

# **Designation Scheme for GHG Verification Body in Korea ETS**

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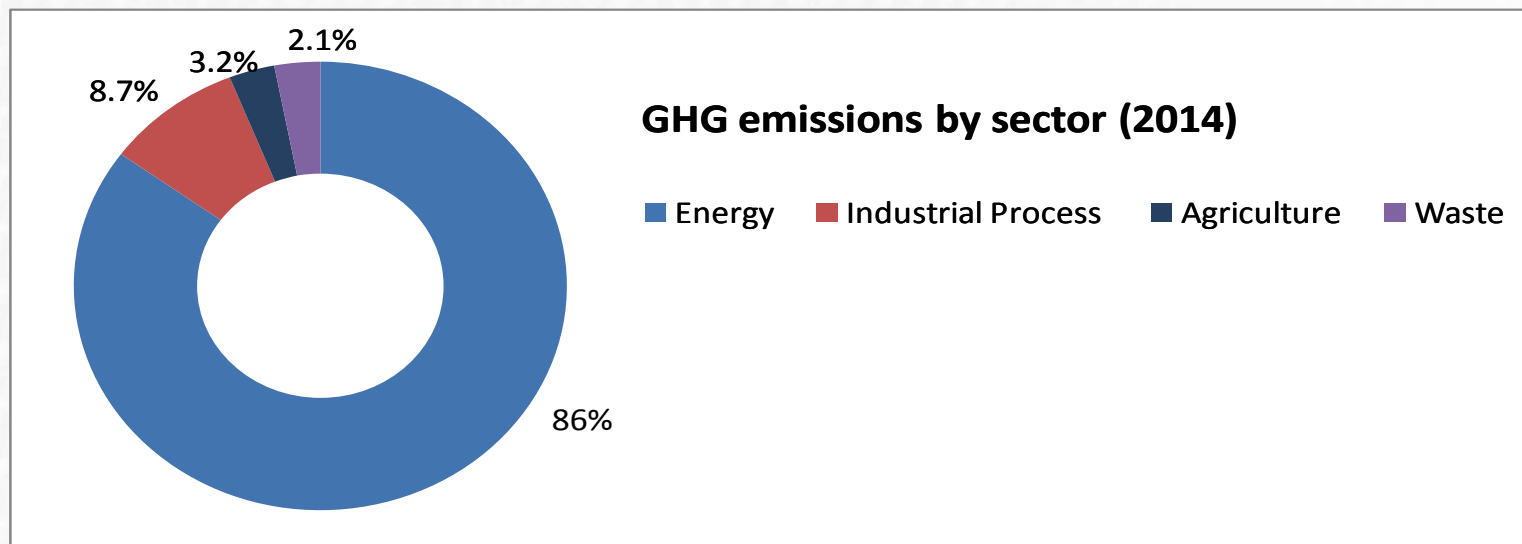


