

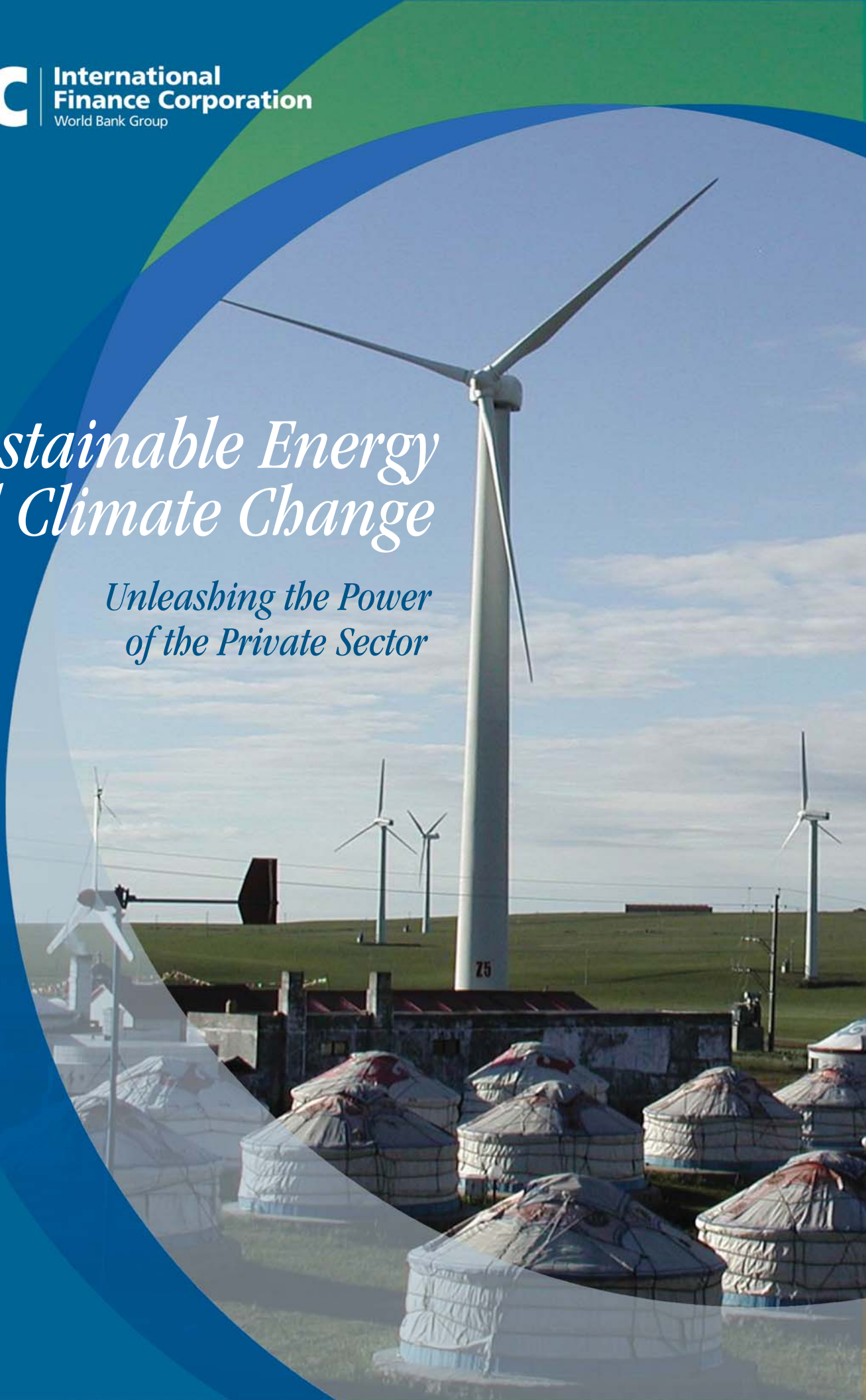


IFC

**International
Finance Corporation**
World Bank Group

Sustainable Energy and Climate Change

*Unleashing the Power
of the Private Sector*





Sustainable Energy & Climate Change Mitigation Finance at the IFC

IFC, the private sector arm of the World Bank Group, provides financing for a variety of sustainable energy and climate change mitigation ventures in eligible countries.

