Financing Renewable Energy: The Role of Ex-Im Bank

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U.S. Ex-Im Bank

► Independent agency of the U.S. government established in 1934 to finance the export sales of U.S.-made goods and services

► Provides Loan Guarantees, Export Credit Insurance, Working Capital Guarantees, and Direct Loans.

► Ex-Im Bank’s support for renewable energy and environmental exports mandated in its Congressional Charter since 1992

► FY2010 tripled its portfolio of renewable energy projects to $330 million, and doubled this to $721 million in FY2011.
  – Created the Office of Renewable Energy & Environmental Exports in 2008
  – Created a Renewable Energy Express Program in 2010

► Environmental Exports Program offers enhancements:
  – Terms of up to 18-years for renewable energy projects
  – Up to 30% local cost support within the U.S. scope of supply.
  – Capitalization of interest during construction

► Ex-Im Bank financing is usually the most cost-effective source of financing for international customers to purchase U.S.-made technology
Direct Loan

- **Direct Loans** made by Ex-Im Bank to a foreign buyer

- Fixed interest rates based on a 1% spread over Treasury notes
  - Interest rate for an 18-year Direct Loan is 2.95% (as of November 14, 2012)

- The international borrower submits the Direct Loan application.

- Ex-Im Bank requires the buyer to make a cash payment to the exporter equal to at least 15% of the U.S. supply contract.
  - 15% cash payment can either be borrowed from a lender or the exporter, or be from the buyer’s own funds.

- Exporter paid with disbursement L/C or buyer is reimbursed

- A negotiated credit agreement required for a Direct Loan

- Shipping must be made on U.S.-flag vessel (except air shipments)
Case Study: Gas Verde, S.A. - Brazil

► Ex-Im Bank approved a 12-year $48.5 million Direct Loan in May 2012 to finance the export of equipment and services for a biogas treatment facility in Rio de Janeiro.

► Ex-Im Bank’s current 12-year fixed-interest Direct Loan in U.S.$ = 2.43%

► Gas Verde S.A. will install U.S. biogas technology to process raw landfill gas into high-grade methane to be sold to a Petrobras refinery under a 15-year sales contract.

► The exporter is FirmGreen®, of Newport Beach, CA who along with its subcontracted companies supplied proprietary biogas-cleaning equipment run by FirmGreen’s patented VerdeControls™ operating software and other related services.

► Repayment for the loan is based on the creditworthiness of the main shareholders of Gas Verde S.A. who will provide the repayment guarantee for the loan.

► The new biogas plant will capture and treat 20,000 normal cubic meters per hour (nM³/hr) of raw landfill gas to produce 9,000 nM³/hr of fuel-grade biomethane gas.

► Reclamation of the biogas at the site will significantly reduce passive landfill emissions to the atmosphere.

► Biogas from the Novo Gramachão plant will directly replace an estimated 10% of the natural gas derived from fossil-fuel sources that is consumed at the Petrobras refinery.

► One of the world’s largest solid-waste landfills, Jardim Gramacho was the subject of “Waste Land,” an acclaimed documentary nominated for an Academy Award in 2011.
Case Study: Gamesa – Cerro de Hula, Honduras

► Ex-Im Bank’s $159 million 18-year fixed rate Direct Loan to the project sponsor, Energía Eólica de Honduras S.A., (“EEHSA”) financed its purchase of 51 Gamesa G87 2-MW wind turbines for the 102-MW Cerro de Hula project.

► EEHSA has a 50-year concession to operate the project, and 20-year PPA with the Honduran state-owned utility ENEE.

► The 18-year Direct Loan has a tailored semi-annual repayment term with a weighted average life of 10.5 years = 21-year loan term.

► The project will be the largest in Central America, and will generate 6% of Honduras power, and is the first utility-scale wind project in Honduras.

► The wind turbines will be manufactured at Gamesa’s Pennsylvania manufacturing facilities.

► The project company is owned by Mesoamerica Energy is a renewable-energy company that develops, builds, owns and operates wind projects and other renewable-energy facilities in Central and Latin America.
Loan Guarantee

**Guaranteed Loans** made by commercial banks (U.S. or foreign) to a foreign buyer with a 100% *unconditional* repayment guarantee from Ex-Im Bank

- Guarantee covers 85% of the U.S. content of the transaction.

- *Negotiated* interest rates, often floating rates based on spread over 6-month U.S. dollar LIBOR rate; banks can also arrange fixed interest rates

- Loan fully transferable, can be securitized

- Banks often finance the 15% required cash payment

- Guarantee available in major foreign currencies

- Ex-Im Bank’s Local Currency Loan Guarantees can in turn support capital market issues in local currency
Ex-Im Bank + India

- Ex-Im Bank is the first international financing institution to approve a solar-power project under India's National Solar Mission, and one of the first for Gujarat.