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## Outline of Korea ETS

# 1. Outline of Korea ETS

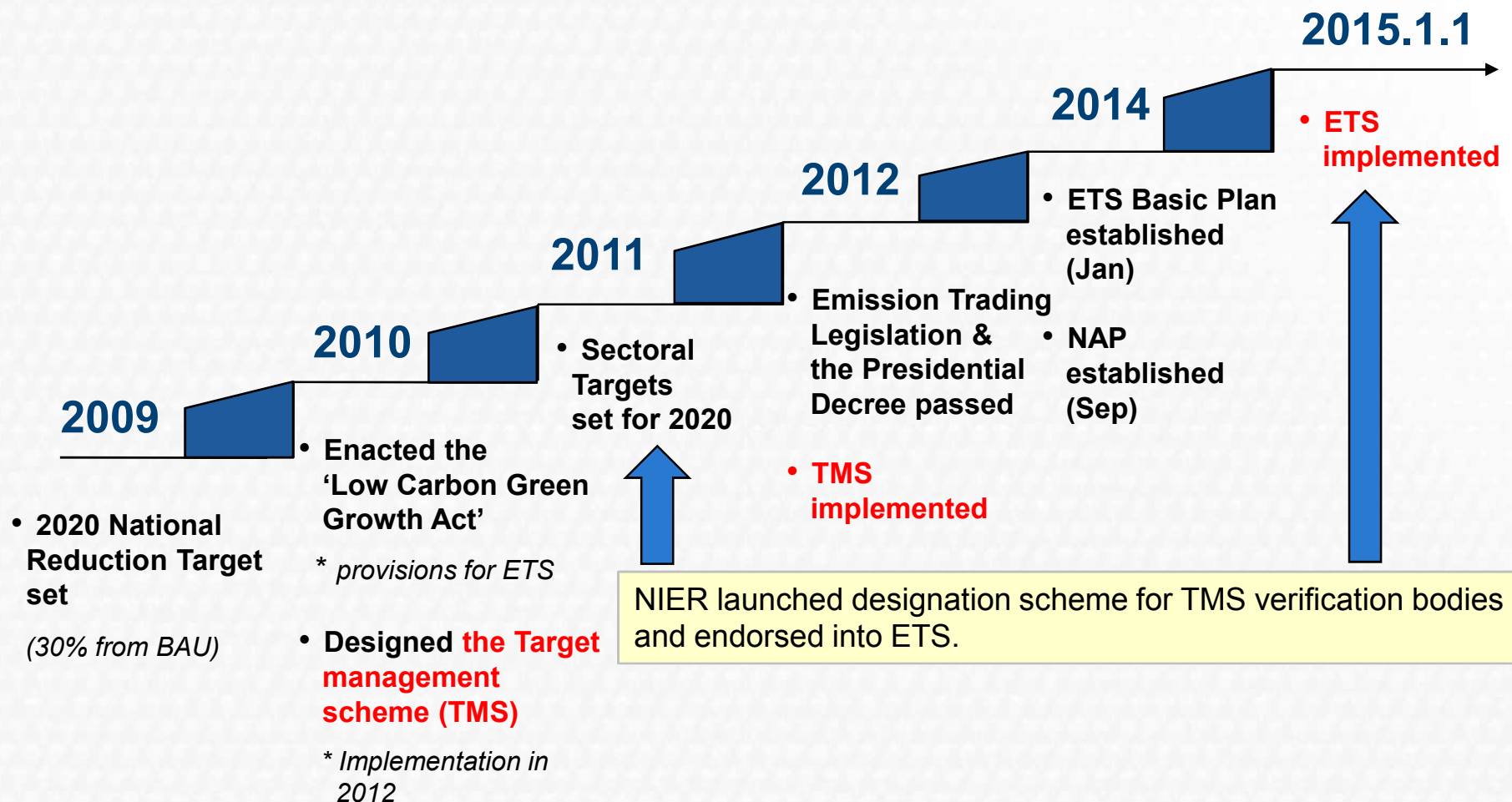
- Overview of Korea's GHG emissions
  - Energy & Industrial Process – key sectors for GHG emissions



- Facts on Korea's energy consumption
  - World's 7th largest energy consumer : 690.6MTCO<sub>2</sub>eq)
  - 97% of energy is imported from abroad
  - Energy import account for 29% of Korea's total import volume

