Stories of Impact

Climate Change

IFC
International Finance Corporation
World Bank Group

Innovative Solutions for a Sustainable Future in South Asia

IFC
International Finance Corporation
World Bank Group

DONOR PARTNERS

Australia
Austria
Canada
Denmark
European Union
Finland
Germany
Italy
Japan
Netherlands
Norway
Sweden
Switzerland
United Kingdom
United States of America

Improving Resource Efficiency

Stories of Impact

INSIDE

Climate Change: Innovative Solutions for a Sustainable Future in South Asia

Partnering with Private Sector

To Address Climate Change Impacts

Climate change poses a threat to people in developing countries, many of whom depend on agriculture, forestry, and fisheries for their livelihoods. IFC plays a unique role in helping clients address risks and identify investment opportunities

Globally, average temperatures have risen almost one degree celsius[1] since the late 19th century with massive loss of arctic sea ice, extreme heat waves, rising sea levels and variable and extreme rainfall patterns creating droughts and floods.

According to World Bank's *Turn Down the Heat* Report on climate change, while all nations will suffer the effects of a warmer world, the inhabitants of the world's poorest countries are most vulnerable to risks from food shortages, water scarcity, cyclones and droughts.

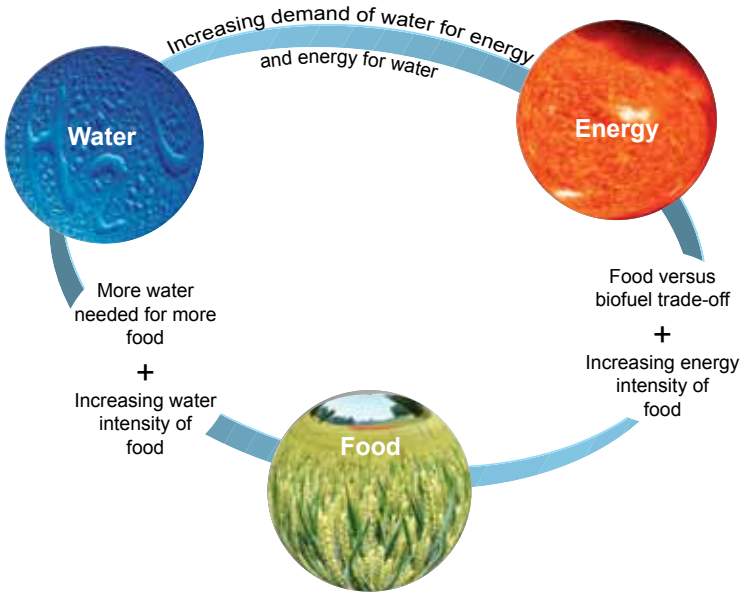
From melting Himalayan glaciers in India, Nepal and Bhutan that pose the risk of outburst floods to the rise in sea levels that threatens the coastlines of Bangladesh and Maldives, and abnormal monsoon in recent years in parts of India, South Asia is highly vulnerable to natural disasters.

In this 'make-or-break' decade, actions taken now could make a difference on how warm our planet will become.

A global problem, the solutions for addressing climate change are local.

IFC is supporting private sector clients in South Asia move to a low-carbon growth path through investment and advisory support in renewable energy, energy efficiency and resource efficiency, and by promoting climate resilient development.

[1] IPCC, 2007: Summary for Policymakers. In Climate Change 2007:The Physical Science Basis. Contribution of the Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S.D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.



Energy, Food and Water

Climate change impacts every sector - primarily water, energy and food security - and these are all IFC priorities today.

While the role of the public sector is essential to establish a supportive policy framework, the private sector must also play a leading role in adopting a clean and green growth path. Current levels of investment in climate-related projects in developing countries falls far short of what is needed. According to Climate Policy Initiative[2], the contribution to global climate finance by private investors is almost three times greater than public finance.

IFC recognizes that climate-related interventions led by the private sector are critical. **IFC is leveraging its expertise and scaling up climate change-related products to assist clients in implementing climate-smart and sustainable projects in a changing environment.**

IFC's advisory services is making a difference by helping mitigate climate change and increase resilience through first-of-its-kind innovative and market transforming initiatives

[2] Out of the estimated climate finance of $97 billion a year, $55 billion is provided by the private sector and $21 billion by public budgets Climate Policy Initiative 2011. The Landscape of Climate Finance. Venice.