- **Reliance Power Ltd.** - 16.5-year Ex-Im Bank Direct Loan of $84.3 million to finance the 40MW Dahanu Power Project in Rajasthan using First Solar modules under the National Solar Mission.

- In July 2012, **Solar Field Energy Two**, wholly owned by Kiran Energy Solar Private Power Ltd., was approved for a $23 million Loan for a 20-megawatt (MW) solar facility in Rajasthan.

- In July 2012 **Mahindra Surya Prakash**, owned by Kiran Energy and Mahindra Holding Ltd., was approved for a $34.3 million Loan for two solar facilities (one 20 MW and one 10 MW) in Rajasthan.

- Ex-Im Bank 12-year Loan Guarantee to **PNC Bank** for a $19 million loan to **ACME Solar** to finance First Solar thin-film modules for 15MW project in Gujarat; 25-year PPA with GUVNL.

- Ex-IM Bank authorized a $16 million 16.6-year Direct Loan in July 2011 to finance a 5MW solar power project in Rajasthan for **Azure Power** that used First Solar thin-film modules.

- In May 2012 Ex-IM Bank authorized a $70.4 million 18-year Direct Loan to finance a 35MW solar power project in Rajasthan for **Azure Power**

- Ex-Im Bank authorized financing for $3.7 million **corporate loan** to **Universal Solar** for a 2MW ground-mount PV project in Ahmedabad using Miasole thin-film modules.
Ex-Im Bank’s $80 million 16.5 year fixed rate Direct Loan financed the purchase of Areva’s concentrated solar technology to Reliance Power in Rajasthan, India.

The project, "Rajasthan Sun Technique Energy Private Limited," is a subsidiary of Reliance Power and is being co-financed by the Asian Development Bank and FMO, the Dutch development bank.

Reliance Power was one of the successful bidders to develop 470 MW of concentrating solar power capacity under the first phase of the NSM.

This project uses a concentrated solar power technology known as compact linear Fresnel reflector (CLFR) from AREVA Solar Inc., Mountain View, CA.

This project (along with the Kogan Creek Solar Project in Australia) is the first to use technology of this kind from AREVA Solar on a large commercial scale.

“Our strategic tie-up with Ex-Im is unmatched in terms of its scope and size. This partnership plays an important role in meeting India's growing energy needs."

- Jayarama P. Chalasani, Chief Executive Officer of Reliance Power
Ex-Im Bank provided a 15-year Loan Guarantee in Euros worth U.S. $6.4 million to Raiffeisen Bank (RBI International Finance) to finance the export of 15 Northern Power™ 100 kilowatt permanent magnet direct drive wind turbines to community wind projects in Italy.

ARG Energie S.R.L. of Avelino, Italy is the borrower on the transaction with PurEnergy, a leading wind energy developer based in Bisaccia, Italy, providing the installation, operation, and maintenance of the turbines.

This transaction represents the largest-ever U.S. export of small wind turbines!

This transaction, processed under the Bank’s Renewable Energy Express Program, marks the first time Ex-Im Bank has financed a community wind power project supported on a project finance basis.

The Italian Government has created an incentive program to promote the expansion of grid-connected small wind power projects under 200 kilowatts.

Energy produced by the small wind projects is eligible for an attractive feed-in-tariff price that is fixed for 15 years.
Northern Power – Italy Community Wind
Case Study: Jeoden Geothermal - Turkey

- Ex-Im Bank approved a $1.5 million Loan Guarantee in 2011 to finance the export of 3 modular Pratt & Whitney PureCycle geothermal power units.

- *Jeoden Elektrik*, the project sponsor, is an Istanbul-based company formed in 2010 to develop, construct, own, and operate renewable energy projects.

- *Jeoden* will own and operate a 750kW geothermal power plant project in Sarakoy, Denizli, Turkey.

- Electricity generated by the project will be sold under a 10-year PPA to TEDAS, the Turkish state-owned distribution company.

- The Turkish Renewable Energy Law provides a 10-year official feed-in-tariff of 10.5 U.S. cents per kW guaranteed by the Ministry of Energy.

- *World Business Capital* made the Loan with repayment guaranteed under Ex-Im Bank’s Medium-Term Insurance program.

- The loan was made to *Jeoden* on a corporate finance basis.
Case Study: - Generadora Trasandina - Chile

► Ex-Im Bank approved a 10-year $1.9 million Loan Guarantee in 2011 to finance the export of equipment for a biogas-to-energy system to Generadora Trasandina, S.A. of Chile

► The exporter, Applied Filter Technology, Inc. of Snohomish, WA, custom designs, installs and operates biogas-to-energy systems.

