

Carbon Footprinting Activities in Korea

Dec. 15, 2011

Approaches by Asian companies for Carbon Footprint of Products

GYU-SOO JOE



KEITI

Korea Environmental
Industry & Technology Institute



Contents

1

About KEITI

2

Korea Carbon Labeling

3

Low-carbon product certification

4

International Partnership

I. About KEITI

Vision and mission

VISION

Global Institute leading technology and industry for green growth

MISSION

To foster environmental industry by effective promotion of eco-products purchase and environmental technology development

Foster environmental industry leading technology and industry through

Promote green growth which is Environmentally sustainable

Level up to the representative organization Leading global environmental industry

I. About KEITI

Major Functions

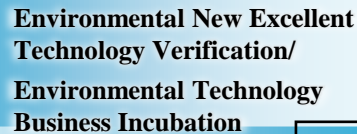
Utilization of Environmental Technology/
Production of Green Product



Certification of Eco-label
/ Promoting green purchase
Export assistance / Financing fund

Active Marketing for Green Product

1
Harmonized Development
between
Environment and Economy



Environmental New Excellent
Technology Verification/
Environmental Technology
Business Incubation

Merge the Practical Technology R&D
with Secured Technology



Environmental Technology
Research & Development
Support

Initial Technology R&D

Contents

1

About KEITI

2

Korea Carbon Labeling

3

Low-carbon product certification

4

International Partnership

II. Korea Carbon Labeling

Background

- **“Low Carbon Green Growth”** is the major policies of current government.
 - **Carbon labeling** is the essential tool for **Green Innovation of living**, 8th policy among 10 policies for **“Low Carbon Green Growth”**
- **“Framework act on low carbon green growth”** came into effect on April 2010.