Multiple challenges create significant opportunities for IFC in the areas of clean energy, food security and resource efficiency

Inclusive growth, global integration and addressing climate change impacts are IFC's three strategic pillars in South Asia. IFC addresses the challenges on climate change through:

- Promoting Clean Energy
- Enhancing Food Security
- Improving Resource Efficiency

IFC's investments and advisory services help the private sector reduce carbon footprints, increase agricultural productivity, and manage scarce natural resources despite adverse climate events.

IFC's activities spur efficiencies, improve competitiveness and, above all, ensure sustainable growth by supporting innovative technology applications and scalable business models.

IFC is helping private sector promote more sustainable management of water resources.

Measuring IFC's Impact on Climate Change in Last Three Years

- Improved access to services for around 300,000 people
- Reduced greenhouse-gas emissions by nearly 160,000 tons carbon dioxide per year
- Helped in water savings of 3.7 million cubic meters per year

In the last three years, IFC South Asia has committed around $800 million in climate-related investments. This represents close to 21 percent of its total commitments.

During the same period, IFC has spent around $14 million (nearly 18 percent of our total program spending) in advisory services-related engagements promoting climate-smart initiatives. This strategy has already led to the achievement of significant impacts.

IFC works with clients to develop competitive and replicable clean energy business models to support projects that provide energy access in underserved regions.

South Asia is among the most vulnerable regions to climate change impacts. It is the poor who are the most affected. This situation will not improve if business-as-usual continues

Promoting Clean Energy

Reducing Greenhouse-Gas Emissions, Energy Poverty

IFC partners with private sector clients, governments, and local financial institutions, including regional rural banks and microfinance institutions, to scale up energy access through off-grid appliances, roof top solar, and grid-connected wind and solar projects.

IFC's advisory services facilitate private sector investments in clean energy to reduce greenhouse-gas emissions and help countries shift to green paths for growth.

In a major **transformational initiative**, IFC, through the Lighting Asia/India program, aims to bring modern, clean lighting services to two million people by the end of 2015.

Enhancing Food Security

Sustainable Agribusiness, Improving Productivity

In regions where climate-related risks of floods, droughts, saline intrusion, and landslides are endemic, IFC works with leading seed companies to increase production, distribution, and adoption of stress-tolerant and high-yield seed varieties. Many farmers lack awareness of the availability of seed varieties or the farming practices required to maximize yields.

Within agribusiness, IFC works with clients to promote improved agricultural and water management practices and introduce new technologies to small farmers growing rice, vegetables, maize, and sugarcane to adapt to climate change.

Improving Resource Efficiency

Savings Costs, Increasing Competitiveness

IFC enables the development of profitable and environmentally sound projects, business models, and sector-wide engagements to change market behavior and support environmentally sustainable, low carbon economic growth.

Over the past few years, **IFC has carried out water and energy assessments for clients** at their manufacturing plants across sectors like pulp and paper, cement, resorts, and dairy among others. This has led to nearly $7 million in annual savings with an investment of over $11 million.

Promoting Clean Energy

Facilitating Energy Access

IFC is committed to working with different partners and stakeholders to increase energy access to India's under-served rural population

Over 700 million people in South Asia do not have access to electricity. About 90 percent of them live in rural areas. IFC works towards eradicating energy poverty and focuses on both grid connected and off-grid energy through innovative and market transforming initiatives.

IFC improves access to energy by:

- Advising firms on the commercial and technical aspects of renewable technologies and business models
- Helping build capacity at the sector level and promoting best practices and standards
- Facilitating access to finance along the clean energy value chain
- Working with governments on initiating regulatory and policy reforms and facilitating investments through public private partnerships

Our endeavor has been to move towards replicating and scaling up the success of our innovative projects and business models across the region.

Measuring IFC's Impact on Clean Energy in Last Three Years

- Improved access to services for around 330,000 people
- Reduced greenhouse-gas emissions by nearly 93,000 tons carbon dioxide per year

Solar lanterns are a cleaner and safer renewable energy source for low-income people in off-grid areas.

Wind energy is increasingly becoming a viable option to meet energy needs in South Asia.

