



Use trade policy To achieve the benefits of low emission development

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Key messages

- Trade is a key tool for ensuring global access to the best available low emission goods and services at a competitive cost. Shifting to a low emission future also offers opportunities for trade, which in turn contributes to growth and development.
- Trade can allow for efficient use of resources and enable a global shift from high to lower carbon products by increasing their availability.
- Removing trade barriers for clean energy and energy efficiency technologies will foster innovation, scale up supply, and reduce costs, thus driving emissions reductions.
- Low emission development, in turn, can increase resilience and competitiveness, create jobs, and generate new trade opportunities, driving sustainable development overall.
- There is a need to strengthen the understanding, dialog, and collaboration between the climate and trade communities at the domestic and international levels to realize the potential of trade in the context of low emission development.

How is low emission development linked to trade?

Trade and trade policies can contribute to shifting to a low emission economy by enabling more efficient use of resources and international exchange of climate friendly goods and services. One meaningful measure would be to remove tariffs and nontariff barriers to trade in clean energy and energy efficiency technologies. In a sector where finished products consist of many components that cross borders numerous times—a typical wind turbine, for example, contains up to 8,000

components—even small tariff cuts would reduce costs, making the technologies more affordable and competitive in the global market, particularly if combined with a phasing out of fossil fuel subsidies. This would not only help mitigate climate change, but also enhance energy access and security, generate jobs in associated sectors, help build domestic low carbon industries, and spur innovation through competition in an open global market. Another valuable role trade can play is to drive the diffusion of products with lower levels of embodied carbon, thus enabling a global shift from high to lower

Embodied carbon refers to the amount of carbon contained in a product. Rather than relating to the nature of a product itself (such as an electric car), it relates to how much carbon was emitted during the production process (the carbon contained in the car).

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- Gain the competitive edge
- Boost ecosystem resilience
- Ensure energy security

This series of short papers gives an overview of selected benefits and development goals linked to LEDS and Nationally Determined Contributions (NDCs).

Series editor: *Natalie Harms, Energy research Centre of the Netherlands (ECN)*



Wind turbine blades wind their way by train through Denver, CO (Photo credit: US Department of Energy/Dennis Schroeder/NREL)

carbon products. Some countries have a comparative advantage for less carbon intensive production, and trade gives others access to these lower carbon alternatives. This could, for example, entail importing steel produced in Brazil using hydropower rather than consuming steel produced domestically in the UK using coal. At the same time, the direct impacts of trade on climate change need to be considered, although transport often has only a small impact on products' carbon footprints compared with process and production methods.

How can low emission development benefit trade?

The transition to a low emission economy, in turn, can also benefit trade and thus contribute to growth and development. Developing low emission industries helps countries diversify and modernize their economies and enables them to participate in new and emerging markets, thereby increasing their economic resilience, strengthening competitiveness, generating employment, and creating new trade opportunities. According to the United Nations Conference on Trade and Development (UNCTAD), the green economy has a vast growth potential, with trade in this area expanding faster than overall trade. Trade in low carbon and energy efficient technologies, for example, is projected to triple to US\$2.2 trillion between 2013 and 2020. This level of growth represents a huge economic potential in a context where world merchandise trade in 2014 stood at US\$18.95 trillion. China, for example, has built a strong solar industry, with 2014 exports at over US\$19 billion, almost double its value from 2009. Other countries are also registering meaningful growth—Morocco's solar exports, for example, have seen a more than sevenfold increase from half a million to more than US\$3.5 million over the same period.¹ Moreover, given the many different elements making up final clean energy and energy efficiency goods and services, this sector represents a meaningful opportunity for developing countries to integrate into global green value chains through intermediate inputs, ranging from rotor blades to screws and cables. With trade in intermediate goods accounting for some 40% of overall trade, this provides a significant entry point for developing countries and has benefits beyond export opportunities, such as the enhancement of domestic jobs, skills, technologies, productive capacities, and economic diversification.

Integrating trade benefits into low emission policies and planning

A thorough integration of both climate and trade considerations into national development strategies and nationally determined contributions (NDCs)—such as mainstreaming the two issues into national development goals and policy objectives, sectoral plans, ministries' operation plans, and national budgets—could lead to more coherent and successful outcomes.² Concretely, this could, for example, include making Aid for Trade more climate sensitive, considering climate links in the World Trade Organization (WTO)'s Trade Policy Reviews (TPRs), or reviewing trade policies in relation to technology needs assessments. A key challenge in realizing the potential of trade in the context of low emission development lies in the frequent conceptual and practical separation of the issues. At the domestic level, trade and climate change are mostly dealt with in separate departments, which have their own mandates, objectives, and agendas. Strengthening understanding, dialog and collaboration between them can lead to more successful and mutually supportive outcomes in both areas. This will require improving stakeholders' conceptual understanding of the two respective issues and their linkages, and enhancing institutional capacity to deal with the links and to engage in inclusive planning. Singapore, for example, has established an interministerial committee to deal with trade and climate change. At the international level, strengthening dialog and collaboration between climate and trade negotiators as well as the UNFCCC and WTO could result in more beneficial outcomes. There are already spaces to accommodate this, such as in the UNFCCC's response measures forum and the WTO's Committee on Trade and Environment.