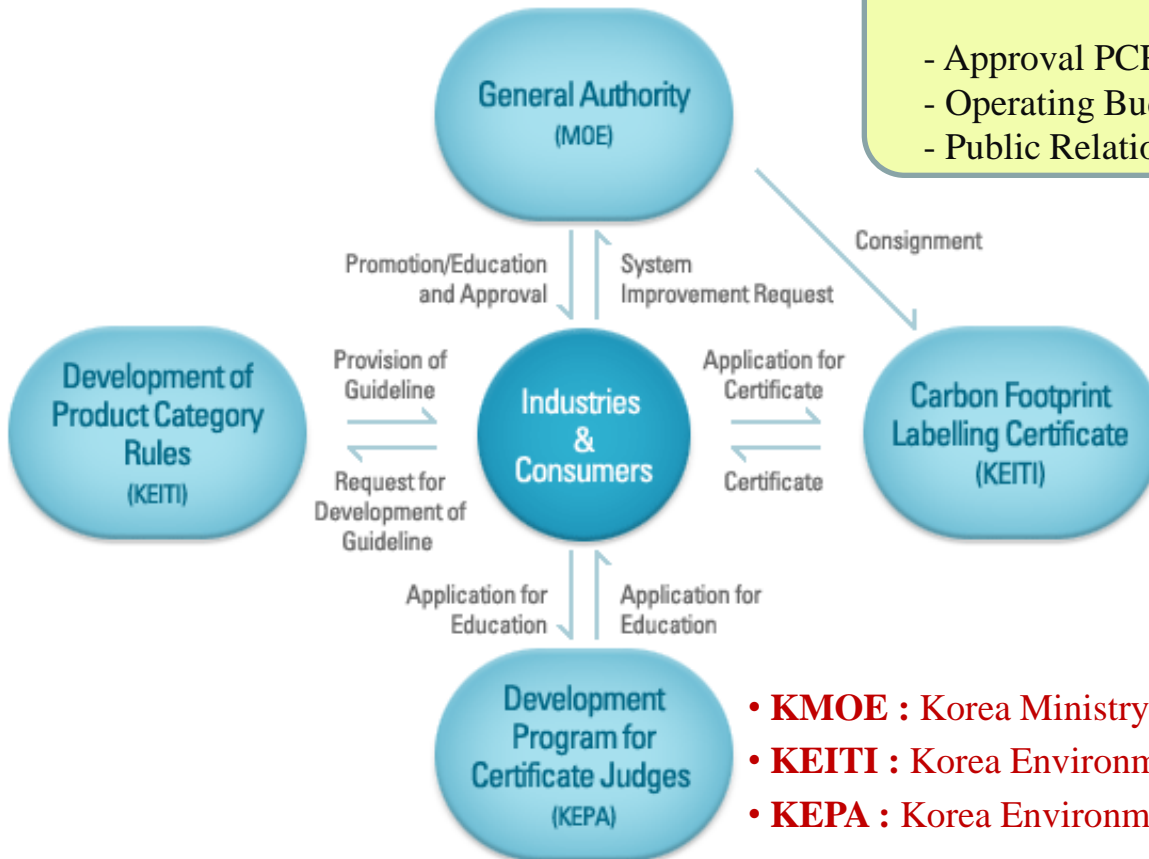
II. Korea Carbon Labeling

Overview

Operation System

◆ **The role of KMOE in CFP program**

- Approval PCRs, managing Act related CFP
- Operating Budget Support
- Public Relations



- **KMOE** : Korea Ministry of Environment
- **KEITI** : Korea Environmental Industry & Technology institute
- **KEPA** : Korea Environment Preservation Association

II. Korea Carbon Labeling

Carbon Labeling in Korea

- Level I : Opening information on total carbon emission amount,
- Level II: Greenhouse gas reduction product on a basis criteria
- Legal background of implementation
 - Article 57, Framework act on low carbon green growth
 - Article 18, Environmental technology & environmental industry support act



II. Korea Carbon Labeling

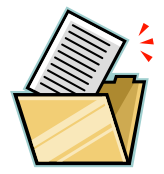
KOCFP document

- Korea Carbon Footprint Labelling's PCR is called **KOCFP**
- **Types of KOCFP**
 - Guidelines Set-1 : **for general product categories**
(energy-non-using durable product, production product, service)
 - Guidelines Set-2 : **for energy using product**
(in use phase of product's life cycle)
 - Guidelines Set-3 : detailed **use scenario of energy using product**

II. Korea Carbon Labeling

Certification procedure-1

Applicant



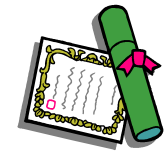
Application

KEITI
(Period : 90 days)



- Documents Audit**
- Manufacturing Site Audit**
- Deliberation on Certification Committee**
- Notification of Approval**

License Holder



Use of Carbon Footprint Label

II. Korea Carbon Labeling

Certified Products

- Total : 96 companies, 190 work-sites, 481 products
- The number of Non-durable products certificate
- 42 companies, 261 products



II. Korea Carbon Labeling

Certified Products

- The number of Non-energy-using durable products certificate
- 6 companies, 16 products

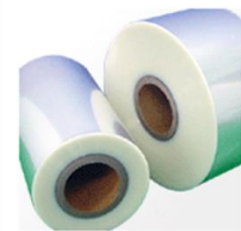
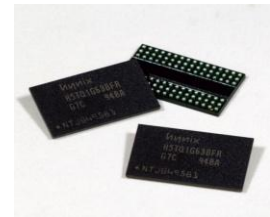


II. Korea Carbon Labeling

Certified Products

■ The number of Production products and Service certificate

- Production products : 30 companies, 78 products
- Service : 6 companies, 14 Service