# 1. Outline of Korea ETS

## ■ Historical progress in mitigation and ETS



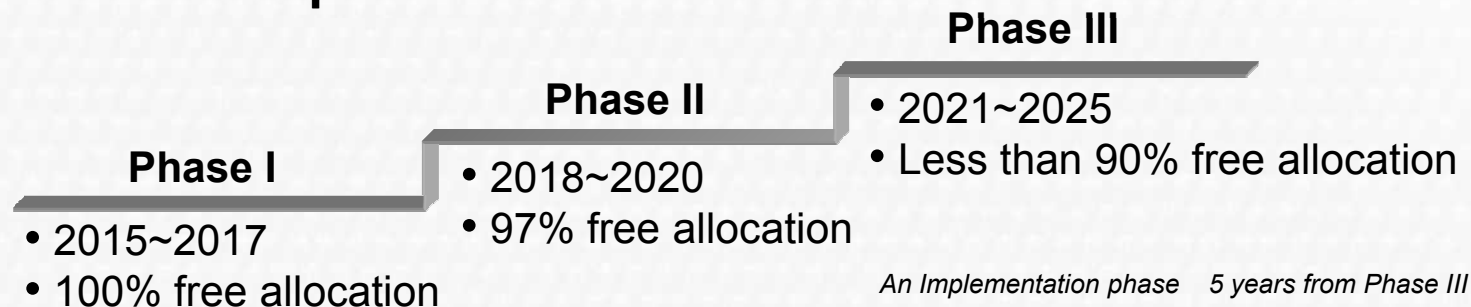
# 1. Outline of Korea ETS

## ■ ETS (Scheme design)

### • Coverage

- Average emission of 3 years\* prior to the implementation phase
  - Entity criteria 125,000t CO<sub>2</sub>e, Installation criteria 25,000t CO<sub>2</sub>e
- Voluntary participating entities

### • Implementation phases & free allocation



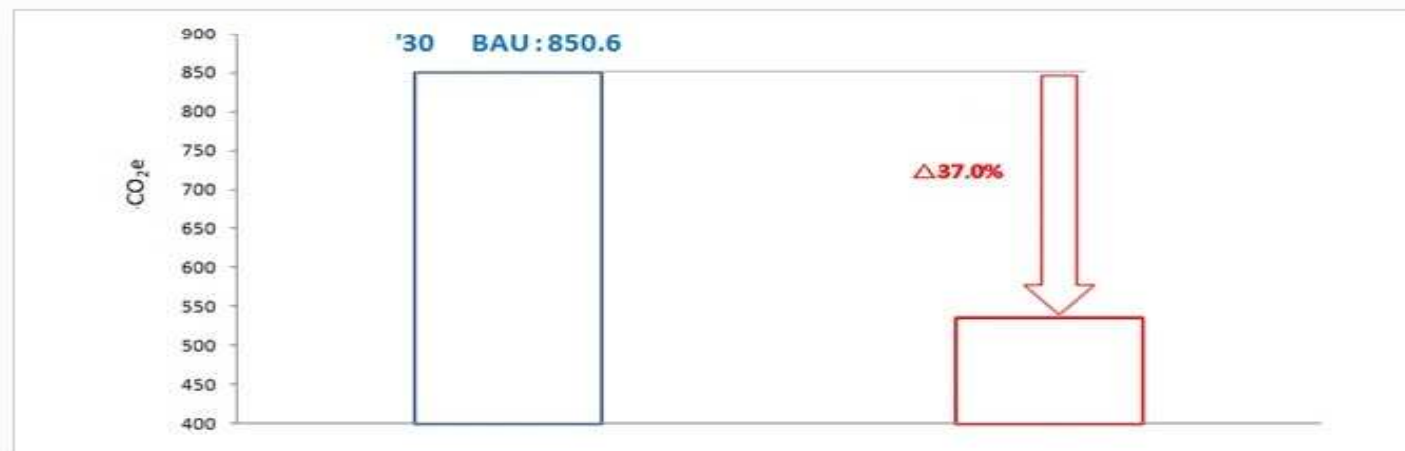
### • 100% free allocation for EITE entities

- > 5% of production cost intensity + > 10% of trade-exposed intensity
- > 30% of production cost intensity
- > 30% of trade-exposed intensity



