

South Korea steams ahead

South Korea has finally passed legislation setting up a national emissions trading scheme. Changmin Yoo examines its design

In May, after several years of debate and discussion, South Korea became the first country in Asia to pass legislation introducing a national greenhouse gas (GHG) emissions trading scheme (ETS). The ETS, which comes into force from 2015, is designed to help the country reduce emissions by 30% by 2020, compared to business-as-usual levels.

That pledge is one of several that follow from the commitment, made by the government in 2008, to focus on a 'Green Growth' agenda as a main national policy tool designed to use the transition to a low-carbon economy to accelerate economic growth. Numerous policies related to green growth and the promotion of low-carbon technology have been introduced since 2008, including the government-led cap-and-trade scheme legislation.

An ETS bill has been debated for the past four years by the government and business community in Korea. In particular, the business community has expressed its concern over the potential impact on its international competitiveness, as a consequence of imposing a cost on carbon via an ETS. The lack of progress in the international climate talks

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since the 2009 Copenhagen climate summit has been an additional political burden for the Korean government as it pushes its ETS agenda.

Nonetheless, the emissions trading bill was finally passed in May 2012 by South Korea's parliament, the National Assembly, with near-unanimous support. The government's intention with this bill is to help Korea green its fossil-fuel dependent industries, as well as foster clean technology innovation and lower domestic GHG emissions.

In July, Korea's Presidential Committee on Green Growth (PCGG) unveiled for public consultation a draft version of a subordinate presidential decree, which sets out details of the country's cap-and-trade scheme, and which is scheduled to be finalised in November 2012. It contains details such as:

- Nomination of the scheme's regulator and governance structure;
- The extent of coverage of the scheme;
- Rules governing the use of carbon offsets;
- The process for determining the emissions cap for each of the allocation periods, the first two of which are three years long, followed by a five-year period;
- Eligibility criteria for the allocation of free permits to



Korea's business community has made its voice heard over competitiveness concerns

- emissions-intensive and trade-exposed industries;
- Government assistance packages for emissions reduction measures; and
- Penalties for non-compliance.

From 1 January 2015, the ETS will supersede the 'Target Management Scheme', which covers more than 500 emitters in South Korea. This was introduced in 2011 as a transition measure before the full-scale introduction of an ETS, which mandated these 500-plus companies to reduce their GHG emissions and energy consumption below pre-determined levels, in a 'command-and-control' manner, as the Target Management Scheme offered none of the flexibility in meeting targets of an emissions trading programme.

The ETS, meanwhile, is expected to cover roughly the same 500-plus companies, with facilities that emit more than 25,000 tonnes, or companies which emit more than 125,000 tonnes, of carbon dioxide equivalent per year, including all six of the Kyoto gases.

Emissions from the sectors covered are believed to represent 60% of the country's total emissions, and it incorporates most heavy industry sectors, including power, steel, cement, petrochemicals, electronics and consumer industrial products manufacturing.

The government decree also sets out its 2020 reduction target for each industry. This reduction target pathway will form the basis for allocation of permits to each sector.

Many of these industries are, of course, largely dependent on export markets. To prevent any loss of competitiveness with companies in jurisdictions that do not have to bear a cost of carbon, the majority of allowances will, at



first, be allocated to emitters in South Korea free of charge. The draft decree states that participating companies will be given 100% of their emissions allowances for free during the scheme's first phase (2015–17), and 97% during the second phase (2018–20). From 2021, at least 10% of allowances will be auctioned.

The bill sets out the possibility of linkage with other carbon markets, such as the EU ETS, with the details of linkage mechanisms to be determined by decree. However, the decree provides no indication as to whether future linkages are likely.

It also contains a number of restrictions on the use of carbon offsets. For example, offsets from emission reduction projects in Korea can be used to meet up to 10% of a company's compliance obligation each year, but no international carbon credits will be eligible for use in Korea's

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cap-and-trade scheme until 2020. After that date, international carbon credits should not exceed 50% of total carbon offsets used by each company.

Jinhee Suh, director for the PCGG, who is responsible for the scheme's design, said: "The Korean ETS has been designed to drive emission reductions within Korea to meet Korea's voluntary reduction target of a 30% reduction against the business-as-usual level by 2020.

"In addition, fostering green technology innovation by the private sector in Korea is another key objective. Therefore we, as a government, want to give a signal to the mar-

South Korea's 2020 GHG reduction target per sector (%)

Group/specific group	2012	2013	2015	2020
POWER				
Power generation, natural gas	1.5	3.0	6.1	26.7
INDUSTRIES				
Refined oil	0.4	0.6	2.8	7.5
Mining	0.4	0.4	0.6	3.9
Steel	0.1	0.2	2.1	6.5
Cement	0.3	0.5	3.0	8.5
Petrochemical	0.4	0.6	2.8	7.5
Paper, lumber	0.4	0.5	2.4	7.1
Textiles/leather	0.4	0.6	1.1	6.3
Glass/ceramics	0.4	0.5	0.7	4.0
Non-ferrous metal	0.4	0.5	0.7	4.1
Machinery	0.45	0.7	1.2	7.6
Electric/electronic	0.2	2.2	32.3	61.7
Electric other	2.4	3.4	26.3	39.5
Semiconductor	1.0	1.8	17.3	27.7
Automobile	0.3	1.1	15.2	31.9
Shipbuilding	0.5	0.6	1.3	6.7
Other manufacturing	0.2	0.2	0.3	1.7
Food and beverages	0.5	0.6	0.9	5.0
Construction	0.2	0.5	3.2	7.1
TRANSPORTATION				
Transportation	2.0	4.2	9.6	34.3
BUILDINGS				
Household	1.8	5.0	8.9	27.0
Commerce	1.9	4.4	8.8	26.7
PUBLIC OTHER				
Public other	5.2	8.6	15.7	25.0
AGRICULTURE/FISHERIES				
Agriculture/fisheries	0.0	0.1	1.7	5.2
WASTE				
Waste	1.3	2.0	9.0	12.3
TOTAL	1.6	3.3	10.0	30.0

Source: Presidential Committee on Green Growth

ket that Korea wishes to set an example of achieving real emission reductions through technology innovation, not through buying credits from someone else," adding that carbon offset trading has come under criticism for the rigour of its monitoring, reporting and verification.

While many details of the scheme have now been spelt out, some aspects remain ambiguous, particularly in relation to rules associated with the allocation of permits. The decree contains metrics that are similar to those used by the EU, although it does not set out a detailed process to determine which industries are deemed to be eligible for assistance. The decree was open for public consultation until August, and is to be finalised by November.

Sensitive issues involving allocation of free permits, off-setting rules and the ratio of auctioning to free allocation can rapidly trigger critical public debate and controversy, with correspondingly significant tasks for both policymakers and the business community in Korea. In this regard, clearing up uncertainty around scheme design will help large emitters to respond appropriately to the prospect of potential carbon price. However, decisions around the carbon leakage assessment and the bill's potential implications for Korean industry's competitiveness will remain contentious issues for the months to come. **GC**

Changmin Yoo is a director in the climate change and energy services group at PwC in Seoul.
E-mail: changmin.yoo@kr.pwc.com