II. Korea Carbon Labeling

Certified Products

- The number of Energy using products certificate
- 16 companies, 112 products



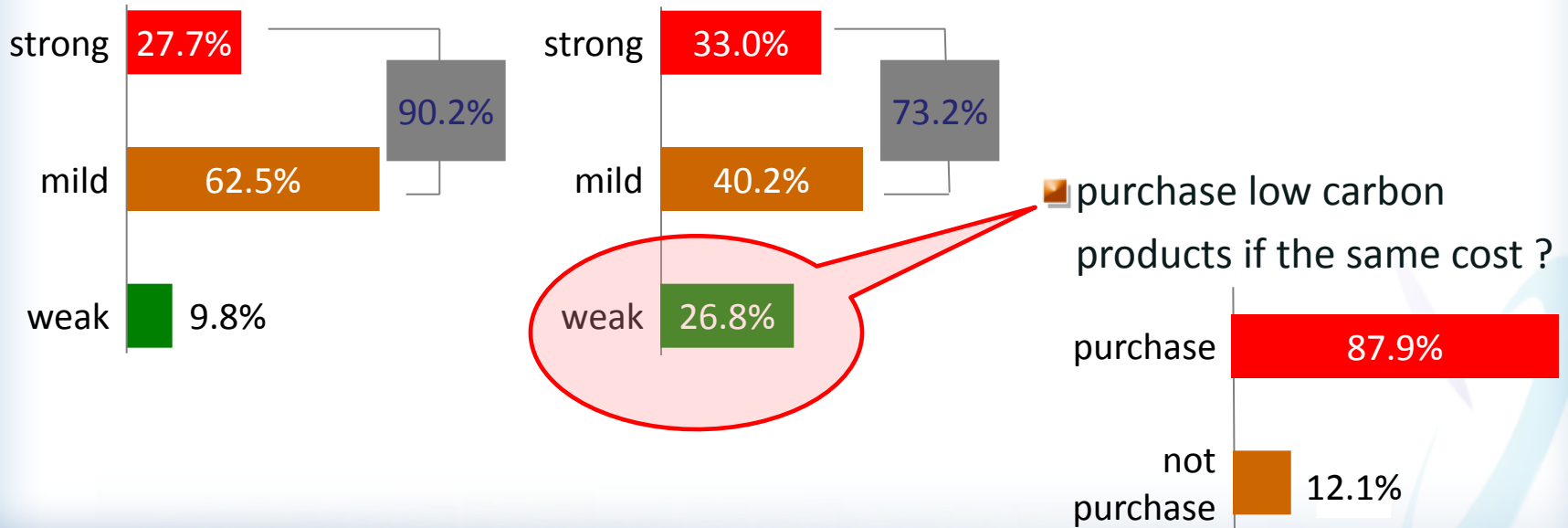
II. Korea Carbon Labeling

Consumer survey

■ purchase low carbon products ?

■ purchase low carbon products even high cost ?

17.0% decrease



II. Korea Carbon Labeling

Consumer survey

■ From the consumer survey on climate change

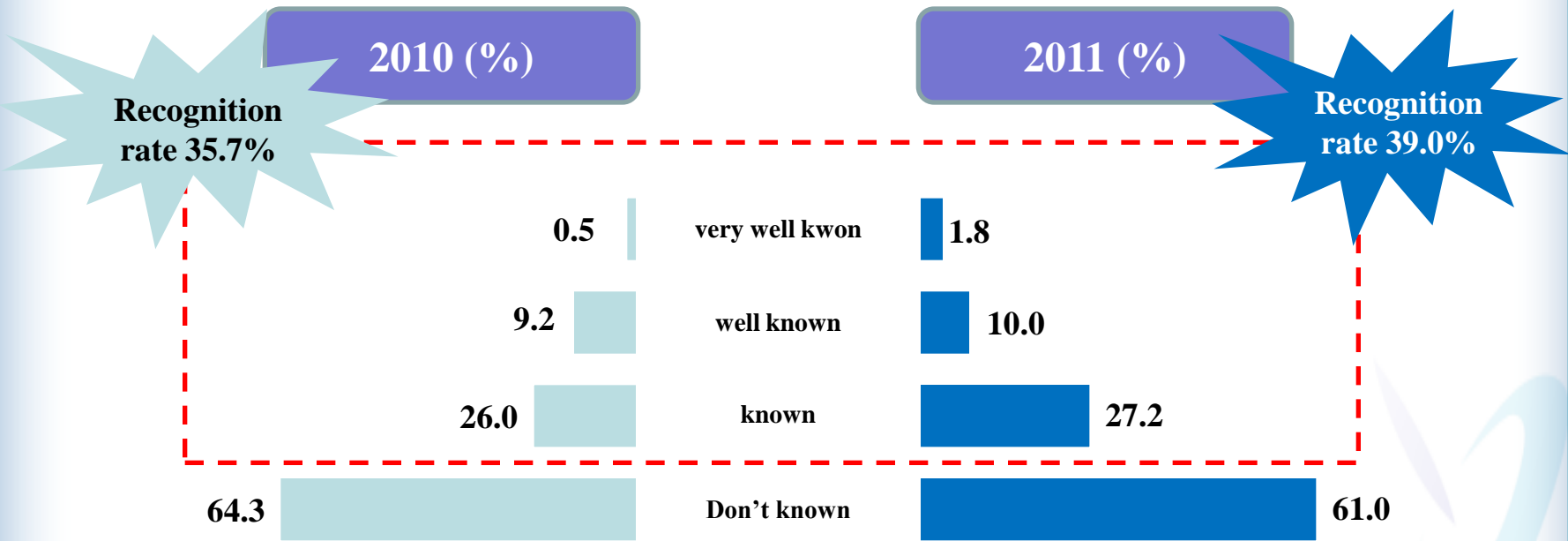
- It become clear that most of consumers recognize the climate change effect.
- Green consumer group toward low carbon society are getting more and more increasing.