# 1. Outline of Korea ETS

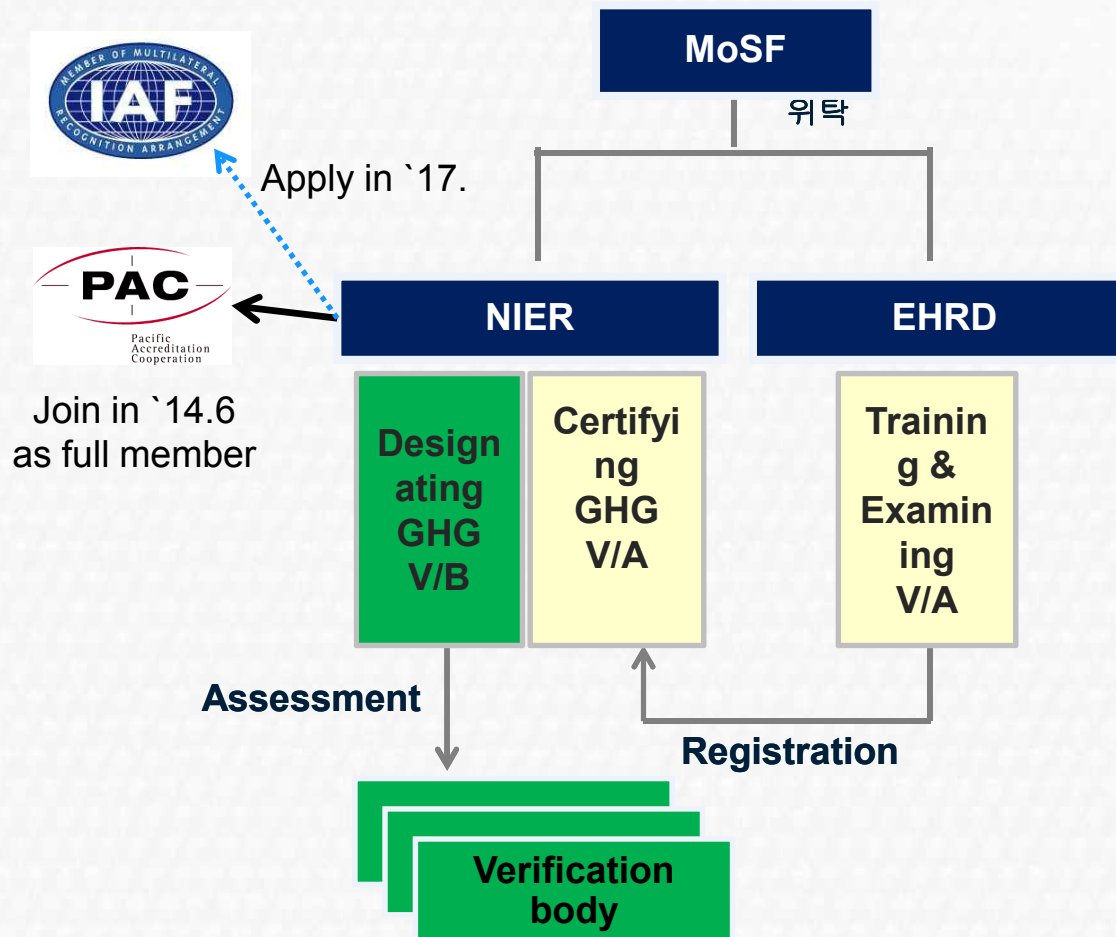
- Korea government established the long-term commitments(INDC) to climate change of Korea to cut greenhouse gas emissions by 37% from business-as-usual(BAU) level by 2030
- GHG emission estimation as for BAU of 2030 : 851 million tons/CO<sub>2</sub>-e
  - INDC(Intended Nationally Determined Contribution)



- The government also plans to secure additional reductions by using international market mechanisms(IMM)
  - 30% of GHG emissions reduction = domestic mitigation 25.7% + using IMM 11.3%

# 1. Outline of Korea ETS

## ■ Designation Operating Structure







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## Designation Scheme for Verification body

## 2. Designation Scheme for Verification Body

### ■ Current state of legislation in Korea

#### • Law

- Framework Act on Low Carbon, Green Growth
- Law on Allocation of GHG Emission Allowance and trading