Through its sustainable energy investments, IFC has played a pioneering role in helping to remove barriers for clean energy technologies and services in emerging markets.

Project Financing


IFC offers a full range of investment products and has mobilized nearly US\$1 billion in capital for various types of sustainable energy investments since 1990. IFC's active mainstream investment portfolio emphasizes structured project finance and also includes corporate financings, extensive support for financial intermediaries, and advisory services. IFC financing can include both debt and equity finance of private ventures.

Mobilizing Donor Finance

Investments in higher risk, innovative technologies and services often have an element of non-commercial risk. With Global Environment Facility (GEF) and other donor resources, the IFC oversees a diverse portfolio of more than US\$200 million dedicated to helping commercialize climate friendly investments by removing barriers and reducing costs to future transactions.

Promoting the Carbon Market

An important and distinguishing aspect of project-based carbon trading mechanisms under the Kyoto Protocol is that they are neither a subsidy nor a grant, but market-based mechanisms in which an exchange of value takes place while capturing environmental benefits of climate friendly projects. IFC is leveraging its extensive project finance experience in developing countries to identify and structure emission reduction projects to help minimize key risks associated with delivery of carbon credits.



Financing and Advisory Services

Sustainable Energy Finance

IFC actively participates in the growing market for financing private power generation using grid-connected renewable energy technologies (e.g., wind, hydropower, biomass and geothermal). Such projects typically require mobilization of both equity and debt financing. IFC also participates in many different types of financing operations that generate energy efficiency benefits including financing to electricity distribution companies to reduce system-wide losses, direct investments in energy service companies (ESCOs) and companies who manufacture energy efficiency equipment.

Advisory Services

IFC provides advice to governments and companies on the structuring and implementation of private sector participation in power sector transactions. For example, IFC completed an advisory mandate to introduce private sector participation in power generation in non-grid areas in the Philippines and recommended installation of possible wind-diesel hybrid systems in some village mini-grids.

Donor Funding for Innovative and Catalytic Projects

In response to the need for concessional resources to remove barriers and lower costs to climate friendly investments, IFC utilizes GEF and other donor funding for private sector projects that help transform markets. These projects are done in partnership with the private sector and highlight the potential for innovative and catalytic approaches.

Carbon Finance

IFC currently has about US\$100 million under management in partnership with the Government of the Netherlands, through which it purchases emission reduction credits from projects eligible under the Kyoto Protocol's Clean Development Mechanism and the Joint Implementation mechanism. IFC is also planning to deliver value-added financial products that will help mitigate risks in the carbon market by leveraging its own ability to take long-term project and credit risk in emerging markets.

Financial Intermediaries

IFC is currently preparing a credit enhancement product for deployment that will allow it to provide AAA-rated guarantee for delivery of credits from projects in developing countries. This first-of-a-kind product will service those who need credits for compliance, while channeling a higher value to qualifying projects in developing countries.

IFC strengthens developing countries' financial markets to help achieve sustainable economic growth. IFC finances commercial banks, leasing companies, micro-financiers and private equity funds. Through investments and technical assistance, IFC is developing financial intermediaries and building financial infrastructure to support a more robust financing capability for sustainable energy. An IFC/GEF program is now operational in seven countries with commitments of more than US\$100 million in IFC funds.

Making a Difference

Wind

Wind energy investments include the 50 MW Rio do Fogo project in Brazil and the 8.25 MW Cabo Engano project in the Dominican Republic. IFC is also considering wind project and carbon financings in other promising markets, including China and India.