➔ *More confident and efficient carbon label is needed in the market.*

II. Korea Carbon Labeling

Consumer survey

Recognition rate Improve about CFP program – **Improved 3.3%**

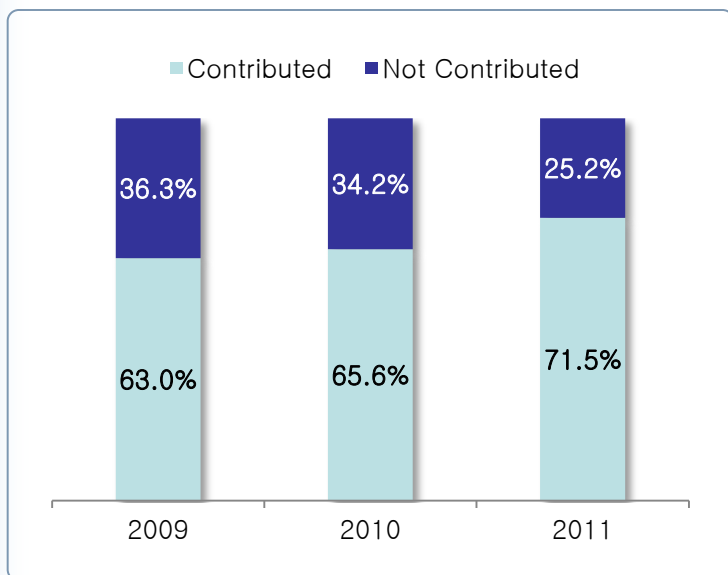


II. Korea Carbon Labeling

Consumer survey

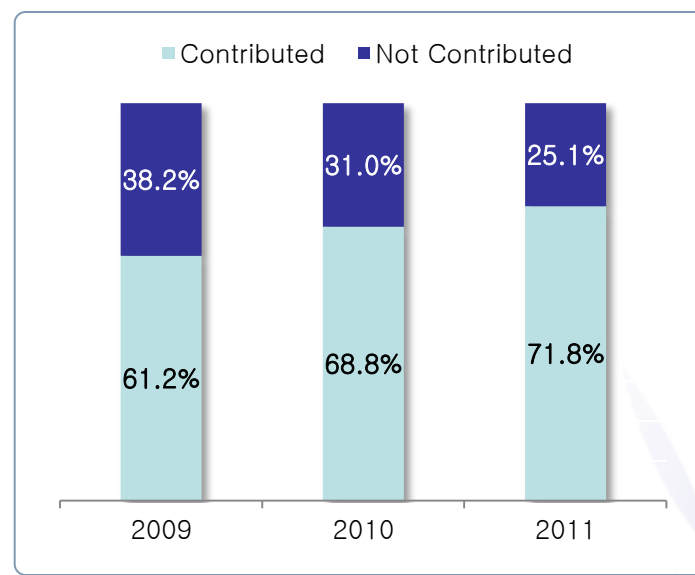
■ Contribution of carbon labeling for products

Improvement of Product reliability by carbon labeling



* Except not answer

Contribution of GHG emission reduction by carbon labeling



* Except not answer

Contents

1

About KEITI

2

Korea Carbon Labeling

3

Low-carbon product certification

4

International Partnership

III. Low-carbon product certification

Context and Necessity

Why low-carbon product certification system is necessary?

