Biofuels as Alternative Energy: A regional overlook

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Presentation Outline

» IDB’s Sustainable Energy and Climate Change Initiative

» IDB Biofuels Sustainability Scorecard
Energy & Climate Change: Challenges for the LAC Region

» LAC countries confront a twin dilemma:
  - They must boost their energy consumption to fuel economic and social development.
  - Energy use has been largely responsible for an increase in greenhouse gases emissions

» Approx. 10% of total population (50 million people) does not have electricity.

» Energy demand in LAC will increase 75% by 2030.
  - Required investments to satisfy such demand will be around US$ 1,600 billion.

» Achieve sustainability of energy supply and rational use of energy resources
  - Regulatory and institutional frameworks
  - Pre-investment funding for project preparation

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Expected Impacts of Climate Change in LAC

» Andean inter-tropical glaciers likely to disappear over the next decades

» Changes in precipitation trends

» Continuous decline in natural land cover at very high rates

» Risk of significant species extinctions in many areas of tropical Latin America

» 50% of agricultural lands likely to be subjected to desertification and salinisation in some areas, by the 2050s

» Increase in the number of people experiencing water stress likely to be between 7 and 77 million by the 2020s

» The expected increases in sea-level rise (SLR), weather and climatic variability and extremes are very likely to affect coastal areas
IDB’s response: SECCI

» Approved by the IDB Board in March 2007

» A response to LAC’s request for an expanded role in sustainable energy and climate change in LAC

» IDB contribution to the new international clean energy investment framework

» Bank wide-initiative complementing the Bank’s existing efforts in energy

» Technical Cooperation, programmatic PBL and Investment Grant: support for IDB project lending and policy lending
IDB Sustainable Energy and Climate Change Initiative
2008 Activity

1. RENEWABLE ENERGY AND EFFICIENCY
18 TCs (US$10m) / 5 Loans (US$300m)

2. SUSTAINABLE BIOENERGY
8 TCs (US$4.2m) / 4 Loans (US$310m)

3. CARBON FINANCING
5 TCs (US$2.85m)

4. CLIMATE CHANGE ADAPTATION
3 TCs (US$1.4m)

5. MULTI-PILLAR
6 TCs (US$3.1m) / 2 PBL Loans (US$500m)

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Climate Investment Funds:
IDB’s leadership on Climate Change in LAC

» New funds for promoting low carbon and climate resilient growth and development

» CIF - Two Funds: Clean Technology (CTF) and Strategic Climate Fund (SCF)

» Purpose: to scale-up investments moving from project to programs

» Fill immediate financial gap for urgent actions until the post-2012 regime financial architecture is effective

» Accelerate public and private investments

» Amount: US$ 6.1 Billion

» Timeframe: now and for next 5 years
SECCI  Policy-based programs: Mexico and Colombia

» Country-specific Stern Report

» Strengthening Environmental Ministries responsible for CC policies

» Mainstreaming CC in priority sectors

» Development of CC plans for 15 states (Mexico)
SECCI’s Biofuel objectives

» Assess the economic viability of biofuels and bioenergy development.

» Provide sustainability assessment to mitigate potential adverse social and environmental impacts.

» Assist Latin America and the Caribbean in becoming a leader in “climate friendly” biofuels production by increasing research and expertise in second generation biofuels.

» Provide country-level policy assistance in support of biofuel development.

» Finance sustainable biofuel and bioenergy programs, including feedstock development, production facilities, and related infrastructure.

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Promoting Sustainable Biofuels

“The lesson learned is that we have to distinguish between the various biofuel options, looking very carefully at the different feedstocks, agricultural practices and production processes to ensure that only the most sustainable biofuels are promoted: the ones that offer climate benefits while protecting biodiversity and food security”
Key Trends in Biofuels

» Increasing demand given high volatility of oil prices and climate change awareness

» Moving target - scientific opinion continues to evolve

» Highly complex issue with a series of trade-offs

» Focus on sustainability standards, but no available tools for assessment so far
IDB Supporting Investment in Sustainable Biofuels

» Biofuels action plans and technical cooperation

» Partnership with the Roundtable on Sustainable Biofuels

» Biofuels Sustainability Scorecard for assessing biofuels projects
IDB’s role in knowledge sharing and regional cooperation

» Brazil-US MoU: IDB partnership to elaborate Biofuel Blueprints in Central America and the Caribbean

» Meso-American Biofuels working group
  - Sharing best practices and technology transfer
  - Action plans for regional initiatives for ethanol and biodiesel

» Regional stakeholder meetings with the RSB focusing on sustainability
IDB Support

» “Blueprints” and Action Plans for Biofuels
  - suitability for production
  - mapping of areas for feedstock development and production facilities
  - Regulatory and legal issues

» Technical cooperation
  - sustainability standards,
  - Clean Development Mechanism credits;
  - new technology utilization

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SECCI / SCF Scorecard Process

» High demand in biofuels

» Needed a way to screen for the “best” projects

» Sought internal and external feedback from academics, environmental NGOs, financial institutions, investors, and biofuels project developers in the US, EU, and in LAC

» Launched the Scorecard on 9th of September at 4th Annual Western Hemisphere Energy Security and Cooperation Forum, hosted at IDB.

» A 6-month broad public consultation period has begun with the posting of the Scorecard on the website
Scorecard Scope

» IDB knowledge product developed for use by financial institutions, investors/developers, and IDB at all stages of project lifecycle
  - Government entities, NGOs, and other members of biofuels community also expected to benefit from Scorecard

» Thinking tool for how to address environmental and social sustainability issues
  - Does not provide a single score
  - Fosters communication with clients about specific sustainability issues related to biofuels
  - Not a replacement for environmental and social due diligence

» Addresses complex issues in an organized and visual way
  - Color map allows user to assess sustainability of project, including key trade-offs
Scorecard Use

> Colors used to designate rating from excellent to unsatisfactory

> If red (unsatisfactory), project should not be pursued

> Promote discussions about sustainability issues at an early stage

> Framework for providing clients with guidance on sustainability throughout project lifecycle

> Already used to improve the sustainability of various biofuel projects

> Anticipate potential obstacles (future regulations, import restrictions, community response, etc.)

> Complimentary to environmental and social due diligence process

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