Greening global value chains - Implementation challenges

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Outline

- Getting the right picture
  - Who’s involved?
  - … under what conditions?
  - … and with what kind of environmental information?

- Setting proper incentives
  - Within firms
  - Within chains
  - Within national borders
  - At the global level

- Moving jointly, and effectively
Who’s involved?

raw materials → components → assembly → retailers → customers / end users
Who’s involved?

- raw materials
- components
- assembly
- retailers
- customers/end users

- site cleanup
- air & water pollution abatement goods and services
- recovery/reprocessing
- disposal

Downstream supply chain
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The EGS industry – a snapshot

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<td><strong>Total</strong></td>
<td><strong>776.2</strong></td>
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</table>

SOURCE: Environmental Business International, Inc., San Diego, Calif. units in $bil. *Note: each country within the region, not as a block; i.e. German sale to Italy is an export and an import.
... under what conditions?

- raw materials
- components
- assembly
- retailers
- customers/end users

- site cleanup
- air & water pollution abatement goods and services

- recovery/reprocessing

Downstream supply chain

- disposal
Downstream supply chain ... under what conditions?
... under what conditions?

Local/global infrastructures: institutions, cultures, education, health, transportation, communication, energy, water

Downstream supply chain

- raw materials
- components
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Disposal
... under what conditions?
... under what conditions?
Greening GVCs requires:
- A systemic approach
- Traceability
- Transparency

Important hurdles are that:
- Environmental information may not be comparable across firms and countries.
- Many small and medium firms may lack the necessary technology and expertise.
- Parties will often be asymmetrically informed.
Setting proper incentives

Within firms:

• Performance rewards *
• Monitoring and auditing *
• Internal pricing
• Task design and allocation *
• Centralization or delegation of decision making *
• Staffing and training *
• Improvement of corporate culture *
Setting proper incentives

Within chains:

• Selecting and terminating relationships
• Designing effective contracts - contract framing

A prevention frame leads to an interpretation of a goal as minimal (something that must be met), which induces high-intensity negative emotions if the goal is not achieved and low-intensity positive emotions if the goal is met. (…) Conversely, under a promotion frame, parties view the same goal as maximal (something that would be ideal if reached). If a maximal goal is missed, low-intensity negative emotions are experienced, whereas if a maximal goal is reached, high-intensity positive emotions are induced. Thus, in an effort to reach the maximal goal and avoid sins of omission, parties display more flexible and creative behavior.

• Taking full advantage of market incentives
Setting proper incentives

Within national borders:

- **Regulations** *(ex: Extended producer responsibility)*

- **Competition policy:** Beware of the EGS industry’s market power.

- Counter corruption

- **Socio-economic development**
  - Education and training
  - Consumer awareness
  - Adapted business models
Setting proper incentives

At the global level:

- **International agreements**
  
  *(ex: the Basel Convention on the control of hazardous wastes and their disposal)*

- **NGOs**

- **Disclosure programs and worldwide medias**
Moving jointly and effectively