► Generadora Trasandina, S.A. will use the equipment in the “Proyecto Central Los Colorados” to capture methane gas from a municipal landfill to generate electricity.

► The electricity generated by the project will be sold under a 10-year PPA to KDM Energia y Servicios.

► The electricity from the project provides power to hundreds of homes and businesses in the City of Til-Til, in Central Chile.

► PNC Bank made the Loan with repayment guaranteed under Ex-Im Bank’s Medium-Term Insurance program.
Case Study: Barbados Solar Roof Project

► Ex-Im Bank provided a 10-year Loan Guarantee to PNC Bank to finance a 1.4MW rooftop-solar project

► Sustainable (Barbados) Recycling Centre, Inc. will use the electricity to power SBRC’s operations.

☼ SBRC is wholly-owned by Williams Industries.

► This project one of the largest-ever Caribbean solar roof projects.

► The project provides significant savings in electricity costs.

► SolarWorld (U.S.) supplied the solar modules
Williams Industries Barbados: Roof-Top Solar
Export Credit Insurance

Enables U.S. exporters to offer short- and medium-term credit directly to their customers, or for banks to insure credit lines and L/Cs.

Export credit is an attractive substitute to cash-in-advance, letters of credit and costly local bank financing.

Insures credit repayments up to 180 days from date of importation of the goods; capital goods terms of 360 days-7+ years.

► Ex-Im Bank offers both Multi-buyer and Single-Buyer Insurance

Process:
1. The U.S. supplier submits the application along with the required information to establish a credit limit for the foreign customer.

2. Information requirements for the foreign buyer credit limits:

► $10,000 credit - a favorable trade or bank reference.

► $10,000-$50,000 credit - a current credit report

► $100,000-$300,000 credit a current credit report + favorable bank or trade reference.

3. Ex-Im Bank’s Loan Officer analyzes the application and makes a decision on the amount of credit to be supported.
Case Study: Wireless Energy - Chile

► Sunwize Technologies Inc. is using Ex-Im Bank’s Short-Term Insurance to offer “open account” credit to customers worldwide.

► Sunwize exports both modules and turnkey solar power systems.

► Sunwize use of Ex-Im Bank Insurance is supporting their growth in exports as financing to overseas dealers enables financing to their customers, and projects.

► Wireless Energy Chile is using a $300,000 180-day credit line from Sunwize to finance their expanding operations, and to provide financing to their customers.

▪ Cost to Wireless Energy Chile for the 180-day credit line = 1.15%

► Financing is often THE critical factor in financing export sales, open account credit has advantages for international buyers of U.S.-made equipment:

▪ “Supplier credit” attractive substitute to buyer using L/Cs

▪ Interest rates high in many international markets

▪ Increase order quantities to existing customers/distributors
Case Study: Southwest Windpower

- *Southwest Windpower, Inc.*, exports wind turbines to distributors and customers in Turkey, and worldwide.

- Ex-Im Bank’s Short-Term Credit Insurance enables *Southwest Windpower* to offer “open account” credit terms to its distributors that enables them to place larger orders.

- Credit terms can range up 360-days open account; longer terms from 2-18 years also available under Ex-Im Bank’s Long-term programs.

- Replaces bank financing and payment by L/Cs, enables customers to offer credit to their customers.

- The insured receivable also support *Southwest Windpower’s* working capital needs.
Working Capital Guarantee

► Ex-Im Bank provides 90% repayment Guarantee for working capital loans, revolving or transaction based, made by commercial lenders to small businesses to finance export sales.

► The Working Capital Guarantee serves as the collateral to the commercial lender by mitigating the risk inherent when the source of repayment for the loan is an overseas contract.

► Enables exporters to finance materials, labor, and overhead to produce goods/services for export.

► Enables exporters to cover standby letters of credit for bid and performance bonds, or payment guarantees.

► Enables the exporters to finance foreign sales receivables.

► Most Working Capital Guarantees provided by Delegated Authority Lenders (see www.exim.gov for a list) without prior Ex-Im Bank approval.

► In FY 2011, Calisolar, Amonix, Suniva, Miasole, Southwest Windpower, and others used this program to finance production for export sales.
Conclusion

► Ex-Im Bank: top priority to support renewable energy & environmental exports

► Ex-Im Bank supports short, medium, and long-term financing to *creditworthy* international customers, and working capital guarantees to U.S. exporters

► Ex-Im Bank often plays a critical early-stage role in helping small clean tech companies finance their operations.

► With Ex-Im Bank’s early-stage intervention these companies can grow their international business, increase profitability, and ultimately attract significant equity investment.

► Ex-Im Bank is interested in any size project

► We will work with you to create “bankable” projects

► We welcome your projects and your ideas!

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