A mini powergrid enables off-grid households to have access to electricity supply.

Some of IFC's innovative advisory interventions* in South Asia in the clean energy segment are:

	Project Description	Expected Reduction in Greenhouse-Gas Emissions (in carbon dioxide tons per year)	Expected Number of People Reached
OFF-GRID	**India** With support from IFC and other partners, 'Hariyali', the green finance program of Self Employed Women's Association (SEWA) is enabling rural women to buy energy-efficient cook stoves and solar lanterns	100,000	250,000
	India IFC is partnering with Micro Energy Credits (MEC), a carbon offset aggregator, to extensively engage with banks on lending for solar home lighting systems and energy-efficient cook stoves. The project involves providing technical assistance to regional rural banks to develop their clean lending portfolio	40,000	84,000
	India Lighting Asia/India program is a market-transforming initiative that aims to promote safe, affordable and modern off-grid lighting to people in rural India	62,000	2,000,000
ON GRID	**Sri Lanka** IFC is working with financial institutions to develop a market for power generation from renewable energy sources as an alternative to fossil fuels	100,000	–
	Public Private Partnership, India IFC supported Gujarat state to structure and implement on public-private partnership basis an innovative small-scale 5 megawatt grid connected solar rooftop power project in Gandhinagar, the state capital	7,154	10,000
	The public private partnership solar rooftop project in Gandhinagar is now being replicated in five other cities of Gujarat - Rajkot, Mehsana, Vadodara, Bhavnagar and Surat	30,000	36,000

**These are ongoing projects*

Top: Solar lanterns under Lighting Asia/India program give quality light and do not generate unhealthy fumes unlike the kerosene lamps traditionally used in rural India.
Bottom: Solar energy is replacing diesel as a more efficient and cost effective energy source for operating telecom towers.

From Innovation to Market Transformation

Solar panels on rooftops of buildings in Gandhinagar, the capital of Indian state of Gujarat, are helping generate clean energy.

Gujarat state, located in western India, gets over 300 days of sunlight. The state government is committed to mitigating climate change challenges, and is willing to tap into its renewable energy resources, especially solar, while promoting development of sustainable and commercially viable decentralized plants at consumer premises. IFC is addressing technical and regulatory challenges by partnering with private sector to tap into the solar segment.

IFC is Supporting First-of-its-kind Solar Rooftop Pilot Project

In 2011, the Government of Gujarat requested IFC's assistance in structuring a first-of-its-kind pilot grid-connected solar rooftop power project as a public-private partnership. Using rooftops of public buildings and private residences, the project seeks to avoid using scarce and economically viable land. Although the concept exists in developed markets like the US, the pilot project in Gandhinagar, Gujarat's capital, is the first in India.

IFC worked on defining an innovative structure that would address the challenges of developing the solar rooftop market.

Under the model developed by IFC, large third-party developers own the solar generation systems installed on the rooftops of public or private buildings. The key advantage of this model is that the third party developer is a specialized solar industry player with a better understanding of the solar photo-voltaic systems, thus ensuring better installation of the system and long- term operation and maintenance. With IFC's support, a pilot project of 5 megawatt (two 2.5 megawatt systems) in Gandhinagar was successfully awarded through a competitive tender to two private developers in April 2012.

Building on the success of the pilot project, the state government requested IFC to help disseminate the concept across the state through replication in five more cities (projects of 5 megawatt each). The tendering process for these five cities is going on. In addition, based on lessons learned from the pilot project, IFC is working on a policy framework at the state and national levels, to incentivize future large-scale replication, and prepared a white paper on solar rooftop projects for knowledge dissemination in India and internationally.

IFC is helping Gujarat in implementing a pilot solar rooftop project on public private partnership basis.

Impact

Gujarat Solar Rooftop Program	Expected Reduction in Greenhouse-Gas Emissions (in carbon dioxide tons per year)	Expected to Improve Access to Services (in terms of number of people)
Pilot project (5 megawatt)	7,154	10,000
Replication projects in five cities (25 megawatt)	30,000	36,000

The public private partnership approach adopted here is an effective means to bring policymakers, regulatory bodies and utilities together to devise feasible frameworks for future market transformation.

