### Greening Supply Chains in Asia and the Pacific

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GROWING GREEN
BUSINESS INVESTMENTS
IN ASIA AND THE PACIFIC

TRENDS AND OPPORTUNITIES

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Sustainable Financing for Nature Positive Investments: Tools for Integrating Economic and Market-Based Instruments into Projects

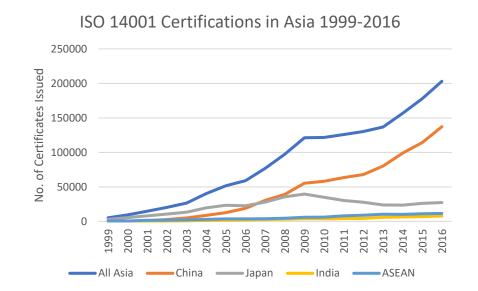


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# **Greening of Businesses**

ADB

- Growing trend in businesses becoming more environmentally friendly
  - Seeking ISO and LEED certification
  - Participation in green business networks
  - Establishment of codes of conduct
  - Responsible environmental management practices
  - Disclosure/Reporting of social responsibility
    - Annual reports, Global Carbon Disclosure Project
- But the private sector needs to do more to meet global sustainability targets
  - Only a third of companies contributed to SDGs with their products and services
  - Carbon emissions reduction targets fall short of those needed
  - Participation in green initiatives is limited to large firms that are
    - Export oriented
    - Foreign owned
    - Part of MNC supply chains









### **Environmental Goods Business**

Supplying green goods, inputs and technologies using green production and management practices

