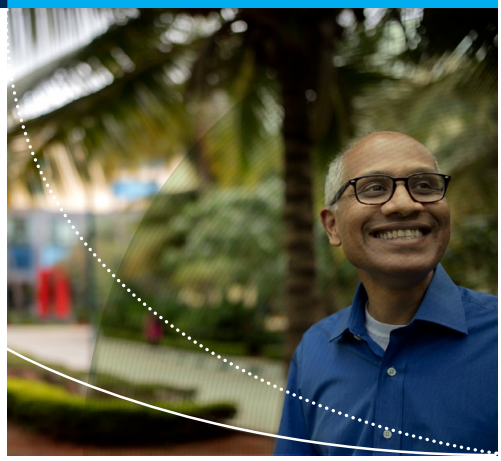
Creating Markets for Climate Business:

An IFC Climate Investment Opportunities report



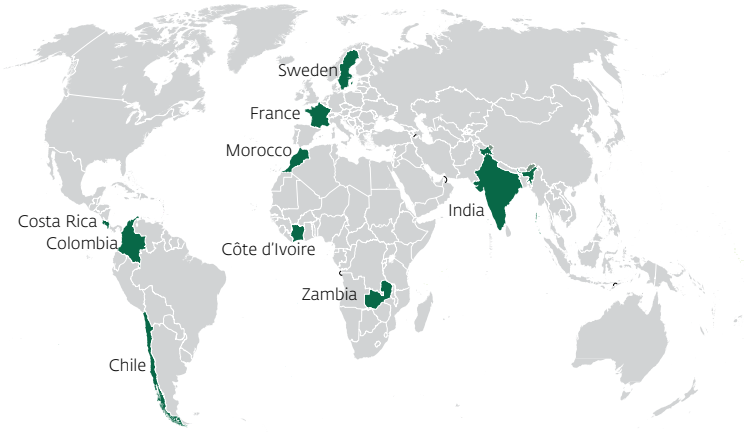
Climate change presents us with perhaps our biggest challenge. Greenhouse-gas pollution continues to build up in the atmosphere, causing more intense storms, floods, droughts, and heat waves. In recent years, we have seen growing certainty and evidence of climate change impacts, with supply chains being disrupted, commodity prices seeing increased volatility, and communities being severely impacted.

The Paris Agreement sent a clear signal to businesses and investors around the world: a low-carbon future is coming. Countries acted decisively to make a commitment to stabilize climate change before the end of this century. Unlike previous commitments, the Agreement took a bottom-up approach – 189 countries submitted national commitments with targets to increase investment in renewable energy, energy efficiency, sustainable infrastructure, and climate-smart agriculture.

This will accelerate investment in markets for climate solutions, which are already worth over $1 trillion. Businesses are delivering innovative solutions to reduce greenhouse-gas emissions at a profit in sectors like renewable energy, climate-smart agriculture, green buildings, and sustainable transport, while generating jobs and making cities cleaner, healthier, and more resilient.

- **Renewable power investment is at $297 billion today** and is expected to be $11 trillion annually by 2040.
- **Off-grid solar and energy storage is at $2.5 billion today,** and could reach $23 billion by 2025.
- **The $5 trillion of annual agribusiness investment** is becoming more "climate-smart."
- **Green buildings are now a $388 billion market;** new IFC analysis sees $3.4 trillion potential through 2025 as key emerging markets rapidly urbanize.
- **Sustainable urban transport is already seeing over $350 billion in annual investment** in electric vehicles and low-carbon solutions like bus rapid transit and light rail; trillions more will be required in the coming decade.

FIGURE 1: Countries are making progress in creating markets for climate business



(Source: IFC analysis)

- **Climate-smart urban water infrastructure** is attracting **$23 billion** in annual private investment in water recycling and reuse, and could attract $13 trillion in cumulative investment to 2030.
- **Urban waste management is generating $160 billion/year in investment,** and will grow to a multi-trillion global market in the near future.

Countries are acting on their Paris commitments by putting in place investment frameworks that are attracting private capital. By setting targets, developing implementing regulations, using market-responsive policies, working across ministries and between national and local governments, and engaging the private sector to help design policies, countries are setting the stage for greater investment (see Figure 1).

