Low Carbon Strategy for Industries

Seminar on “Upgrading Industries Towards A Low Carbon Economy”

By Department of Industrial Promotion

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Why industries need to be interested in climate change?

- Industries are a large GHG contributor.
- Industries have potentials to reduce GHG (cleaner tech).
- No progress in UNFCCC/Kyoto Protocol → Private Sector has to set its own strategies.
How industries can deal with climate change issues?

- Industries can diversify to ‘low-carbon goods/services.’ (compared to the agri.)

- Industries can access more financial supports. (compared to the agri./service)
Samples of Low Carbon Strategies

- Energy Efficiency
- Energy Mixed (renewable energy)
- Clean Technology
- Greener Inputs/Materials
- Carbon Offset from Forestry or other activities
  ➔ Carbon Footprint Label
  ➔ Carbon Reduction Label
Thailand’s Carbon Label (voluntary action)

- Carbon Reduction Label
- Carbon Footprint Label

- Thailand Environment Institute
- MTEC, a member of NSTDA
What are benefits of “low carbon strategy”?

- Positive Externalities to Society and the Environment
- Greener/Cleaner Firms
- Access to Market of Cleaner Products
- Create Sectoral Collaborations
  - Sectoral benchmark
  - Sectoral baseline
What are other factors inducing green products?

- Demand for low-carbon products
- Recycling business
- Waste management services
- Promoting Local (green) Business by
  - Green Procurement
  - Green Consumption
Limitations for SMEs

- Best technology available
- Absorption capability from tech. transf.
- (domestic) Supply Chain Dependency
- (inter’l) Supply Chain Dependency
- Ability to pay IPR from Cleaner Tech.
Challenges for “low-carbon strategy” (1)

- **What** is the definition of “low-carbon”
  - “low-carbon product” =?
  - “low-carbon company” =?
  - “low-carbon tech.” =?
  - “low-carbon benchmark” =?
  - “low-carbon baseline” =?

- **Who** are going to define those terms?
  - Private Sector (e.g. Large firms, SMEs, FIT)
  - Government (e.g. BOI, DIP, DIW, NESDB)
Challenges for “low-carbon strategy” (2)

- Who/How to certify “low-carbon activities”?
- How not to ‘discriminate’ in promoting low-carbon strategy among
  - Large & SMEs
  - Local firms & TransNational Companies
Challenges for “low-carbon strategy” (3)

- Cement Sustainability Initiatives
  - Reduce GHG-intensity 12% by 2006
- New Global Steel Sector Approach
  - Reduce GHG voluntary
- Electric Power Industry Climate Initiative (in USA)
  - Reduce GHG-intensity 3-5% by 2012
Challenges for “low-carbon strategy” (4)

- Common but Differentiated Convergence (CDC)
- Large Firms start first
- SMEs follow
Challenges for “low-carbon strategy” (5) → Trade

Source: UN Comtrade and National Statistic Office
Challenges for “low-carbon strategy” (6) → Trade & Envi.
Challenges for “low-carbon strategy” (7) ➔ Trade & Envi.

**UNFCCC**
- Non-Annex I Parties
  - No Commitment
  - EU: EU ETS
  - Do not accept Commitment
- Annex I Parties
  - Have Commitment
  - US: ACES 2009

**WTO**
- Article 20 (g)
- SCM
- GATS
  - Protect Exhaust. Res
  - Anti-Subsidy
  - Introduce Envi. Service
  - Standards: “Like Products”
  - Domestic Subsidy
  - Process ??
  - Access to Developing Nations
  - Green Subsidy for Envi. Goods
Challenges for “low-carbon strategy” (8) ➔ Trade partners
CLIMATE CHANGE

EU: ETS & Others
- Domestic Actions
- Trade-related Measures
  - Cap & Trade
  - Aviation: Cap & Trade
  - Carbon Label & Footprint
  - Carbon Tax

US ACES 2009
- Domestic Actions
- Trade-related Measures
  - Cap & Trade
  - International Reserve Allowance
  - Sectoral Cap
  - Importers buy GHG Permits

THAILAND
- Domestic Actions
- Trade Measures
  - Reduce Reforestation
  - Import Tariff Envi. Goods = 0-5%
  - Renewable Energy
  - Energy Efficiency
  - Sell Carbon Credits
  - Carbon Label & Footprint

Request Data of Carbon Embedded Carbon Footprint From Importing Firms

Carbonfund.org: An independent American non-profit carbon offset provider, developed their label in collaboration with the Edinburgh Center for Carbon Management on the basis of ISO LCA standards, the GHG Protocol and the Carbon Trust’s methodology.

The Climate Conservancy: California-based non-profit that awards a tiered label based on extensive life-cycle assessments.

CarbonCounted.com: A Canadian non-profit organization that allows products to measure, third-party certify, and label their products online. Does not rely on life-cycle assessments, but utilizes GHG Protocols.

CarbonLabels.Org: A North American carbon label standard for the organic food industry, their methodology is changing as international practices and standards change.

Wal-Mart: Teamed up with the Carbon Disclosure Project to require its suppliers to disclose their carbon emissions. Does not capture carbon embedded in individual products; uses self-reported surveys.

Club Carbon: A life-cycle based carbon label on 26 of its own products. Utilizes an LCA methodology developed by environmental consultancy Bio Intelligence.

Climatecooler.org: Carbon offset marketplace. Carbon embedded is based on input-output methodologies and does not allow comparisons by brand.
Low-carbon Products

Normal Products

Domestic Market

Large Firms

Small Firms

International Market

Low-carbon Products

Normal Products

Methods:
- EE, RE,
- Tech.,
- Materials,
- Carbon Offset

Tools: Labels,
- Reduction Targets
Thank you

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