



Natural Resources Development Finance and GREEN Facility of JBIC

August 29. 2017
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COO, Senior Managing Director

Brief Profile

| | |
|----------------------------|---|
| Name | Japan Bank for International Cooperation (JBIC) |
| Establishment | Dec. 1950, as The Export-Import Bank of Japan |
| Governor | Akira Kondo |
| Capital* | JPY 1,391bil (USD 12.3bil) |
| Total Assets* | JPY 18,572bil (USD 164.8bil) |
| Net Assets* | JPY 2,525bil (USD 22.4bil) |
| Number of Employees | 672 |
| Overseas offices | 16 offices |

※In 1958, JBIC opened office in Rio de Janeiro (as the 2nd overseas office)

* Figures as of March 31, 2017 ※JPY112.68/USD

Government-owned Financial Institution

JBIC is a policy-based financial institution wholly owned by the Japanese government

Policy-based Finance

JBIC provides non-concessional financing to support Japanese companies' export and investment overseas.

Financial Instruments

- Export Loans
 - Import Loans
 - Overseas Investment Loans
 - Untied Loans
 - Equity Participations
 - Guarantees
- etc.

Main Missions

JBIC contributes to the sound development of Japan and the international economy and society by providing various types of financial support to meet the objectives of particular projects.

Promoting the overseas development and securement of resources which are important for Japan



Source: Marubeni Iron Ore Australia Pty. Ltd.

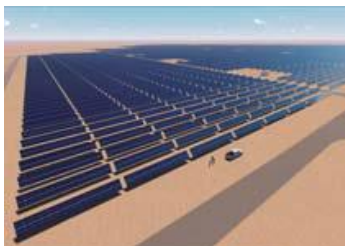


Source: Gas Chemical Limited



Natural Resources Development Finance

Promoting the overseas business having the purpose of preserving the global environment, such as preventing global warming



Source: Shams Ma'an Power Generation PSC



Source: Banco Nacional de Comercio Exterior, S.N.C.



Global action for Reconciling Economic growth and Environmental preservation (GREEN)

Natural Resources Development Finance



Financial Support to Various Phases of Projects



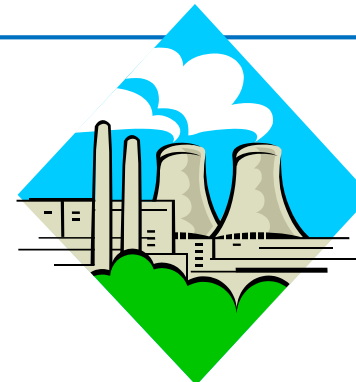
Acquisition of
Mining rights



Development
and Import of
Natural
Resources



Refinery/
Concentration/
Smelting



Infrastructure
Development
(Railway/Port/
Electricity, etc.)



Commitment to Energy & Natural Resources Projects in 5 Years

Total Committed Amount

:US \$ 127 Billion

Energy & Natural Resources Project

:US \$ 40 Billion

Energy &
Natural
Resources

32%

Figures as of March 31, 2017

JPY112.68/USD



Source: MODEC, INC.



Source: Nippon Steel & Sumitomo Metal Corporation



Source: Cordova Gas Resources Ltd.