#### • Guidelines & Designation Criteria

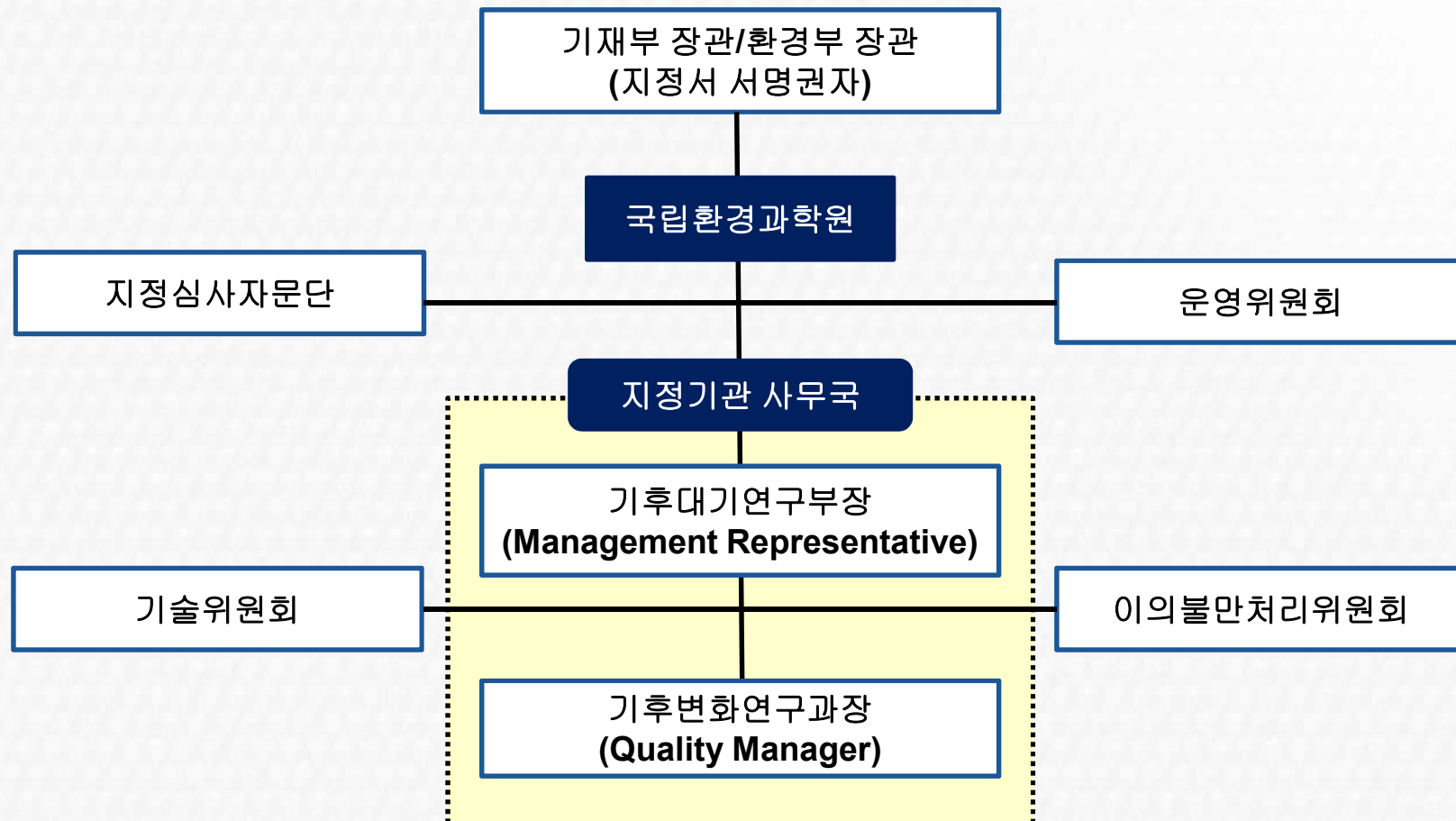
- Verification Guideline on Emission Trading Scheme(Ministry of Strategy and Finance)  
**[Attached Table No. 6] Designation Requirements as Verification Body**
- Guideline for Designation and Management of GHG Verification Body(NIER)  
**[Attached Paper 4] Assessment Criteria for Verification Body**

#### • International Standard

- ISO/IEC 17011 & IAF MD 14 for Designation Body (NIER)
- ISO 14065 & IAF MD 6, ISO 14064-3 for Verification Bodies
- ISO 14064-1 for organization, applied with the guidelines

## 2. Designation Scheme for Verification Body

### ■ Organizational Structure of Designation Secretariat



## 2. Designation Scheme for Verification Body

### ■ Designation process for GHG verification body



- Designation period : 3 years
- Surveillance : once a year
- Reassessment and renewal : every 3 years
- Main issues for assessment
  - **Verification planning and relevant administration process**
    - application review, calculation of verification duration, control for conflict of interest, competence analysis & evaluation, confidentiality, on-going monitoring, Internal audit & management review, documents & records control, etc
  - **Compliance of verification process with the guidelines**
    - will be extended to verification result of monitoring plan from 2017
  - **Completeness of verification report & decision making process**