- Acceleration of low carbon consumption culture
 - Green consumption through carbon emission comparison is difficult.
 - There aren't many product to compare product in the same category.



III. Low-carbon product certification

Context and Necessity

Why low-carbon product certification system is necessary?

- Providing incentives on carbon labeling certification product under governmental policy
 - It is difficult that incentives on product simply opening information on carbon emission.

Simply opening information on carbon emission amount->Does it induce on greenhouse gas reduction?

123g CO₂

000g CO₂

XXXg

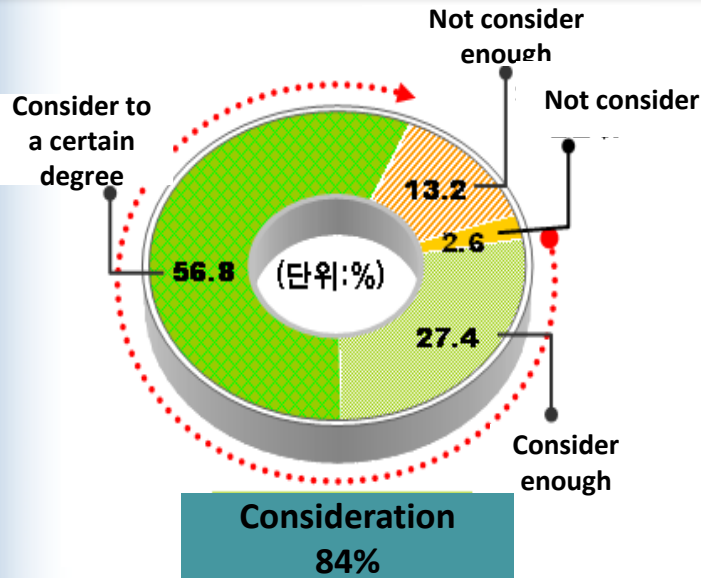
INDICE CARBONE
450g de CO₂
voir au dos

III. Low-carbon product certification

Context and Necessity

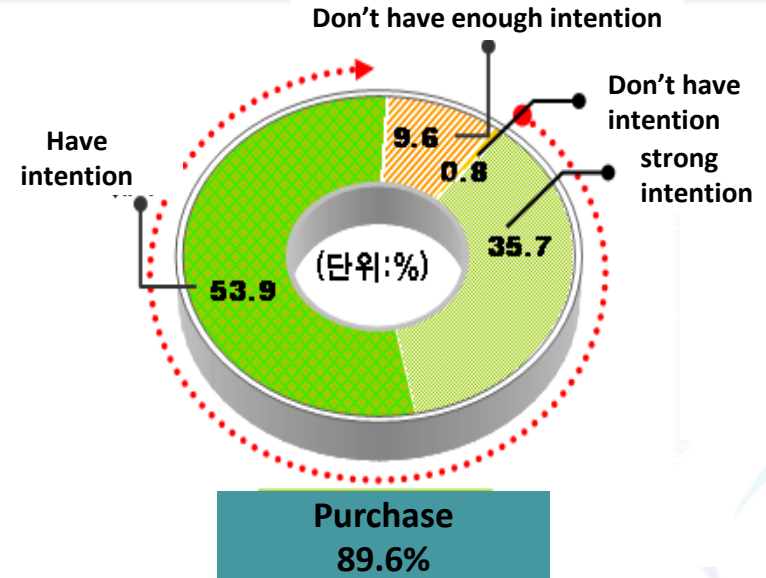
Consumers want to purchase low carbon product

Consideration percent on carbon emission information in case of purchasing product



▶ If carbon emission amount is presented on product, 84% answered they would consider it.