Source: Sojitz Coal Resources



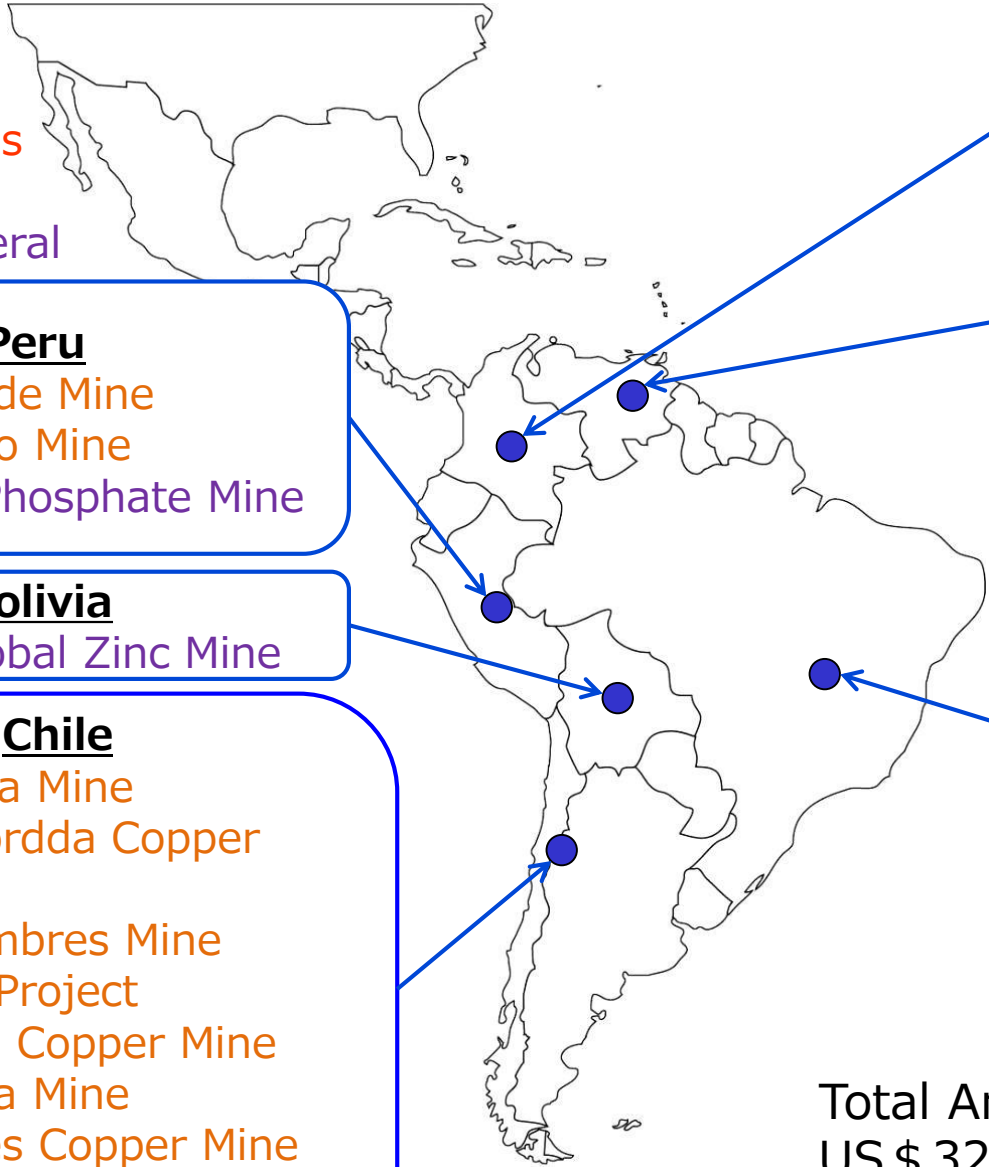
Source: PETROBRAS



Source: Marubeni Iron Ore Australia Pty. Ltd.

Major Projects in Latin America

- ▲ Oil
- Copper
- Natural Gas
- Iron Ore
- ▲ Other Mineral



Peru

- Cerro Verde Mine
- Quellaveco Mine
- ▲ Bayovar Phosphate Mine

Bolivia

- ▲ San Cristobal Zinc Mine

Chile

- Esperanza Mine
- Sierra Gorda Copper Mine
- Los Pelambres Mine
- Promoly Project
- Antucoya Copper Mine
- Escondida Mine
- Caserones Copper Mine
- Stock Acquisition of Anglo American Sur

Colombia

- Drummond Project

Venezuela

- METOR Methanol

Brazil

- ▲ Frade Oil Field
- NAMISA Mine
- MUSA Mine
- ▲ AMAZON Alumina Refinery/Aluminum Smelter
- ▲ CENIBRA Pulp
- ▲ Vale for rail/port logistics infrastructure

Total Amount in Latin America
 US \$ 32Billion
 (Brazil : US \$ 12Billion) **37%**

■ Oil & Gas Sector

- ✓ Oil Field: Barracuda ('00), EVM ('00), Albacora ('00), PDET ('05), REVAP ('06), Frade ('07)
- ✓ Gas Field: Urucu('97), Cabiunas ('00)
- ✓ FPSO*: Espadarte ('06), Gas Opportunity ('09), Tupi ('10), Guala ('11), Cernambi Sul ('12), Cernambi Norte ('13), Carioca ('14) , Tartaruga ('15)
- ✓ Drillship: P&M Drilling ('10)

* Floating Production, Storage and Offloading system

Urucu



Source: PETROBRAS

Cernambi Sul



Source: MODEC, INC.