Hydro

Financing has been provided for more than ten run-of-river hydroelectric projects including: the 43 MW El Canada project in Guatemala, the 28 MW Pamir project in Tajikistan, the 192 MW Allain Duhangan project in India, and the 155 MW La Higuera project in Chile. IFC has successfully concluded emissions reduction purchase agreements with Brascan Energetica in Brazil, which has more than 100 MW of operating run-of-river hydro generation assets, and Eco Power, a private developer of small hydro power plants in Sri Lanka with more than 30 MW in 7 projects.

Biomass

IFC provided financing to Balrampur Chini Mills, a large sugar producer in India that included construction of bagasse cogeneration plants at two mills for a total of 40 MW, and also signed an agreement to purchase carbon credits from these projects.

Geothermal

IFC helped finance the 24 MW Orzunil geothermal power plant project in Guatemala. IFC is also involved in exploring financing of other prospective geothermal projects involving electricity production and district heating. A GeoFund for Central and Eastern Europe is under development with GEF and the World Bank.

Solar PV

IFC is the largest source of financing for off-grid solar businesses in the developing world, using a combination of donor resources and its own capital to test new business models, seed promising enterprises, and provide capital for business development. With GEF resources, IFC has also implemented the largest grid-connected PV installation in the developing world — a 1 MW facility in the Philippines.