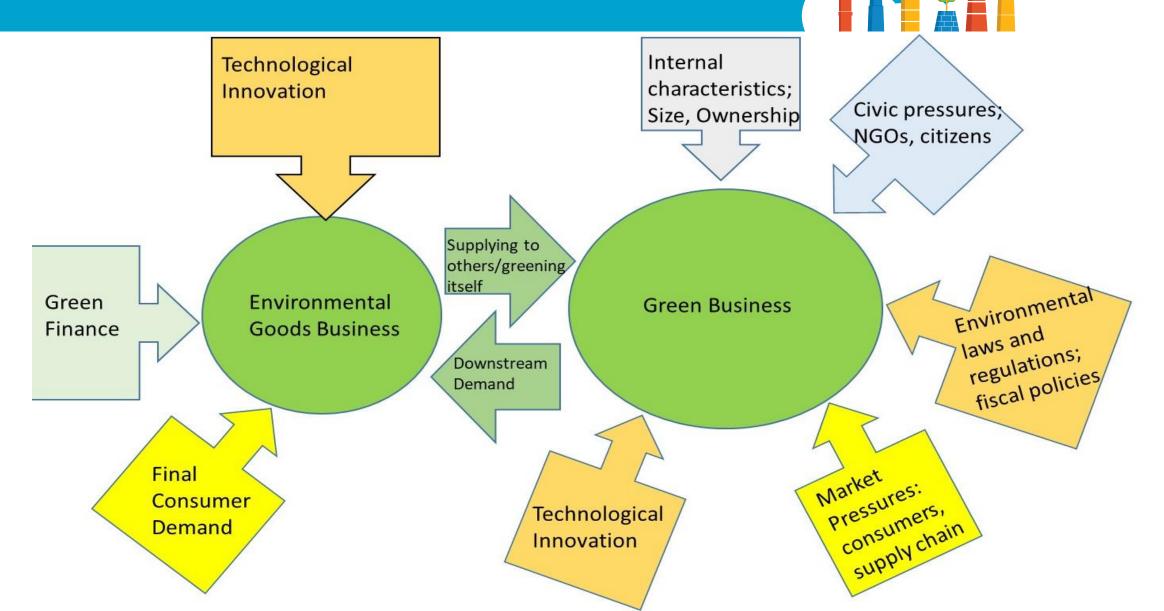
#### **Green Business**

Producing other goods using green production and management practices

**Business-as-Usual Enterprises**: Producing goods and services using business-as-usual production practices

#### **Drivers of Green Businesses**





### Market-Based Motivations: Consumers



- Consumers and public with preferences for goods produced by environmentally responsible firms are vital to create demand. Firms are motivated to be green to
  - Increase market share by differentiating products
  - Meet demands from downstream supply chain for environmentally responsible products
  - Increase revenue through price premiums from environmentally conscious consumers
  - Avoid negative publicity and boycotts
- Key constraint to green goods is that they are "credence goods"
  - Critical to have trustworthy eco-labels
  - Role for governments in developing standards, transparent and credible
  - Demand for eco-labeled products has been growing in Asia
- Challenge for Small and Medium Enterprises to conduct environmental impact assessment and life-cycle assessments
  - Lack of expertise, financial and organizational capacity
  - Can make eco-labels an exclusionary and anti-competitive strategy for greening small firms
- Technical assistance and financial support for getting products eco-labeled to assist SMEs

# **Green Supply Chains**



- Linking upstream firms to downstream buyers that seek to be environmentally responsible
  - Particularly effective when downstream firms are MNCs or global firms
  - Pressure from social media, consumers, investors and NGOs on MNCs to be responsible
- Many MNCs are developing their own global environmental standards and not adopting national standards
  - Seeking suppliers that have environmental certifications, adopting responsible environmental management systems
  - Promoting green practices in developing countries
- Asia is central to the global supply chain as a major supplier of raw materials, intermediate products, and final products to businesses and consumers located in the US and Europe.
- Many Asian countries rely heavily on export markets for their economic growth.
- Adoption of ISO 14001 in the region has also been stimulated by demand from MNCs, particularly those that are larger, more visible and vulnerable to negative publicity for their environmental performance

# **Challenges to Greening Supply Chains**



- Changes to the supply chain can be expensive and risky.
- Requires support from senior management, and finding suppliers with resources to adopt environmental management systems and comply with the requirements of certification programs.
- Obtaining ISO certification can incur significant implementation costs; limited to larger firms
- Need to ensure quality of the certification and independence of auditors
- Government role in ensuring that third-party auditors are operating independently.
- Governments can also develop approaches to induce and verify compliance with the standards by offering regulatory relief, faster access to permits, or other benefits.



### Effectiveness of Green Supply Chains



- Supply chain pressures are more effective if supplemented by other policy drivers to green supply chains
  - national environmental standards
  - existence of or aspiration to free trade agreements with the EU and US
  - effectively enforced international environmental agreements
- Global economic activity with major environmental impacts affected by the green supply chain effect is small
  - products largely consumed domestically or exported to other developing countries with weak environmental standards not affected
- Share of MNCs in production in most developing countries is small
  - Focus is often on few products made in developing countries and exported to developed countries
- Consumer concerns in developed countries tend to be selective and focused on developing country practices that are often more symbolic—like wildlife protection—than critical, such as urban air quality.

### **Barriers to Greening SMEs**



- High costs of implementation, lack of resources and trained staff
- Low environmental awareness within the organization (including top management),
- Lack of consumer demand for green products
- Firms operate with very low margins and in hyper-competitive industries
  - focused on surviving in the near term rather than building customers and demand in the future.
- Regulatory vacuum, legislation outlining best practices essentially absent
- Many Asian SMEs have shown limited response to green supply chain pressures.
- MNCs differ in their approaches to green supply chain management, the lack of harmonization makes it difficult for best practices to spread across the entire supply chain.

### Role for Government in Greening Supply Chains



- Through public procurement policies: this can affect domestic SMEs
- Encourage and reward green businesses by developing preferential programs and making the winning of public contracts conditional on environmental performance.
- Assist small firms overcome hurdles necessary for them to green their supply chain.
- Public-private partnerships can also provide training and technical assistance to develop human capital skills.
- Credible threat of implementing existing regulations



### Role for Capital Markets in Greening Businesses



- Financing to establish and grow green businesses is often difficult to acquire.
- Initial high costs of production and uncertain market returns
- Long-term financing is needed to establish green businesses that are often infant industries with market benefits that may take many years to materialize.
- But these firms will pose lower environmental risks and thus economic risks in the future.
- Capital markets can lead to greening of businesses through
  - Reward green businesses that rely on traditional methods of financing their operations by lowering their cost of capital because these businesses are likely to be less risky.
  - Provide new financial instruments to establish green businesses by enabling innovation and investment in green technologies.