## 2. Designation Scheme for Verification Body

### ■ GHG Emissions Verification Process



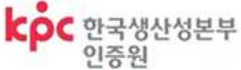
















	Procedure	Overview (Verification Team(VT), Business Entity subjected to verification(BE), Internal Deliberation Team(ITD))
Step 1	Identification of Verification Overview	<ul style="list-style-type: none"> <li>·Identification of the state of a business entity subjected to verification</li> <li>·Verification scope</li> <li>·Emissions calculation criteria and data management system</li> </ul>
	Verification Planning	<ul style="list-style-type: none"> <li>·Risk analysis, Data sampling planning, Verification planning</li> </ul>
Step 2	Document Review	<ul style="list-style-type: none"> <li>·Evaluation on the criteria for greenhouse gas calculation</li> <li>·Evaluation on assertions and identification of major emission sources</li> <li>·Evaluation on data management and reporting system</li> <li>·Operating state compared to the previous year and check on and reflection of changes in process units</li> <li>·Request for corrections based on document review results</li> </ul>
	Site Inspection	<ul style="list-style-type: none"> <li>·Check on the consistency between monitoring plans and actual performance on site</li> <li>·Data and information verification</li> <li>·Check on the calibration state of measuring equipment</li> <li>·Check on the management state of data and information system</li> <li>·Check on pervious verification results and changes</li> </ul>
Step 3	Organization and Evaluation of Verification Findings	<ul style="list-style-type: none"> <li>·Evaluation on evidence collected</li> <li>·Error evaluation</li> <li>·Materiality evaluation</li> <li>·Organization of verification findings</li> <li>·Corrective actions and creation of a verification report</li> </ul>
	Internal Deliberation	<ul style="list-style-type: none"> <li>·Observance of verification procedures</li> <li>·Deliberation on suitability of verification opinions</li> </ul>
	Submission of Verification Report	<ul style="list-style-type: none"> <li>·Submission of a verification report</li> </ul>



## 2. Designation Scheme for Verification Body

### ■ Current Status of Korea (Dec. 2016)

- Number of designated Korea ETS Verification Bodies : 19

Verification Body		Verification Body	
Korean Foundation for Quality		KOREA TESTING & RESEARCH INSTITUTE	
Korea Productivity Center Quality Assurance		Korea Management Association Registration Inc.	
Korea Quality Assurance		National Forestry Cooperative Federation	
Deloitte Anjin LLC		Korea Gas Safety Corporation	
DNV-GL Business Assurance Korea		Korea Environmental Preservation Association	
KOREAN STANDARDS ASSOCIATION		TUV-SUD Korea	
BSI KOREA		Korea Testing Laboratory	
Lloyd's Register Quality Assurance		DAEIL ENGINEERING & CONSULTING	
EQAICC		Creative Sustainable Register	
SHIN-HWA ENGINEERING			





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## Status of GHG Verification auditor registration

### 3. Status of GHG Verification auditor registration

- **Current Status of Korea (Nov. 2016)**

- **Number of verification auditor : 208**
- **Number of verification auditor by the scope**
  - If the auditor qualified to multi scope, overlap registration is acceptable.

Common	Mineral	Chemistry	Steel & metal	Electric Electronic	Waste
208	46	26	30	15	106