Case study

WTO's Environmental Goods Agreement

Since July 2014, 17 members of the WTO have been negotiating an Environmental Goods Agreement (EGA)³ to remove barriers to trade in environmental goods. The initiative is an example of how trade policy can contribute positively to environmental protection and tackling climate change. In fact, the EGA mandate explicitly recognizes the initiative's contribution to the multilateral climate negotiations. EGA members will eliminate tariffs on imports from all WTO members on many clean energy and energy efficiency goods that are key to climate change mitigation, making a concrete contribution to climate action. Not only will this enhance global trade in such goods, but it can also support climate action by increasing the diffusion and deployment of these technologies, in particular if combined with other policy reforms. The agreement represents an opportunity for countries to integrate into the sector's globalized value chains. The EGA can also serve as a first step for a wider liberalization in the clean energy and energy efficiency sector, including services and nontariff trade barriers, leading to even greater climate and trade benefits.



Methodology and tools

Trade reform in the area of clean energy technologies (be it unilateral, plurilateral, or multilateral), or implementing demand side instruments such as standards or government procurement to incentivize low carbon consumption, are promising ways forward and can be incorporated into countries' NDCs. Conducting studies on how to integrate climate action and trade into low emission development strategies could provide policymakers with concrete ideas about solutions that would lead to win-win situations. In order to assess the impacts of trade related instruments on mitigation, countries could conduct impact assessments, for example building on the EU's sustainability impact assessments— independent assessments carried out by external experts in conjunction with trade negotiations. To assess the benefits of low emission strategies for trade, governments can monitor statistics such as trade data for clean energy and energy efficiency components, although these can be difficult to identify as they often serve both climate and nonclimate purposes. Clearer methodological guidance would need to be developed in this area, as well as with regard to the calculation of embodied carbon.

LEDS GP has developed a toolkit to support assessment of development impacts of LEDS and NDC actions (see below).

Resources

ICTSD: Climate and energy publications www.ictsd.org/themes/climate-and-energy/research
UNEP: 'Inclusive green economy: Environment and trade' web.unep.org/greeneconomy/what-we-do/environment-and-trade-hub
LEDS GP: 'Development impacts assessment (DIA) toolkit' ledsgp.org/development-impact-assessments-tools

- Tamiotti, L. et al. (2009) *Trade and climate change*. Nairobi and Geneva: United Nations Environment Programme and World Trade Organization.
- UNCTAD (2011) *Building a development-led green economy*. UNCTAD Policy Brief 23. Geneva: United Nations Conference on Trade and Development.
- IISD and UNEP (2014) *Trade and green economy: A handbook*. Winnipeg and Geneva: International Institute for Sustainable Development and United Nations Environment Programme.

Notes

- 1 Comtrade database, accessed 16 March 2016. The data are based on HS subheading 854140, which also provides for trade in unrelated products.
- 2 UNCTAD (2015) *Integrating Trade into National Development Strategies and Plans: The Experience of African LDCs*. Trade and Poverty Paper Series 3. Geneva: UN Conference on Trade and Development.
- 3 Vossenaar, R. (2014) *Identifying products with climate and development benefits for an environmental goods agreement*. Geneva: International Centre for Trade and Sustainable Development; Sugathan, M. (2015) *Addressing energy efficiency products in the environmental goods agreement: Issues, challenges and the way forward*. Geneva: International Centre for Trade and Sustainable Development.

The **International Centre for Trade and Sustainable Development (ICTSD)** is an independent nonprofit organization based in Geneva, Switzerland. ICTSD's goal is to advance sustainable development through trade related policymaking. Trade related policy frameworks can serve as powerful drivers of sustainable development in global policymaking and global inclusion if those engaged in negotiations incorporate emerging knowledge on economic, environmental, and social issues. In doing so, they are empowered to better understand their own interests, build bridges to others, and advance mutually acceptable solutions. ICTSD's vision is a sustainable world, supported by national, regional, and international trade policy and frameworks that support intergenerational equity. www.ictsd.org

The **LEDS GP Benefits Assessment and Communication Working Group** focuses on identifying, communicating, and integrating social, economic, and environmental benefits associated with low emission pathways. The group works to advise on development impact assessment to provide tools and exchange knowledge and guidance on how to align development priorities with climate change policies and measures. Contact: benefits@ledsgp.org

The **Low Emission Development Strategies Global Partnership (LEDS GP)** was founded in 2011 to enhance coordination, information exchange, and cooperation among countries and international programs working to advance low emission, climate resilient growth. LEDS GP currently brings together LEDS leaders and practitioners from more than 160 countries and international institutions through innovative peer to peer learning and collaboration via forums and networks. www.ledsgp.org

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