Based on the lessons learned from the program, IFC is supporting regulators at the national level to prepare a conducive regulatory framework. Additionally, the model is replicable across the country and internationally. IFC is currently assessing the feasibility of rooftop solar programs in other Asian and African countries.

The Gujarat Solar Rooftop Program is an innovative example of IFC utilizing expertise of its staff from different departments in offering an integrated solution to help achieve Gujarat Government's objectives of adding power generating capacity and mitigating climate change impacts. In addition to advisory support, IFC has also financed two developers for the Gandhinagar project.

Top Left: IFC client SEWA is helping low-income women in Gujarat buy energy efficient cookstoves that require less fuel and produce fewer emissions.

Right: Lack of access to reliable energy is a significant obstacle to economic development in emerging markets, particularly for people living and operating outside of the large urban centers.

Enhancing Food Security

Building Climate Resilience for Farmers

Improved agricultural practices optimize use of scarce resources like water.

Our experience shows that farmers need capacity building and training on adoption of climate-resilient seeds and high-yielding varieties to enhance agricultural productivity and income

The agriculture sector in South Asia is impacted by increasing global temperatures, rising sea levels, saline intrusion, drought, and land submergence, affecting agricultural productivity and leaving millions of farmers vulnerable to global climate change. IFC partners with agribusiness companies to provide solutions in some of the most vulnerable regions in South Asia.

IFC is enhancing food security by:

- Advising agribusiness firms and their supply chains (traders, processors, and aggregators) on improved agricultural practices and opportunities to introduce climate-smart knowledge, products and technologies to small farmers
- Training farmers to enhance agricultural yields and revenues of farmers and small and medium enterprises
- Strengthening market linkages and supply chains for climate-smart products and technologies

- Working with financial institutions to increase lending to farmers and other supply chain members
- Facilitating investments through public private partnerships for expanding capacity and improving management of grain silos and warehousing

Helping small farmers increase their productivity and linking them to markets is an important focus for IFC.

Some of IFC's innovative advisory interventions in South Asia in climate resilience are:

Project Description	Expected Improvement in Productivity (in percent)/Water Savings (in million cubic meters per year)	Expected Number of People Benefited
Climate-Resilient Seeds Help Reduce Climate Change Impacts, Bangladesh* IFC is working with Bangladesh's four largest private seed companies to enhance production, distribution and adoption of high-yielding and stress-tolerant seed varieties in poverty-stricken and climate vulnerable areas	At least 14.4 percent incremental increase in yield for project-supported farmers	80,000
Building Climate Resilient Communities, Nepal IFC is working with leading agribusiness firms in Nepal to promote improved agricultural and water management practices and introduce new technologies among small farmers producing rice, maize and sugarcane to adapt to climate change	Productivity differential of 20 percent between project- trained farmers and those without training over a multiyear period	15,000
Promoting Water Efficient Agricultural Production to Address Food Security, India* IFC is working with Indian companies to introduce water use efficiency technologies in their basmati rice supply chain in state of Haryana. Through promotion of technologies such as laser leveler and direct seeded rice, the initiative has demonstrated substantial water savings potential over water-intensive transplanted rice cultivation methods	1.1 million cubic meters of water savings (achieved till date)	1,100
Weather Index Insurance for Sri Lankan Farmers to Mitigate Risks* IFC is partnering with Sri Lanka's SANASA Insurance to help farmers minimize the impact of crop losses due to floods or droughts through weather-based agricultural insurance products	-	6,652

**These are ongoing projects*

IFC is working with agribusiness firms in Nepal to promote improved agricultural and water management practices.

IFC is assisting private sector in Bangladesh develop new climate-resilient seeds.

Direct seeding eliminates the laborious process of planting rice seedlings by hand and reduces water requirements significantly.

Helping Farmers Enhance Incomes, Raise Productivity

IFC is helping women in Bangladesh become micro-entrepreneurs by using stress-tolerant and hybrid seeds.

Climate change poses a serious challenge to Bangladesh's agricultural output and puts its food security at risk. As a low-lying country with large delta areas, Bangladesh experiences extreme weather events, which result in flooding and land inundation. Bangladesh is already losing 1.75 percent of its arable land each year – faster than its population growth of 1.5 percent. By 2025, its agricultural sector will have to feed an additional 19 million people with considerably less land. Soil and water salinity and drought intensity have increased across the country, while crop yields remain low due to inefficient agricultural practices.

