

Bioenergy and Water: Developing Strategic Priorities for Sustainable Outcomes  
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**How Can the Benefits of  
Bioenergy Be Delivered?  
IDB Support to Biofuels**

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# Content

- **The Inter American Development Bank (IDB)**
- **Latin American and the Caribbean (LAC)'s Potential for Biofuels**
- **Drivers of Biofuel Investments**
- **Tools for Sustainable Biofuels Financing**

# Who We Are: The IDB Group

**IDB**

Inter-American  
Development Bank

**IIC**

Inter-American  
Investment  
Corporation

**MIF**

Multilateral  
Investment Fund



## IDB

- Founded in 1959. It has 48 member countries, including 26 Latin American and the Caribbean (LAC) borrowing members
- Main source of multilateral financing in LAC for economic, social, and institutional development
- Average annual approval of \$11.9 billion,
- Grant financing approvals, including investment grants, reached a total of \$404 million

## IIC

- Pioneered the use of loans, grants and equity for small and medium-size enterprises (SMEs).
- Focuses on providing medium and long-term financing for these companies either directly or through local financial institutions

## MIF

- Promotes private-sector growth through grants and investments.
- Largest donor for Inclusive private sector development in LAC. Finances about 100 projects each year, with a total finance volume of about \$100 million

# IDB Strategic Priorities for LAC

Social policy  
for equity and  
productivity.

Infrastructure for  
competitiveness  
and social welfare.

Institutions for  
growth and  
social welfare.

Competitive  
regional and  
global international  
integration.

Protecting the  
**environment**,  
responding to  
climate change,  
promoting  
renewable  
energy and  
ensuring food  
security.

# IDB Support to Energy Sector

- The IDB helps member countries expand the coverage and quality of energy services such as electricity and natural gas.
- Finances programs to improve energy **efficiency**, foster cross-border energy **integration**, and diversify the energy matrix by sustainably exploiting **renewable and non renewable** sources
- **Sustainable Bionergy** viewed as viable option for low carbon component of energy matrix

# IDB Support Through the Public Sector

**Instruments:** Sovereign Guaranteed Loans & Technical Cooperation Grants

- **Policy dialogue enhancement:** Analytical work developed to assist governments in public policy and informed investment decisions for better working of the markets, correction of market failures and access to technology.
- **Investments:** Loans oriented towards ensuring long-term competitiveness of sector through the provision of public goods with high economic return, high coverage, and low level of distortions.
- **Financing of subsidized delivery of services.** When necessary, programs promoted to foster electricity access among small, poor populations mostly in remote areas.

# IDB- Support through Private Sector (1)

## Structured and Corporate Finance

- Finances large banks and private sector and public and mixed-capital entities in nearly all economic sectors in LAC.
- Provides loans from IDB's own resources and works with banks and institutional investors to participate on a co-financing basis
- Loans and Guarantees between US\$10.0 and US\$200 million
- Sectors: Extractive (oil & gas, mining, forest products) Productive (*agribusiness*, biofuels, cement, steel, chemicals and others) and Service (tourism, education, healthcare)
- Focus on supporting green (e.g. energy efficiency, co-generation, environmental impact mitigation) and social (e.g. training, housing, income inequality) components in projects and investments



# IDB- Support through Private Sector (2)

## Opportunities for the Majority (OMJ)



### OMJ projects seek to

- Increase productivity, bring low-income populations into the formal economy, create jobs, address market failures that raise costs for those least able to afford them
- Bring quality goods and services to the 360 million people in Latin America and the Caribbean who are at the Base of the Pyramid (70% of population)
- OMJ offers loans, guarantees, and grant technical cooperation
- Since 2008 OMJ-IDB invested US\$180 million and with donor participation up to US\$300 million



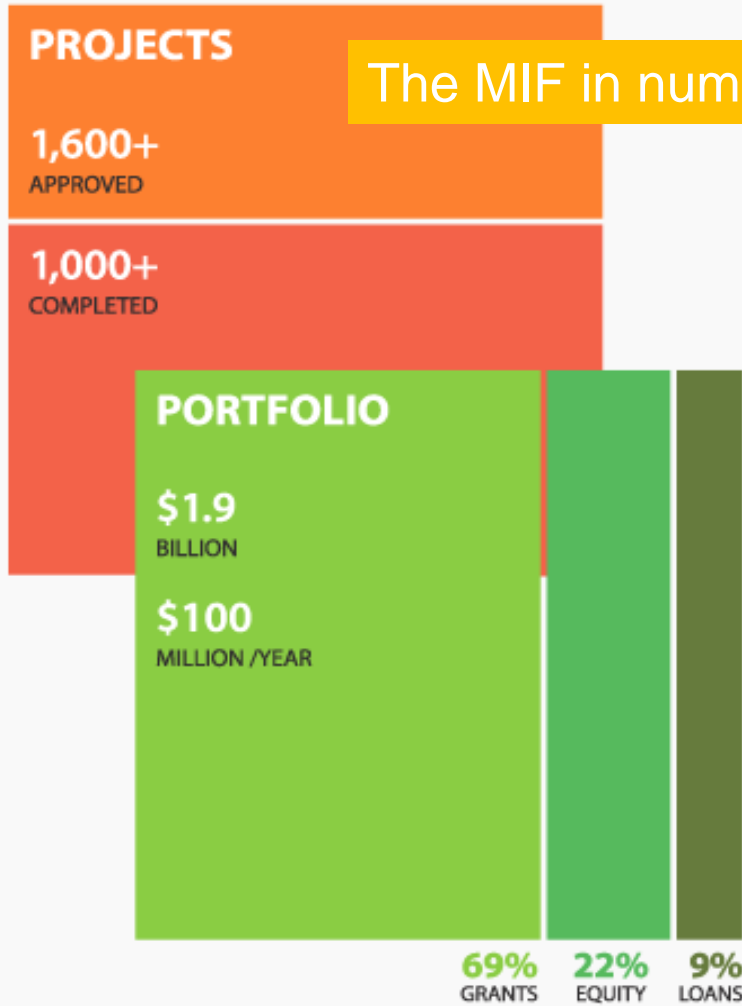
# **IDB- Support through Private Sector (3)**