Prior purchasing intention on low carbon product in case of purchasing products



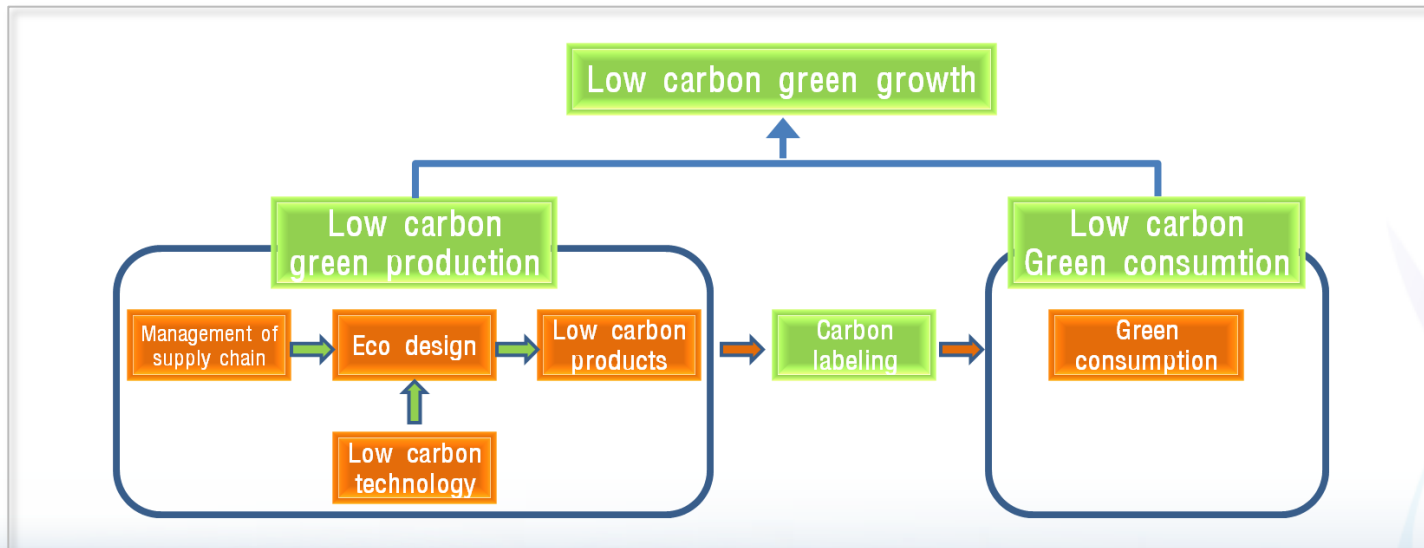
▶ In case of purchasing product, 89.6% answered they would low carbon product as priority.

III. Low-carbon product certification

Context and Necessity

Why low-carbon product certification system is necessary?

- It accelerates improvement of business's low carbon technology.
 - making business's participation expand and speeding up their low carbon product technology through strategic incentive under policy



III. Low-carbon product certification

Adoption Effect

1,000 low carbon products certification,
 about 1.12 million tons of CO₂ reduction in a year,
 Same effect to plant 40million of pine trees

Increasing consumer's green consumption convenience

Accelerating low carbon consumption culture and low carbon technology development

Inducing businessman's greenhouse gas reduction
 * Providing incentives by reduction.