■ Mining and Metals Sector

- ✓ Iron Ore: NAMISA ('08), MUSA ('11)
- ✓ Niobium: CBMM ('12)
- ✓ Aluminum: Import loan to ALBRAS ('05), ALUNORTE expansion ('06)
- ✓ Vale for Rail/Port Logistics Infrastructure ('06)

■ Paper/Pulp Sector

- ✓ CENIBRA expansion ('95)
- ✓ Acquisition of CENIBRA ('01)

CBMM



Source: Nippon Steel & Sumitomo Metal Corporation

CENIBRA



Source: CENIBRA

A photograph of an offshore wind farm in the ocean. Several white wind turbines are visible, extending into the distance. The sky is clear and blue, and the water is a deep blue. A white text box is overlaid on the image.

GREEN Facility of JBIC

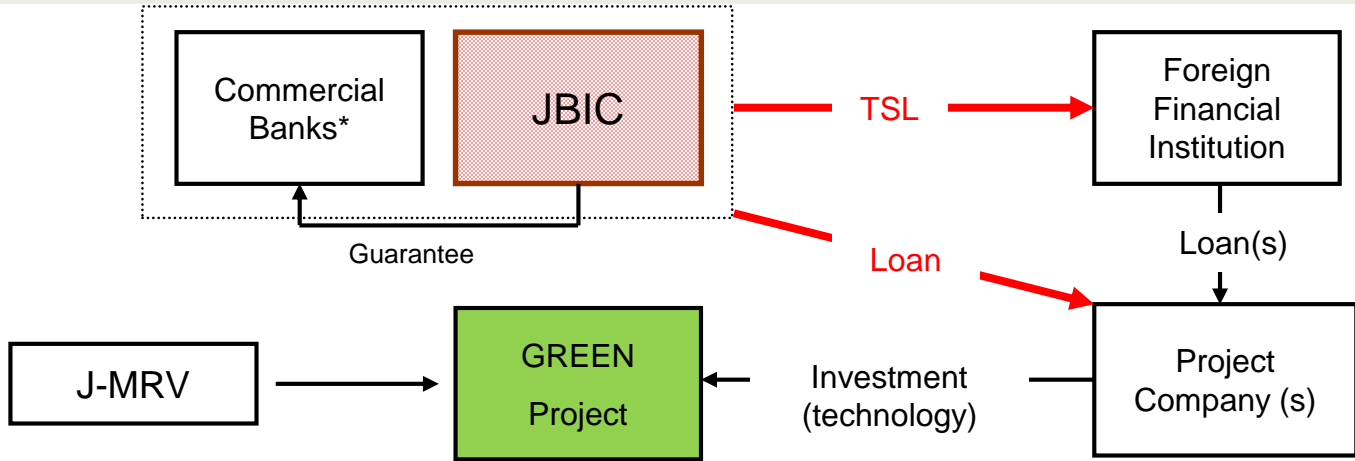
Renewable Energy Development (GREEN Facility)

General Features – Untied Loans/ Equity in the Green Sector

| | |
|-------------------|--|
| Requirement | Eligible projects aimed at preserving the global environment and accepting J-MRV* for calculating and monitoring GHG emission reduction impact |
| Financial Scheme | Two Step Loan (TSL), Loan to Project Company, Equity |
| Eligible Entity | Foreign Government, Governmental Agencies, Local Governments, Public Enterprises, Foreign Financial Institution, Multilateral Institution |
| Eligible Projects | Renewable Energy, Energy Efficiency and Other Projects |