Increased Availability of Stress-Resistant Seeds for Farmers

The agri-seed project contributes to food security and helps promote resilient agricultural practices by strengthening the private sector's capacity to enhance production, distribution and adoption of high-yielding, hybrid and stress-tolerant seed varieties. Working with lead firms, IFC works to enhance incomes of rice and vegetable farmers and seed growers in Bangladesh where farmers face greater challenges due to climate change and low crop productivity. Key components of the project are:

- Adaptation to climate change by farmers through promotion and distribution of stress- tolerant seeds by private seed companies
- Productivity improvement by enhancing the production, distribution and promotion of high-yielding variety/hybrid seeds through private seed companies
- Capacity building and training of seed companies and their supply chains such as dealers, retailers and aggregators
- Identification and addressing of critical sectoral policy constraints

As part of the project, IFC is working with:

- Bangladesh's largest private seed companies (Energypac Agro-G Limited, Supreme Seed, ACI Limited, and Lal Teer Limited) to demonstrate the business case for stress-tolerant and hybrid seeds in climate vulnerable and high-risk areas
- Seed growers, dealers, and retailers to expose them to new seed varieties by supporting field demonstrations
- Bangladesh's Ministry of Agriculture and other government departments and agencies to encourage public-private dialog and improve the regulatory environment for seed companies

Impact

Of the 66,120 farmers trained in adoption of new seed varieties and modern agricultural practices

- Over 67 percent adopted project-recommended practices.
- 44,000 reported improved performance, including better productivity and business outcomes.
- 26,000 implemented changes related to climate change adaptation.
- 19,200 adopted new practices related to productivity improvements.

Supporting Micro-entrepreneurs

Helped 1,200 women become micro-entrepreneurs by growing and selling seeds.

Eight new stress-tolerant seed varieties were launched by the government of Bangladesh to private sector for production and multiplication.

Market Linkage

One lead firm and three additional buyers sourcing seeds from established seed growers.

Improving Resource Efficiency

Increasing Competitiveness

IFC's resource efficiency teams work with firms to ensure optimal and efficient use of energy, water and other natural resources.

The impact of climate change on water availability will affect several sectors including energy production and manufacturing, which are critical sectors for growth. IFC's resource efficiency team works with firms to save costs, prevent waste, and reduce greenhouse-gas emissions through more efficient use of energy, water, and raw materials. At the sectoral level, IFC promotes wider adoption of good practices through case studies and benchmarking use of energy, water, and raw materials.

IFC works with private and public stakeholders to promote efficient use of natural resources by:

- Assessing potential for increased energy, water, and resource efficiency at the firm level
- Developing and undertaking sector benchmarking of resource efficiency indicators for certain resource-intensive sectors to overcome knowledge gaps
- Collaborating with financial institutions, industry groups, and other market aggregators to scale up investment
- Promoting resource-efficient best practices and standards like green building standards
- Analyzing and supporting policy and regulatory needs on energy/water efficiency and waste prevention/recycling

Supply of resources is limited today, and our natural resource base is being eroded. The efficient use of natural resources is critical for sustainable private sector development

Measuring our Resource Efficiency Growth in Last Three Years

- Reduced greenhouse-gas emissions by 66,300 tons carbon dioxide per year
- Helped in water savings of 2.6 million cubic meters per year

IFC's Cleaner Production Program in South Asia includes initiatives that contribute to significant savings of water and energy.

Some of IFC's innovative advisory interventions in South Asia that help optimize use of natural resources are:

	Project Description	Expected Reduction in Greenhouse-Gas Emissions (in carbon dioxide tons per year)	Expected Water Savings (in million cubic meters per year)
INDIA	**Cleaner Production Program for South Asia** The project directly supports cleaner production assessments with existing and potential IFC investee clients in paper and pulp, cement and other sectors. Cleaner production is a key instrument for carbon dioxide emission reductions and an effective way to mitigate risks known to cause or accelerate climate change	74,300	1.3
	Corporate Water Program* IFC partnered with the Tata Group to develop a water sustainability framework for group companies -Tata Steel, Tata Power, Tata Motors and Tata Chemicals - based on Water Footprint Network's globally acknowledged water footprint methodology. The project calibrated water usage at eleven facilities and identified investments in water conservation technologies and solutions. Following the project, the Tata Group, one of the premier conglomerates in India, will develop and implement a group-wide water policy and strategy, starting with the replication of water footprint assessments across all group companies. The group will also partner with IFC and other stakeholders to catalyze water security solutions for farmers in the north Indian state of Uttar Pradesh	--	6.8
	Municipal Street Lighting in Bhubaneshwar* IFC is supporting the Indian state of Odisha in upgrading the street lighting network in the capital of Bhubaneswar through a public private partnership approach	6,800	--

**These are ongoing projects*

	Project Description	Expected Reduction in Greenhouse-Gas Emissions (in carbon dioxide tons per year)	Expected Water Savings (in million cubic meters per year)
BANGLADESH	**Low Carbon Special Economic Zones** This project will lower carbon emissions within the Chittagong Export Processing Zone and provide a roadmap to a low-carbon growth path for other export processing zones inside and outside Bangladesh	11,728	--
	Partnership for Cleaner Textile IFC has engaged with ten apparel brands to harmonize procurement guidelines related to water efficiency in the supply chain, 200 textile factories to identify resource efficiency measures, and 150 factories on best textile processing and effluent treatment technology investments	20,000	2.5

IFC's innovative $10 million Partnership for Cleaner Textile initiative is paving the way to reduce water use and pollution in Bangladesh's textile sector.

Reducing Costs, Boosting Output

Helping Clients Save Resources

Implementation of resource efficiency recommendations by IFC client JK Paper led to significant savings of water and energy.

With increasing globalization, manufacturing units are looking for innovative ways to be sustainable on all fronts. Energy costs, as a percentage of manufacturing costs have increased due to higher fuel prices, which impact both production and distribution costs and erode long-term competitiveness and profitability.

Energy, Water Savings Contribute to Improved Bottom Line

As part of its Resource Efficiency Program for South Asia, IFC has provided technical assistance on cleaner production to five IFC investee companies across the sectors of pulp and paper, cement, resorts and food processing. The assessments helped these companies identify energy, water, and other types of resource savings, reduce greenhouse-gas emissions in operations, and, consequently, improve profitability.

In the case of JK Paper, one of India's biggest branded paper producers, IFC conducted an assessment at the company's manufacturing plants in the states of Odisha and Gujarat. Following this, the company agreed to implement IFC's recommendations, which are expected to result in annual savings of over 17,000 tons of greenhouse-gas emissions, around 3 million cubic meters of water and around 15 gigawatt of electricity.

Broadly, the recommendations encompass the optimization of electric drives and motors, steam and pumping systems, and cooling and lighting systems. Following IFC's intervention, the company identified additional improvements and has secured a $3 million loan from IFC to implement these.

IFC's engagement with our client in the Maldives — the Universal Group — to conduct a clean production assessment in four of its resorts identified around 15 percent savings in electricity and 5 percent in water consumption. This translates to 5,000 tons of greenhouse-gas emissions reduction per year. IFC extended a $2.5 million loan to Universal Group to help implement the recommendations of assessment report.

Impact

In aggregate, IFC's resource efficiency initiatives in South Asia have enabled investment opportunities of $11 million, annual water savings of 1.3 million cubic meters (equal to annual water consumption of 7,600 Indian households), and reductions in annual greenhouse-gas emissions of 54,500 tons.

IFC and IFC investee client Attero, an eWaste asset management and recycling company, are working on a joint initiative to collect and responsibly recycle eWaste through an inclusive approach that integrates informal waste collectors.

After successful engagements with individual clients, IFC's Cleaner Production Program in South Asia has been expanded to include initiatives that can have a wider impact and influence standards and policy. IFC has supported the World Business Council for Sustainable Development to develop a technology roadmap for the Indian Cement Industry. This is the first ever national level greenhouse-gas emissions road map for any energy intensive manufacturing sector. The roadmap looks at various future scenarios facing the Indian cement industry and suggests a pathway up to 2050 for the reduction of direct greenhouse-gas emissions. The roadmap was developed by the Cement Sustainability Initiative of the World Business Council for Sustainable Development and the International Energy Agency with the support of cement manufacturing companies in India and IFC, demonstrating the critical role of partnerships.