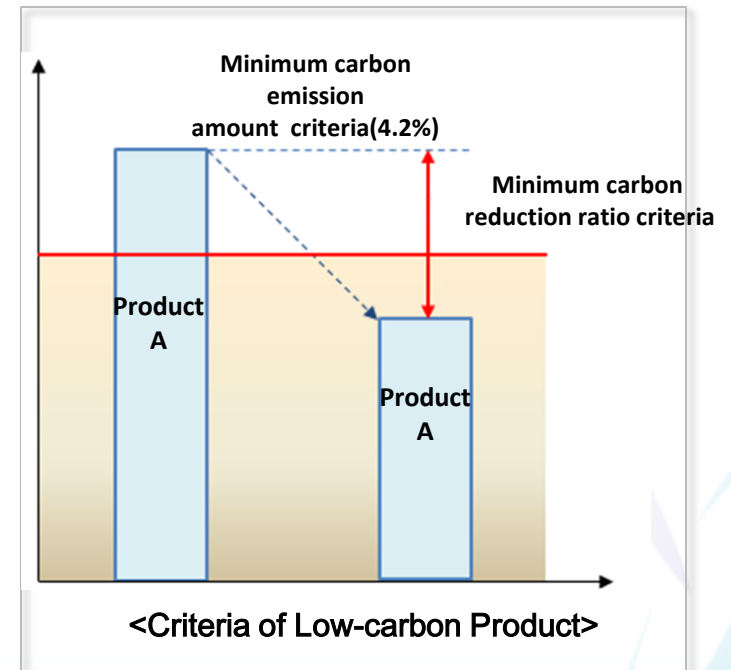
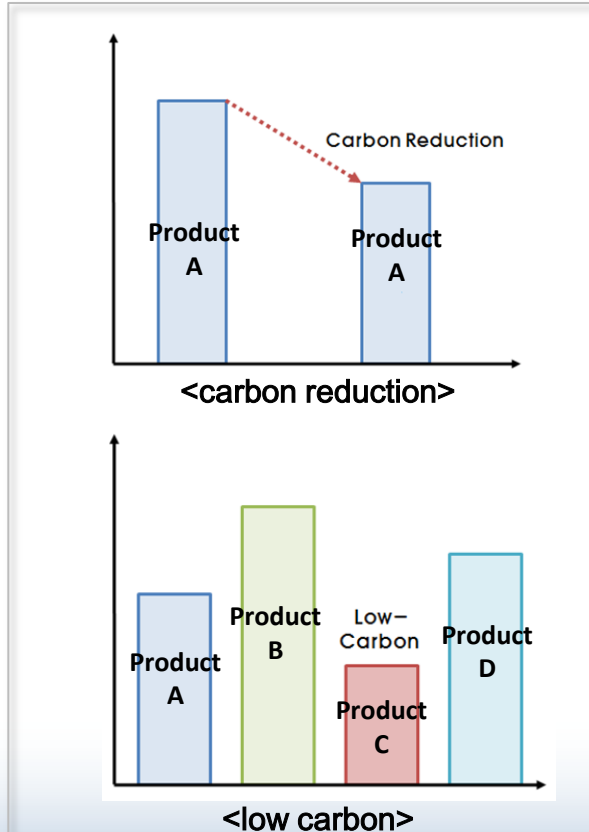


Greenhouse gas reduction in nation

III. Low-carbon product certification

Criteria of Low-carbon Product

- The world first low carbon product certification which considers the concept of carbon reduction and low carbon product has been implemented in Nov. 2011