# Rewarding Green Businesses through Lower Cost of Capital and Higher Returns on Investment



- Green business may have lower risks of liabilities, penalties, and high compliance costs in the future and are less likely to receive negative publicity.
- Investors that value environmental performance can adjust the cost of capital to account for underpriced environmental risks and support greening of business.
- Capital markets can respond negatively to disclosures about poor environmental performance

#### **Challenges**

- Role of capital markets may be limited to larger polluters, consumer-oriented, and investor-owned firms.
- Enabling capital market support requires infrastructure for data gathering, monitoring and verification, inspection and penalties for non-reporting or falsification of data.
  - This regulatory infrastructure is often missing in the developing Asian countries or is subject to regulatory capture. A vast majority of small enterprises or state-owned enterprises means concerns about negative publicity and cost of capital are likely to be weak.
  - Capital markets in developing countries prioritizing growth can be expected to care more for news about economic performance than environmental.

### **Provision of Green Finance**



- Can encourage investments in projects that both provide investable returns and protect the environment.
- expand green investments by including environmental considerations in existing infrastructure projects or catalyzing investments in key environmental sectors.
- Green finance small source of financing in Asia but growing particularly in Japan
- Public-private partnerships can meet financing deficit by providing concessional financing
- Green bonds: bond investments in low carbon and climate resilient infrastructure
- Banking sector: Potential for green lending to grow
  - Requires developing guidelines and environmental criteria to be incorporated



# Challenges to Green Financing



- Insufficient disclosure requirements on environmental and long terms systemic risk factors
- Gaps in enforcement of environmental regulations and pricing of emissions
- Fossil fuel subsidies limit profitability of green investments
- Lack of awareness of threats posed by environmental degradation and climate change on financial sustainability of industry
- Lack of trained staff to assess environmental and climate risk at financial institutions and a shortage of bankable projects constrain green investment.

# **Increasing Green Lending**



- Rating and labeling green bonds can open up demand for green bonds.
- Establishing uniform labeling standards and indices for rating green bonds would make these bonds benchmark-eligible securities for institutional investors.
- Enhancing transparency through comprehensive and verifiable ESG disclosure requirements will build investor and lender trust.
- Fundamental cultural change in financial markets to include sustainability considerations in all financing and investment decisions.
  - developing a new approach to these decisions and including all relevant stakeholders in the decision-making process.

# Increasing Green Lending



- Financial incentives to green bond investors and banks can encourage green investments which may have greater risk or longer payoff periods than regular investments.
  - E.g. ADB provides partial credit guarantees to lending banks to share the risk of payment from green projects by the borrower.
  - USAID has extended bond guarantees to support Asian municipalities in raising funds for building resilient urban infrastructure.
- Developing long-term, local currency refinancing sources for banks to extend long-term credit can help at least partially offset the traditional focus on short-term investments in Asia.



## Increasing Green Lending



ADB has been participating in green finance through issue of green bonds and partial credit guarantees to lending banks to share the risk of payment from green projects by the borrower.

ADB can play a more impactful role by

- supporting development of uniform norms for defining green projects and standards for rating and labeling green bonds
- capacity building programs to train banks how to evaluate for environmental risk analysis and management through knowledge-building and sharing
- helping the financial industry develop sustainable financing practices
- supporting innovations in lending instruments to create new instruments for financing sustainable,
   long-term projects.