## **Inter-American Investment Corporation (IIC)**

- Focuses on small and medium-sized companies that have difficulty accessing medium- and long-term financing
- Loans and investments for innovative, creative projects and enterprises with high developmental impact
- Provides direct loans, guarantees, equity investments, and credit lines to financial intermediaries.
- Catalyst for attracting technology, know-how, and additional project financing

# IDB- Support through Private Sector (4) Multilateral Investment Fund (MIF)

The MIF in numbers since 1993



Largest provider of technical assistance for private sector development in LAC

3 areas of focus: Access to Finance, Access to Basic Services, and Access to Markets and Capabilities

Projects are carried out in partnership with other organizations, who contribute a significant portion of the project costs

## LAC's Potential for Biofuels

- Latin America is uniquely positioned to be a top supplier of sustainable biofuels due to climatic, political, social and agricultural conditions
- Motivation from need to address air quality, improved energy security, less oil dependence, incentive of economically supporting agricultural /rural sectors
- Despite positives, investment and consumption in biofuels in LAC are not forthcoming as expected.
- Share in LAC production energy matrix is 12%, of which 6% is Brazil's share. Share in consumption is 17%, of which 11% is Brazil. (2011, EIA).

# Drivers of Biofuel Investments (1)

As with any other private initiative, it needs the right investment climate (Risks and Opportunities) to secure profit margins

- **Market (M)**: Predictable demand at the right prices derived from
  - Pricing of biofuels
  - Regulation - Mandates and goals
  - Export potential
  - Cost of non renewable energy sources- Oil/gas prices and other renewables
  - Supply chain response: car industry, fuel suppliers
- **Policy (P)**: A stable, certain, clear mid- and long-term policy environment: incentives; terms of trade/ trade agreements; subsidies to other sources. Governments play a crucial role in promotion of biofuels.

## Drivers of Biofuel Investments (2)

- **Cost Competitiveness (C)**: Availability of adequate land; labor; cost saving technology in feedstock production, processing, and distribution vs. other energy sources, and vs. biofuels prices; cost of compliance with sustainability safeguards.
- **Reasonable risk level (R)** : Feedstock prices and availability; yields, climate and other ag risks; immature technologies; potentially adverse environmental and social impacts of feedstock production for biofuels on natural resources. and on food security (reputational)
- **Financing (F)**: Terms for long term financing; cost of high initial investment; risk perception; macro/global economic climate

$$BI = f (M,P,C,R,F)$$

# Policy Implications

- **Stable policy framework**
- **Financing and supporting R&D in second and third generation; and in cost reduction technologies associated with the whole chain**
- **Labor training and communication to potential investors**
- **Technological transfer and extension to communities**
- **Communication campaigns to raise awareness of benefits to potential users**
- **Establishment or adoption of internationally recognized standards for sustainability and risk reduction**

# IDB Analytical Tools: The Scorecard

- **Objective:** To provide a tool for thinking through the complex environmental and social sustainability issues associated with biofuels from the field to the tank, encouraging higher levels of sustainability in such projects
- **Users**
  - Designed specifically for the private sector at the project level.
  - Could be used more broadly as a thinking tool for which criteria need to be assessed in biofuels development.
  - Designed to be useful for project developers, including people at all stages of production; financial institutions; private investors; and environmental and social safeguard reviewers



# IDB Biofuels Sustainability Scorecard

<b>Water management</b>	<b>%</b>
No irrigation required Rain-fed	
Efficient irrigation	
Standard irrigation	
Irrigation in water scarce region Water stress caused by project	
Water scarcity caused by project	
N/A	

<b>Total water requirements for project ***</b>
Only rain fed water used
More than 10% below global average
Equal to global average
More than 10% above global average
No use of wastewater in production

# IDB Analytical Tools: Hydro BID

## Regional Water Resources Simulation Model for Latin America and the Caribbean (Hydro-BID)

Integrated suite of water resources modeling tools.

This modeling system includes hydrology and climate analysis modules to estimate the availability (volumes and fluxes) of freshwater at the regional, basin and sub-basin scales

<http://www.youtube.com/watch?v=qlsqzWpJWwc>

[http://www.youtube.com/watch?v=T\\_sGitVeDgU](http://www.youtube.com/watch?v=T_sGitVeDgU)

# IDB Analytical Tools

**All sustainability factors not in the scope of the Scorecard should be taken into account for analysis**

- IDB's Sustainability and Safeguards Policies

<http://www.iadb.org/en/topics/sustainability/sustainability-and-safeguards-policies,1515.html>

- National Regulatory Frameworks for Biofuels

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