



Cross-Cutting Topics

Green Competitiveness:

Building Climate Efficient Businesses and Supply Chains through Cost-Effective Innovation

The World Bank Group helps governments and industries maximize green growth along supply chains, enhance competitiveness, and minimize negative effects on climate change by promoting innovation, enabling better use of energy and water, and supporting more efficient management of waste.

Context

Governments face the challenge of a global environment where climate variability coupled with increased resource demand and price volatility threatens the competitiveness of economies. Industries and their supply chains are key drivers of economic development and significant contributors to climate change: they are responsible for 21 percent of direct and 11 percent of indirect greenhouse gas (GHG) emissions that cause climate change. Industries are projected to be responsible for 26 percent of the increase in GHG emissions from 2005 to 2030.

Climate change also impairs industrial production and competitiveness. Growing resource use due to increasing consumer demand, and the long-term upward trend in commodity prices since the late 1990s expose developing countries more frequently to increased input costs for energy and other resources, and shortages of energy and water.

However, with the challenges of climate change come opportunities. Investments of at least \$170 billion per year could be made until 2020 toward resource efficiency improvements utilizing climate friendly technologies. A potential market of \$1.6 trillion is accessible to small and medium enterprises in developing countries over the next decade in clean technology sales.

What we offer

In the area of trade and competitiveness, we help developing countries increase the competitiveness of their industries and supply chains by promoting climate-efficient solutions and clean technology development.

Climate-Efficient Industries and Supply Chains

We help respond to market failures by providing policymakers with solutions to reduce energy, water use and waste in industrial processes. We focus on four target areas:

- **Industry-specific climate change and resource efficiency policy and regulation** encourage private sector investment in efficiency and energy saving through policies, reforms, guidelines and initiatives that enhance equipment and processes.
- **Standards and labeling** of equipment help trigger market transformation toward efficient equipment, clean technology, and green buildings in industry sectors.
- **Financing mechanisms** encourage investments in efficiency at the firm level through financing and leasing, establishment of energy service companies, and through other fiscal and non-fiscal incentives.

- **Green manufacturing and clean technology** support the production of efficient technologies that facilitate the uptake of efficiency measures by manufacturing industries with input from the Climate Innovation Centers (see below).

Innovation and Entrepreneurship for Clean Technology

We help developing countries proactively and profitably adapt, develop, and deploy climate-smart technologies and business models. The Bank Group's infoDev program is creating a global network of climate innovation centers (CICs) that provide a country-driven approach to addressing climate change and fostering green growth. Support provided includes the following areas:

- **Launchpad:** Design and launch next-generation of incubators for clean technology.
- **Insight:** Provide cutting-edge analysis to fill critical knowledge gaps on accelerating the growth of clean technology ventures.
- **Market Connect:** Facilitate global deals, investments, partnerships, and knowledge flows for clean technology ventures and related institutions.
- **Finance Lab:** Innovative financing mechanisms for early stage climate tech ventures that have limited other financing options.
- **Impact:** Helps CICs measure and learn from their own results, and learn from others, to improve decision-making.

Relevant publications

[Building Competitive Green Industries](#)

[Low-Carbon Zones: Practitioner's Handbook](#)

[Inclusive Green Growth](#)

Our work in action

A low-carbon industry project in **Bangladesh** reduced the carbon footprint of the country's export processing zones (EPZs). We assisted the government in establishing guidelines and policies that encourage firms within EPZs to consume less energy and reduce up to 15 percent of carbon dioxide equivalent, a standard unit for measuring carbon footprints. As a result, firms adopted recommendations which resulted in a 10 percent reduction in CO₂ emissions per year, saving 18,222 megawatt-hours of energy.

The **Kenya** Climate Innovation Center (KCIC), launched in Nairobi in September 2012, has become the go-to center for green growth in Kenya. Local entrepreneurs, local and foreign investors, researchers, government officials, donors, and academics look to KCIC for support, connections, and guidance when operating in Kenya's various climate technology markets. KCIC has served 83 clients from an applicant pool of 338 small and medium enterprises (SMEs) and entrepreneurs. Of these clients, 51 are in renewable energy, 15 in agribusiness, 7 in water and sanitation, and 9 SMEs work across multiple climate technology sectors.

For further information

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