*JBIC's Original Methodology for Measurement, Reporting and Verification

Typical Structure

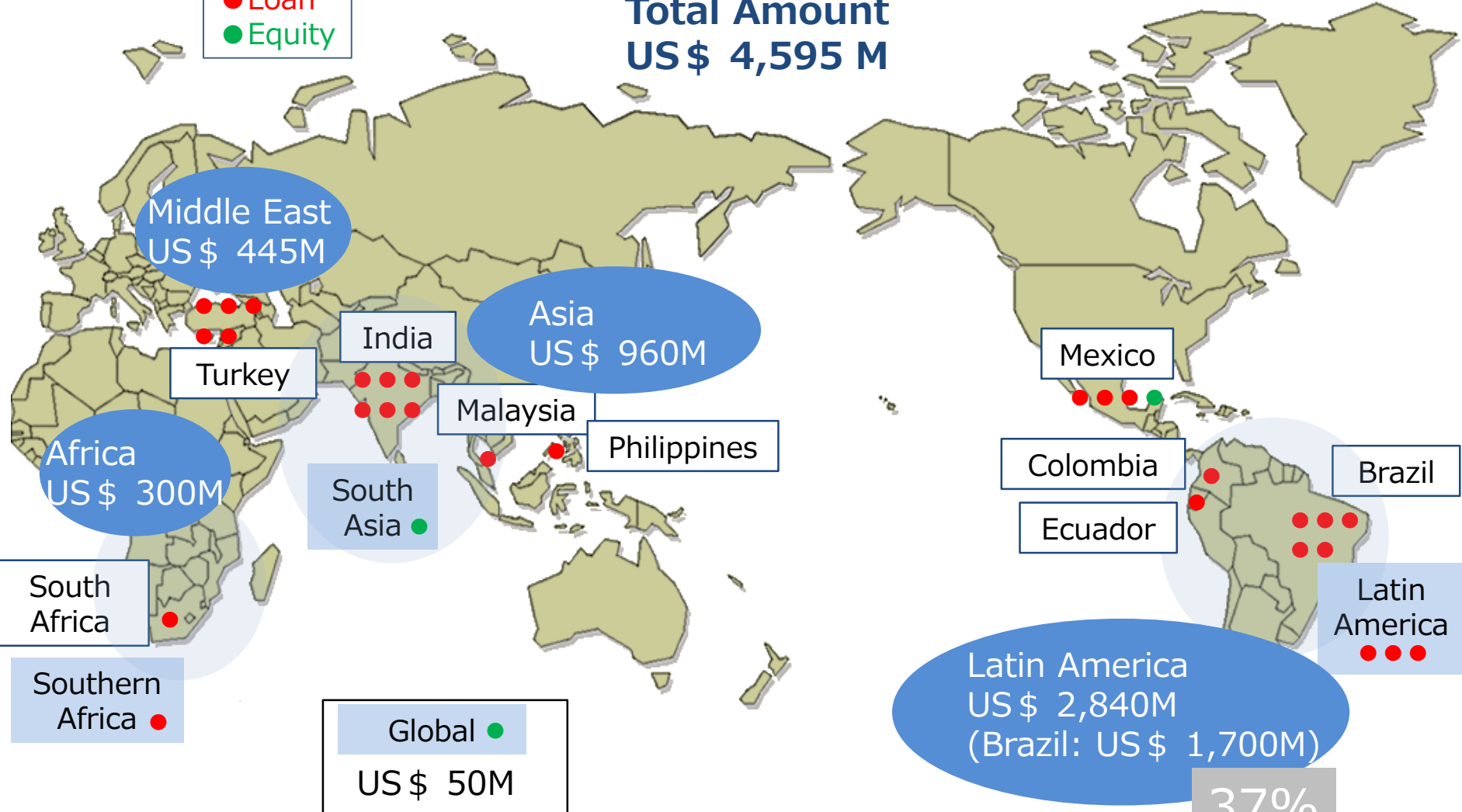


*Japanese banks or branches of foreign banks in Japan

Financing for Renewable Energy & Energy Saving Projects

● Loan
● Equity

Total Amount
US\$ 4,595 M

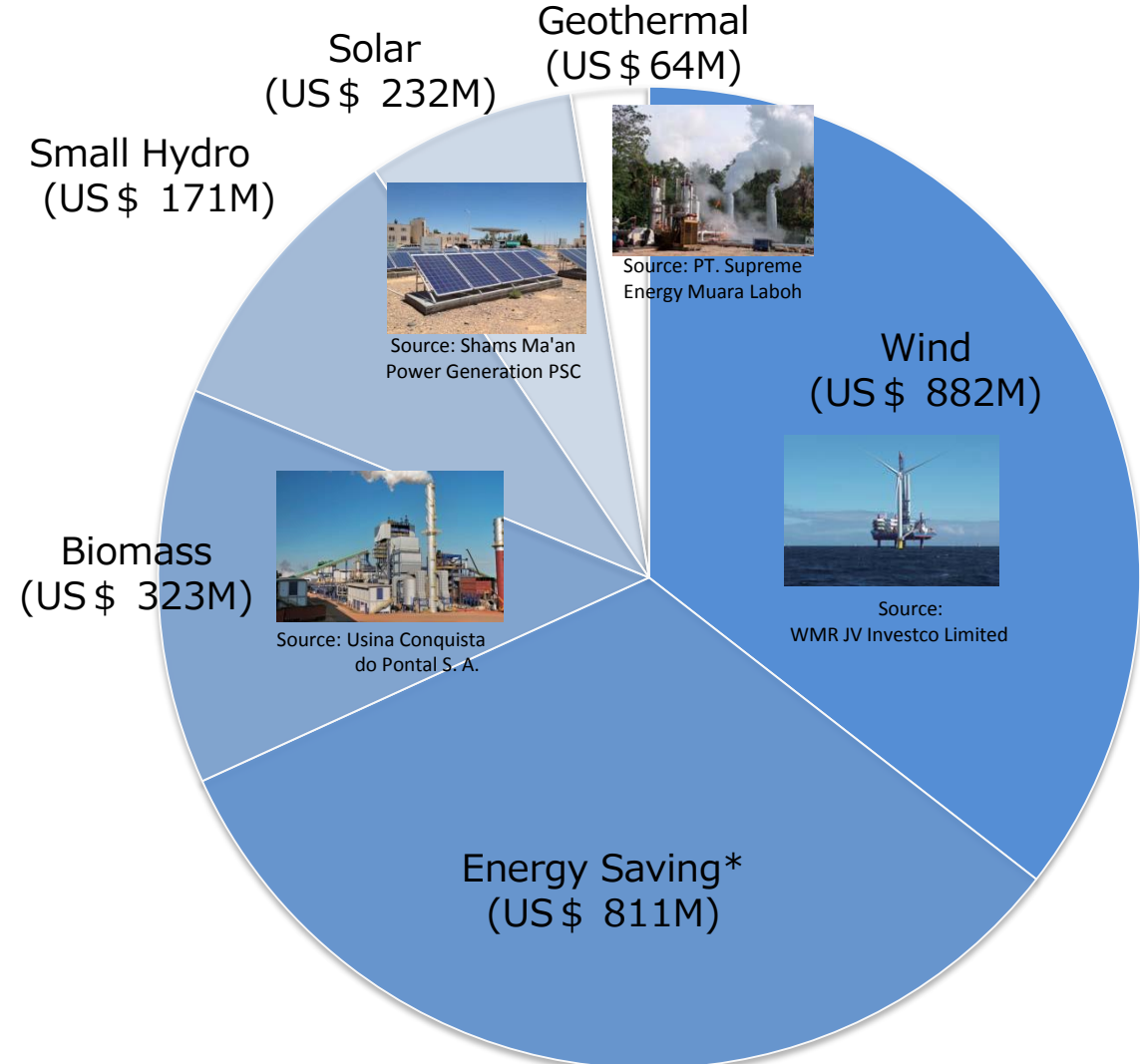


Latin America
US\$ 2,840M
(Brazil: US\$ 1,700M)
37%

As of July 31, 2017

GREEN: Approved Sub Loan Projects

Approved Amount of Sub Loan Projects by Sector
(Total Approved Sub Loan: US \$ 2,480 Million)



Number of Approved Sub Loan Projects by Sector

| | |
|----------------|-----------|
| Wind | 35 |
| Solar | 21 |
| Small Hydro | 14 |
| Energy Saving* | 6 |
| Biomass | 6 |
| Geothermal | 2 |
| Total | 84 |

As of May 31, 2017

As of May 31, 2017

*Combined Heat and Power(CHP) etc.