III. Low-carbon product certification

Low-carbon Products

- 9 companies, 9 products



bean-curd



TFT-LCD glass



washing machine



refrigerator



cooked rice



tap water



wardrobe



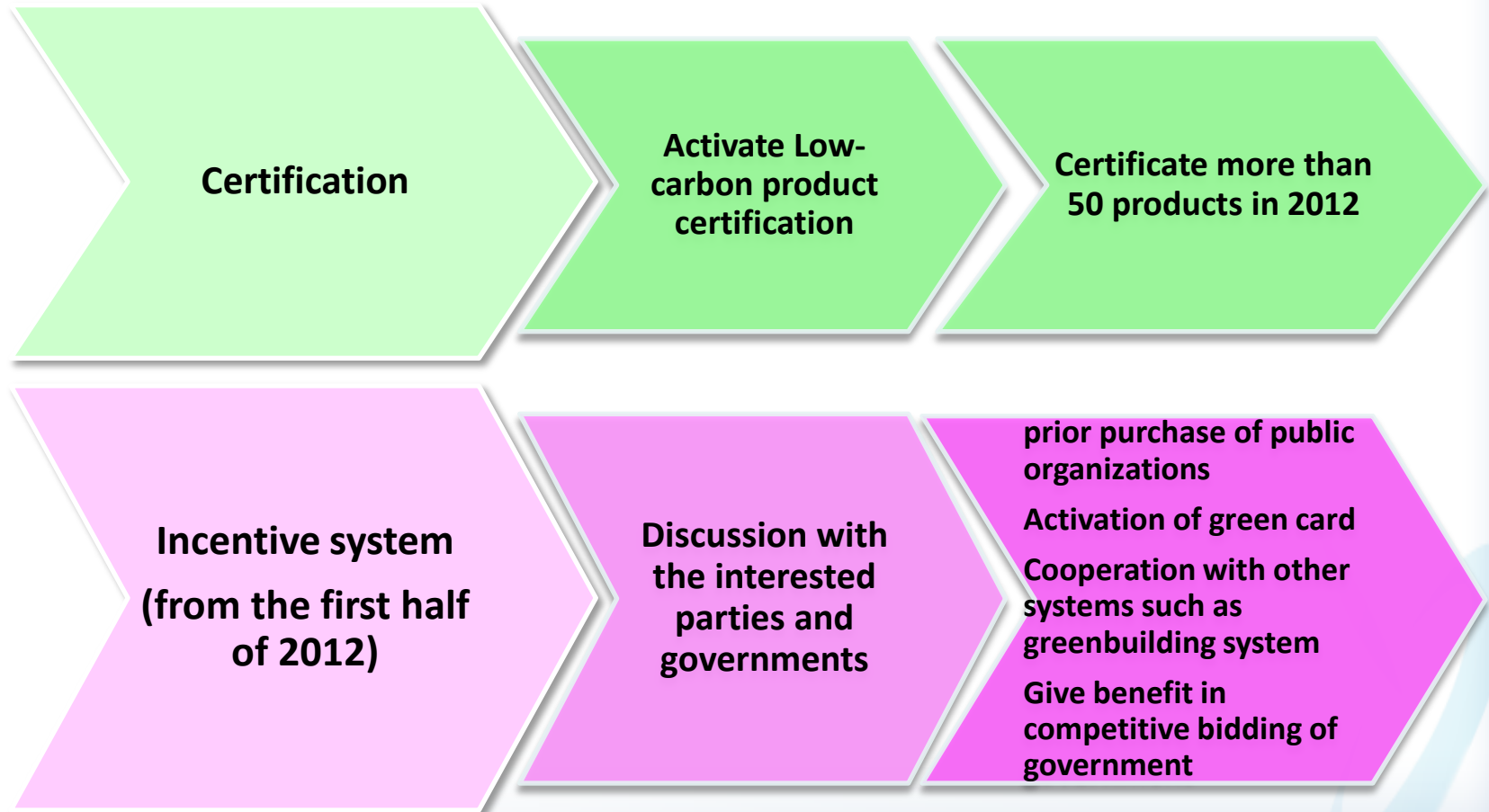
detergent



water purifier

III. Low-carbon product certification

Future Schedule



Contents

1

About KEITI

2

Korea Carbon Labeling

3

Low-carbon product certification

4

International Partnership

IV. International Partnership

Co-operation with Japan - 1

- MOU contract between KEITI and JEMAI (June. 2010)
- Korea-Japan Workshop for CFP and experts meeting (2010.10 / COEX)
- Korea-Japan Workshop for CFP (2010.10 / COEX)
- Participate “Japan Eco-products 2010 Symposium” (2010.12)
- Exchange LCI database between the two countries (2010.12)



< MOU >



< Workshop >



< Experts meeting >

IV. International Partnership

Co-operation with Japan - 2

- Carbon Footprint International Workshop & Aisa LCA/CFP Database Internal Meeting (2011.2 / JEMAI)
- Korea-Asia Seminar on Carbon Footprint (2011.10 / COEX)
- Korea-Asia Experts Workshop on Carbon Footprint Partnership (2011.10 / COEX)
- KEITI-JEMAI Expert Meeting (2011.12 / JEMAI)
- International workshop for CFP(2012.2 / JEMAI, tentative)



< Internal Meeting >



< Seminar >



< Experts Workshop >

Website

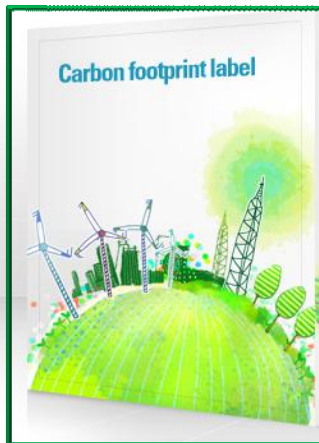
■ http://www.edp.or.kr/index_eng.asp

MENU

KOREAN

KEITI Korea Environmental
Industry & Technology Institute

Welcome to EDP Website



Environmental
Declaration of Products



Korea LCI Database
Information Network





Thank you!

Gyu-soo Joe
Carbon Management Team
Tel) +82-2-380-0671
Fax) +82-2-380-0691
E-mail) jksyo@keiti.re.kr