As part of the program, IFC is also supporting these companies undertake resource efficiency assessments at their manufacturing units. The assessments will identify specific areas where investments related to energy efficiency, raw material conservation (clinker substitution), waste heat recovery, use of alternative fuels and new technologies can lead to greenhouse-gas emissions reductions.

IFC is helping cement companies undertake resource efficiency assessments at their manufacturing units.

The Way Forward

Our Priorities, Next Steps

Climate change is a key priority for IFC in both its investment and advisory work. Our future strategy seeks to:

- *Reinforce agribusiness supply chains aimed at improving food production, storage, and distribution, save energy and limit greenhouse-gas emissions while assisting in jobs creation*
- *Improve access to energy for the masses through large scale replication of proven on-grid and off-grid applications*
- *Work closely with governments to develop the renewable energy sector*
- *Explore opportunities to introduce IFC EDGE 'Excellence in Design for Greater Efficiencies', a green buildings design and certification system for emerging markets.*

In some extreme cases, climate change is a threat to development progress made over the past decades. Climate change mitigation and adaptation efforts must align with poverty alleviation and other development objectives.

IFC is committed to promoting pro-poor climate-smart development globally. In South Asia, IFC's overall strategy emphasizes on strengthening climate resilience in frontier markets such as Nepal and Bangladesh, and in India's low income states in the next three years.

IFC recognizes there are challenges and obstacles to climate-smart growth. The current economic environment has put pressures on many governments to focus on more immediate concerns. There has been a slowdown in government frameworks, regulations, and investments geared towards the green economy. The private sector, while recognizing the risks and opportunities associated with climate change, needs new business models and financing to access these opportunities and reduce risks. This

continues to make green growth slow and difficult.

To scale up activities, IFC is collaborating with the World Bank, donors, public and private stakeholders so that the impacts can be meaningful.

IFC's actions and policies over the next three years span a range of ground-breaking climate change mitigation and adaptation initiatives focusing on food, water and energy security.

Through appropriate and efficient delivery of services in water and required investments, IFC is focusing on managing resources in a sustainable way. For instance, new business models for area based participatory watershed management to ensure sustainable distribution of resources to communities are under consideration.

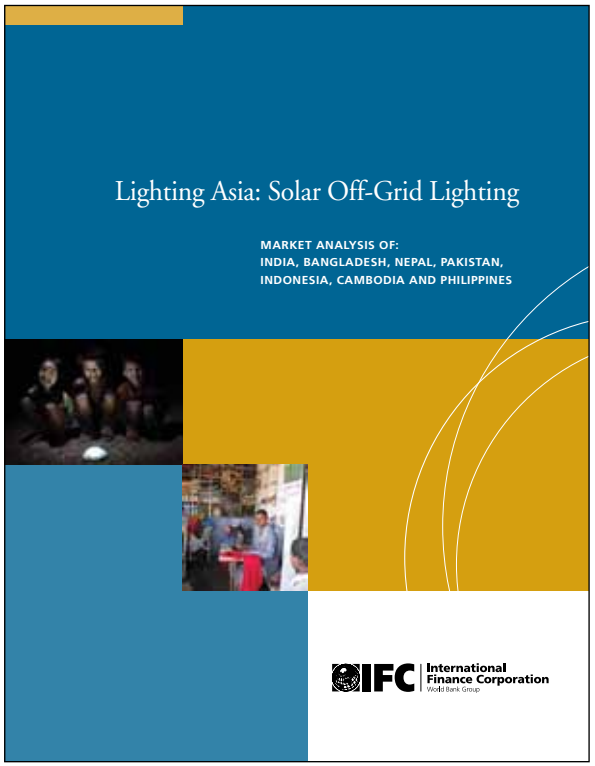
IFC's response to the challenges of climate change impact is driven by market need and client's requirements.

In an ever changing environment, IFC must not only scale up existing interventions, but also uncover new opportunities and identify cutting edge advisory services and investment products to address evolving needs of clients.

IFC is in a strong position to address these challenges by demonstrating viable investment strategies, shaping markets through regulatory and policy advice, and providing leadership to the donor and the international community.