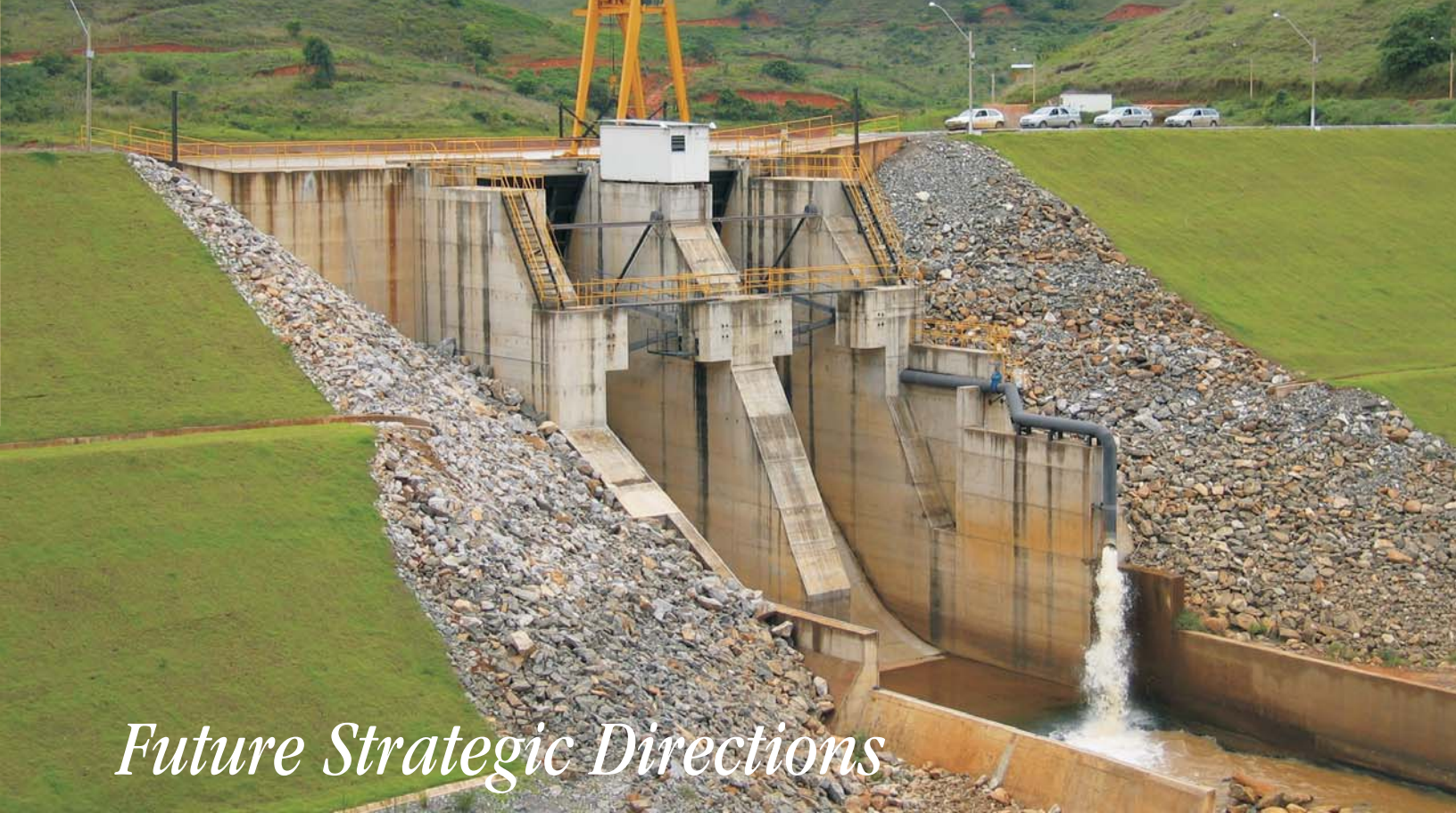
New Technology

Commercializing new energy technologies is essential for reducing the long-term growth in GHG emissions in developing countries. The transfer of new technologies requires a combination of technical know-how and financial management. IFC has undertaken several such projects with GEF and other donor resources, including projects to commercialize stationary fuel cells, use advanced power generation technologies to cogenerate with bagasse at sugar mills, and manufacture advanced micro-turbines.

Methane Capture and Destruction

IFC has invested equity in a pre-IPO company that provides waste management services to swine and dairy farmers and sells carbon credits by capturing and combusting associated biogas. IFC is currently considering project and/or carbon-related financing for several waste management and wastewater, landfill gas, and coalbed methane projects.





Future Strategic Directions

Growth in Sustainable Energy Commitments

IFC will accelerate investments in renewable energy and energy efficiency to contribute to the World Bank Group's target to scale-up its portfolio of such investments by an annual average of 20% through 2010.

Increasing Use of Financial Intermediation

A new Financial Markets Sustainability Group has been created to promote clean energy and other environmental financial products as a core driver of IFC's financial markets business globally.

Increased Support for New Technologies

A proposed new private sector fund with co-financing from GEF will expand IFC's role as a leader in financing innovative energy and environmental technologies, facilitating more streamlined project delivery.

New Products for the Carbon Market

Carbon is likely to be a key value driver in IFC's operations and the private sector will be the primary conduit for trading and unlocking value. IFC will facilitate the development of a commercial carbon market and deliver innovative financial products that unlock the value of carbon assets of our developing country clients and assist our developing country partners in meeting their commitments to mitigate climate change.

Monitoring and Reporting GHG Emissions

IFC performance standards require assessment of opportunities for improving energy efficiency and using renewable energy where feasible, and, for larger projects, pending revisions would require quantification and reporting of greenhouse gas (GHG) emissions and a strategy for achieving reductions.



At IFC our mandate is to further sustainable economic development through the private sector. We pursue this goal through innovative solutions to the challenges of development, as we invest in companies and financial institutions in emerging markets and as we help build business skills. We consider positive development impact an integral part of good business, and we focus much of our effort on the countries with the greatest need for investment. We recognize that economic growth is sustainable only if environmentally and socially sound and helps improve the quality of life for those living in developing countries.

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Cover Image: A wind farm in Huitengxile, Inner Mongolia Autonomous Region, China. Photo courtesy of Mr. Dai Cunfeng of the China Renewable Energy Development Project Management Office, National Development and Reform Commission, Beijing, China.