GREEN Track Record in LAC region



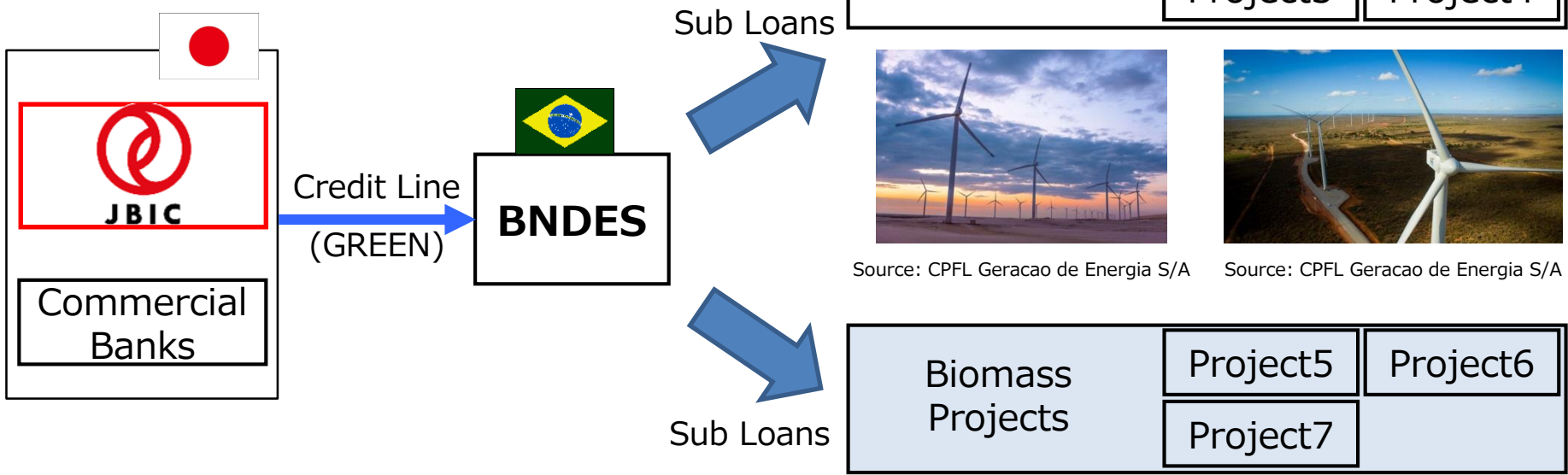
| Country | Finance Close | Borrower in Latin America | Amount (US \$ M) |
|--|---------------|---|------------------|
| Andean Region | Mar. 2011 | CAF (Andean Development Corporation) | 300 |
| Brazil  | Mar. 2011 | BNDES | 300 |
| Mexico | Oct. 2011 | Banco Nacional de Comercio Exterior (BANCOMEXT) | 100 |
| Central Americas | Dec. 2011 | BCIE (Banco Centroamericano de Integración Económica) | 100 |
| Brazil  | Oct. 2012 | Petrobras | 1000 |
| Colombia | Mar. 2013 | Banco de Bogota | 100 |
| Mexico | Sep. 2013 | BALAM FUND* | 40 |
| Brazil  | Mar. 2014 | BNDES | 300 |
| Mexico | Jul. 2014 | Banco Nacional de Comercio Exterior (BANCOMEXT) | 100 |
| Brazil  | Mar. 2015 | BNDES | 150 |
| Brazil  | Dec. 2015 | BNDES | 100 |
| Mexico | Mar, 2016 | Banco Nacional de Comercio Exterior (BANCOMEXT) | 100 |
| Andean Region | Apr, 2016 | CAF (Andean Development Corporation) | 100 |
| Ecuador | Feb, 2017 | Republic of Ecuador | 50 |

*Equity

GREEN Facility for BNDES

- GREEN Facility to BNDES for renewable energy projects
 - ✓ no.1: 300 mil USD (Mar, 2011) : 7 Sub-loans
 - ✓ no.2: 300 mil USD (Mar, 2014) : 11 Sub-loans
 - ✓ no.3: 150 mil USD (Mar, 2015) : 1 Sub-loan
 - ✓ no.4: 100 mil USD (Dec, 2015) : 1 Sub-loan

GREEN Facility to BNDES : no.1



Source: CPFL Geracao de Energia S/A



Source: CPFL Geracao de Energia S/A

**CO2 emissions reduction:
113,568 tons per year**



Source: Usina Conquista do Pontal S. A.



Source: Rio Claro Agroindustrial S. A



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Agradecemos sua atenção!



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