Phase III)
Offsets	< 10% with <5% for foreign credits (Phase I~II), <5% (Phase III)
Penalty	Lesser of KRW 100,000 Won/tCO ₂ e or 3 times market price

3rd Allocation Plan

❖ Emission Cap = 3,048 million KAU

- ✓ derived from GHG roadmap for 2030 national emission target

❖ Total allowances = 3,082 million KAU

- ✓ Initial allowance allocation 2,902 m
 - 1,041 for energy transformation; 1,636 industry sector...
- ✓ New entrant reserve 146 m
- ✓ Market stability reserve 34 m
 - Allowances outside Cap
 - 14 m for market stabilization
 - 20 for market facilitation



3rd Allocation Plan

❖ Allocation method

- ✓ Benchmarking for 12 sectors
 - Steel, chemical, building, pulp and paper are added to the list of power, refinery, cement, aviation, waste, CHP, etc.
 - Fuel specific benchmarks for power plants based on average emission rates adjusted by cross-fuel sector-specific correction factor
 - Cross-fuel single benchmark from 2024, conditional on coal-cap instrument
- ✓ Grandfathering for all the others (base years: 2017~19)
- ✓ Auction share increase to 10% from 3% in Phase 2

❖ EITE threshold criteria

- ✓ Product of Carbon cost ratio and Trade intensity over 0.2%
 - Modified from EU rule (30/30/10/5)
 - Less than half of the sectors, including refinery and steel, are allowed full free allocation (power sector subject to 10% auction)

Key Issues for Effective Carbon Pricing

- ❖ **Lack of carbon pricing in Power sector dispatch decision**
 - ✓ Pros and cons of indirect emission regulation under ETS
- ❖ **Market stability measures**
 - ✓ Market stability reserve
 - ✓ Price floor
 - ✓ Strict limit on banking
- ❖ **Role of foreign credits for NDC**
 - ✓ Concern on the large inflow of cheap foreign CERs
- ❖ **Carbon pricing acknowledgement under EU CBAM**
- ❖ **Low liquidity of market**