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Creating Markets, Creating Opportunities

CREATING MARKETS FOR CLIMATE BUSINESS

How can governments, businesses and other stakeholders achieve the promise of Paris? By creating markets for climate business. There is a set of policy reforms, business models and financial innovations that have been proven to attract private investment for each of the climate sectors.

Creating markets also includes using cross-cutting solutions like green finance, which strategically use limited amounts of public finance and regulation to mobilize much larger sums of private capital. Reducing fossil fuel subsidies and pricing carbon will also be key to level the playing field for low-carbon investments. To attract even more private capital for climate-smart urban infrastructure, governments and businesses can work together to enhance city creditworthiness and create more public-private partnerships.

IFC's *Creating Markets for Climate Business* report has been designed to help inform private companies and investors about the myriad opportunities that exist in climate business around the world. It also will help governments translate their climate ambitions into successful markets for climate business. It synthesizes the lessons learned from several decades of successful market creation across the globe, spanning sectors and regions.

> *The private sector holds the key to fighting climate change--it has the innovation, the financing, and the tools. We can help unlock more private sector investment, but this also requires government reforms as well as innovative business models—which together will create new markets and attract the necessary investment. This can fulfill the promise of Paris.*
>
> — **Philippe Le Houérou,** Chief Executive Officer, IFC

MARKETS FOR CLIMATE BUSINESS

Grid-Tied Renewables

Step 1: Set a target.

Step 2: Put in place smart, market-responsive policies.

Step 3: Ensure that other policies are not inhibiting market growth.

Step 4: Adapt policies to meet the evolving needs of the electricity market.

Off-Grid Solar and Storage

Step 1: Set a target.

Step 2: Publicize a grid expansion plan to give confidence to developers and investors.

Step 3: Provide targeted incentives to encourage deployment.

Step 4: Allow different electricity tariffs for mini-grids and rooftop PV.

Step 5: Provide microfinance, training and education.

Climate-Smart Agriculture

Step 1: Mainstream climate-smart agriculture into national policies and sector development plans.

Step 2: Address inefficient government price and subsidy regimes to reward CSA.

Step 3: Invest in strategic infrastructure to facilitate CSA investment.

Step 4: Promote outreach, training, and agribusiness centers of excellence.

Green Buildings

Step 1: Develop regulatory tools, including building codes, government procurement, appliance standards and performance labels.

Step 2: Build capacity via public awareness, awards, audits, ratings and certification, workforce training and technical assistance.

Step 3: Provide targeted incentives, revolving loan funds, risk guarantess and energy performance contracts.

Step 4: Encourage utilities to act via advanced metering, demand response, time-based tariffs, subsidies and ESCO support.

Transport and Logistics

Step 1: Avoid the need for urban commuting via better urban design, bike lanes and consolidated freight centers.

Step 2: Shift from personal vehicles to other modes of transport with BRT, metro systems, travel demand management, fiscal measures and PPPs.

Step 3: Improve technology for passenger vehicles and freight via fuel economy standards, tax rebates, EV infrastructure and automation and optimized routing.

Climate-Smart Water Infrastructure

Step 1: Establish water access, cost recovery and service quality goals, increase inter-government coordination and foster water-smart public awareness.

Step 2: Ensure financial sustainability by implementing water pricing and removing subsidies.

Step 3: Make public-private cooperation deliver increased water efficiency via guarantees, PPPs, project preparation funds and performance-based contracting.

Step 4: Build capacity through training, regional cooperation, public awareness, home/equipment certification, auditing and benchmarking.

Climate-Smart Urban Waste Management

Step 1: Achieve economies of scale by aggregating waste flows and developing regional plans/partnerships.

Step 2: Use an integrated waste management approach to attract private investment. Step 3: Get the prices right via cost recovery through taxes, volume-based fees and other means.

Step 4: Put incentives in place through appropriate WTE pricing, mandates for compost and other sector policies.

Step 5: Raise consumer awareness to reduce non-recoverable waste streams.