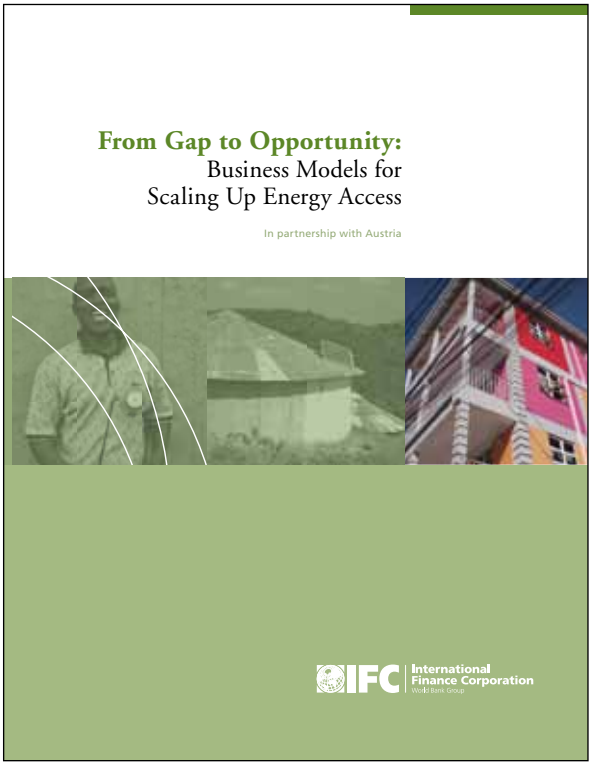
Sharing Knowledge

IFC's knowledge products in climate change



Lighting Asia: Solar Off-Grid Lighting, Market Analysis of India, Bangladesh, Nepal, Pakistan, Indonesia, Cambodia and Philippines

Nearly 800 million people in Asia live in a state of near darkness, coping with unreliable or non-existent or no access to electricity on a daily basis. There is a strong demand among off-grid consumers in Asia for reliable, clean and cost-effective alternatives to fuel-based lighting. This report provides an overview of the off-grid lighting market in seven nations across south Asia – India, Bangladesh, Nepal, Cambodia, Indonesia, Pakistan and the Philippines – and presents an opportunity for investors and industry players to make a real and necessary impact by serving communities that lack access to reliable electricity.



From Gap to Opportunity: Business Models for Scaling Up Energy Access

This report breaks new ground by estimating that there is a $37 billion market opportunity for improved energy services at the base of the pyramid. It profiles companies with innovative business models and explores in detail what it takes for them to succeed.

More specifically, the report sizes the commercial opportunity for lighting, basic electricity and cooking services, and explores in depth how companies are capturing this potential around the world. With a view to scaling up market-based successes, it offers a series of recommendations for operating firms, social and commercial investors, policy-makers and donors.

CREDITS

Photography

J.K. Paper (front cover)
Dominic Sansoni
Curt Carnemark
Emmanouela Markoglou
Shehzad Noorani
Gujarat Power Corporation Limited
Sattyakee D'com Bhuyan
Sustainability Knowledge Network
S. Jain
Zahidul Naim Zaharia
A. Jacobson

IFC South Asia, 2014

About IFC

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries. Established in 1956, IFC is owned by 184 member countries, a group that collectively determines our policies. Working with private enterprises in more than 100 countries, we use our capital, expertise, and influence to help eliminate extreme poverty and promote shared prosperity. IFC leverages the power of the private sector to create jobs and tackle the world's most pressing development challenges. IFC's vision is that people should have the opportunity to escape poverty and improve their lives.

Contact Information

International Finance Corporation
Maruti Suzuki Building
3rd Floor, 1 Nelson Mandela Road,
Vasant Kunj, New Delhi - 110070
India
T: +91 11 4111-1000
F: +91 11 4111-1001
www.ifc.org

Stay Connected

www.ifc.org/southasia
www.facebook.com/IFCsouthasia
www.twitter.com/IFC_SouthAsia
www.ifc.org/facebook
www.twitter.com/IFC_org
www.youtube.com/ifcvideocasts
www.ifc.org/SocialMediaIndex

IFC | International Finance Corporation
World Bank Group