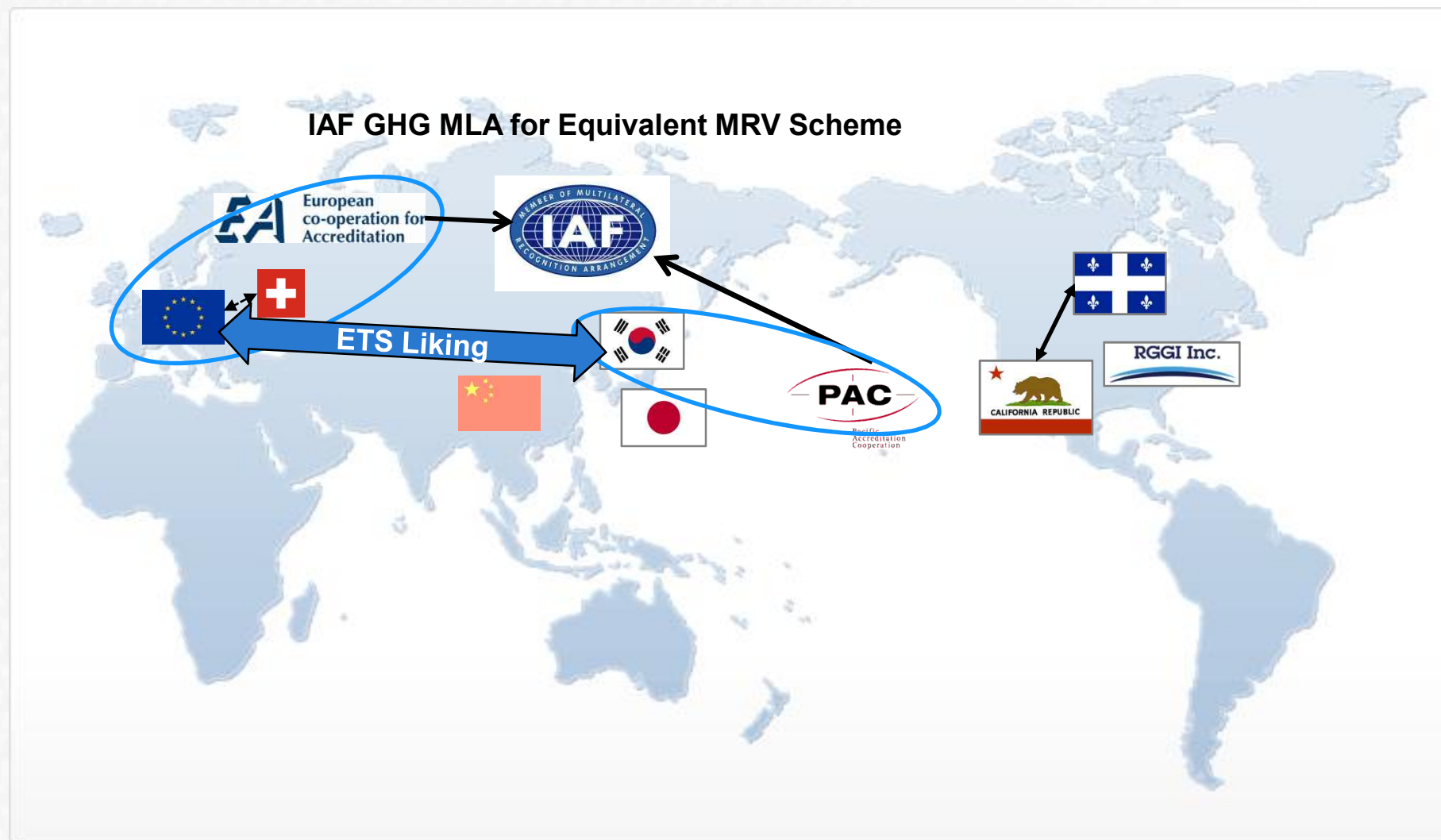
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## Preparing Linkage of ETSs

## 4. Preparing Linkage of ETSs

- **Joining relevant International Organizations for GHG MLA**
  - **June 2014 : become a full member of PAC**(Pacific Accreditation Cooperation)
  - **Planning to join PAC GHG MLA**(Multilateral Recognition Arrangement) **& IAF**(International Accreditation Forum) **full membership in 2017**
  - **Participate PAC GHG WG & IAF GHG WG for developing GHG MLA**
- **Under consideration to sign the agreement between or among Korea ETS and foreign ETSs**
  - **Linking ETS is possible from 2020**
- **Start to engage in international standardization process of ISO/TC 207/SC 7 for Greenhouse gas management and related activities**
  - **Now, ISO 14064-1, 2 & 3 and ISO 14065 are under revision process**

## 4. Preparing Linkage of ETSs





# Thank you!



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