# Markets for Environmental Services: EcoTourism



- Potential to benefit local communities and conserve the environment
  - Bring jobs, business opportunities and diversified source of income and can be profitable
- But impact of environment ecotourism is mixed
  - failed to fulfill its promise to local communities for various reasons, including a lack of mechanisms to fairly distribute the economic benefits of ecotourism, compulsory displacement, and land insecurity
  - can disturb wildlife behaviors such as nesting or breeding, cause damage to habitats and ecosystems, and spread disease among wildlife
  - employment opportunities tend to be concentrated in the hands of a few people, and most jobs are given to skilled people drawn from urban areas. Local people with resource and skill constraints are often denied access to revenue opportunities generated by tourists

### Increasing Effectiveness of EcoTourism

- Restrict the scope of recreational use based on carrying capacity, introduce codes of conduct for tourists, and involve the local community in the implementation of conservation and tourism policies.
- Guiding principles need to be mainstreamed into the development and implementation of policies governing ecotourism and sustainable tourism more generally.
- Importance of improving the use of environmental resources for tourism development, while respecting the sociocultural authenticity of host communities and ensuring long-term economic viability and socioeconomic benefits for all stakeholders.
- Avoid incidents of "greenwashing" or providing misleading information about a tourist site's environmental impact or sustainability.
- Regulatory frameworks and enforcement must also be strengthened to ensure proper implementation of sustainable tourism policies.
- Empowering local communities through education and participation in decision-making and management of tourism destinations are essential to ensure the environmental and socioeconomic gains from ecotourism.



### Markets for Biodiversity



- Businesses internalize the impact of their activity on biodiversity through payments for the protection, restoration, or management of biodiversity.
- These programs meet the dual objective of biodiversity conservation and economic development using an offset approach.
- The goal of biodiversity offsets is to achieve No Net Loss and preferably a net gain in biodiversity on the ground, with respect to species composition, habitat structure, ecosystem function and people's use, and cultural values associated with biodiversity.
- They also require in-kind compensation that balances biodiversity losses. These compensation activities take place within the framework of a "mitigation hierarchy": first, avoid any impact to biodiversity; then reduce unavoidable impacts as much as possible; and finally, consider an offset.



## **Drivers of Biodiversity Markets**



- Regulatory compliance: the government sets a limit on the allowable impact to a species or habitat and lets the market determine the cost of offsetting impacts above the limit.
- Government mediated payments: Government can also purchase biodiversity services by acquiring land or conservation easements or by creating payment programs for biodiversity stewardship activities.
- Voluntary provisioning: driven by ethics and philanthropy and can entail purchase of biodiversity friendly products, donations for biodiversity conservation, ecotourism, and others.



### Challenges in Implementing Biodiversity Offsets



- Controversial because it implies accepting ecological losses at one location in return for uncertain gains elsewhere.
- Need to develop best management practices, guidelines and methodologies to assess biodiversity offsets and provide certainty about government policies.
  - Requirements for demonstrating No Net Loss are not well defined.
  - Offsets require showing ecological equivalence between biodiversity components that may differ in type, location, and context.
  - The outcomes of offset schemes are uncertain, and there is often a time lag between development impacts and the benefits due to the offset scheme being realized.
- Other practical implementation challenges are non-compliance with the mitigation hierarchy, as well as offsets not being or only partially implemented.
  - There may be differences of opinions about ecological outcomes, or lack of monitoring and follow-up by regulators.
  - Offsets may fail to establish or persist, development impacts may be larger than expected, and the baseline may be difficult to establish.

### In Summary



- There is significant opportunity for green businesses in Asia and the Pacific as the global environmental market expands in the coming years
- Efforts to promote green businesses require a robust regulatory framework, proactive engagement of domestic civil society, and pressure from markets for consumer goods, capital and ecosystem services to impose regulatory and non-regulatory pressures on businesses to be more environmentally responsible.
- Much of the civil and green supply chain pressure for greening of businesses in Asia is currently emanating from environmental regimes and consumers in the Western world rather than domestically.
- While this external pressure is focusing attention on some environmental issues in developing countries it is less effective in targeting attention toward environmental problems caused by SMEs serving domestic markets.
- Regulatory pressures and green finance are needed to encourage technological innovation and commercial scale deployment and facilitate green supply chains