

An overview of the North American Development Bank and its involvement in the Renewable Energy sector



NAPCO Meeting
Scottsdale, Arizona
January 17, 2013

The North American Development Bank (NADB)

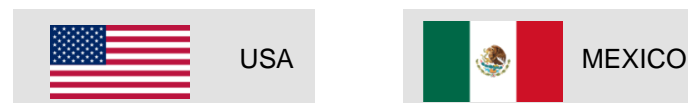


NADB

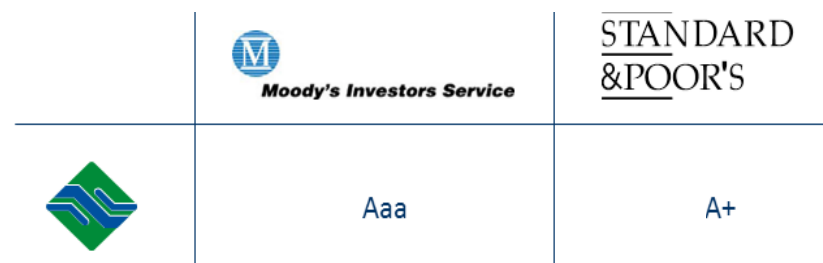
1. The NADB was established in 1994 under the auspices of the North American Free Trade Agreement (NAFTA) between the United States and Mexico.
2. One of NADB's objectives is to facilitate financing for environmental projects along the US-Mexico border region.
3. NADB also promotes sustainable development among the communities throughout the region.

Structure

NADB is capitalized and governed equally by the governments of both the United States and Mexico.



NADB has a Aaa/ A+ credit rating



NADB PROGRAMS

Loan

- Competitive fixed or floating rates
- Focuses on the financial viability of projects (credit risk analysis, source of repayment, collateral and guarantee structure)

Technical Assistance

- Support project development with regards to the closing of financing, project design, related development studies, and project bidding

Eligible Sectors

Water and Sewage

- Potable water treatment plants
- Sewage and wastewater treatment
- Water conservation
- Storm drainage

Residential, industrial and hazardous waste

- Landfills
- Recycling
- Equipment
- Toxic waste disposal

Air Quality

- Street paving
- Pavement rehabilitation
- Road bypasses
- Urban mass transit systems
- Border crossings

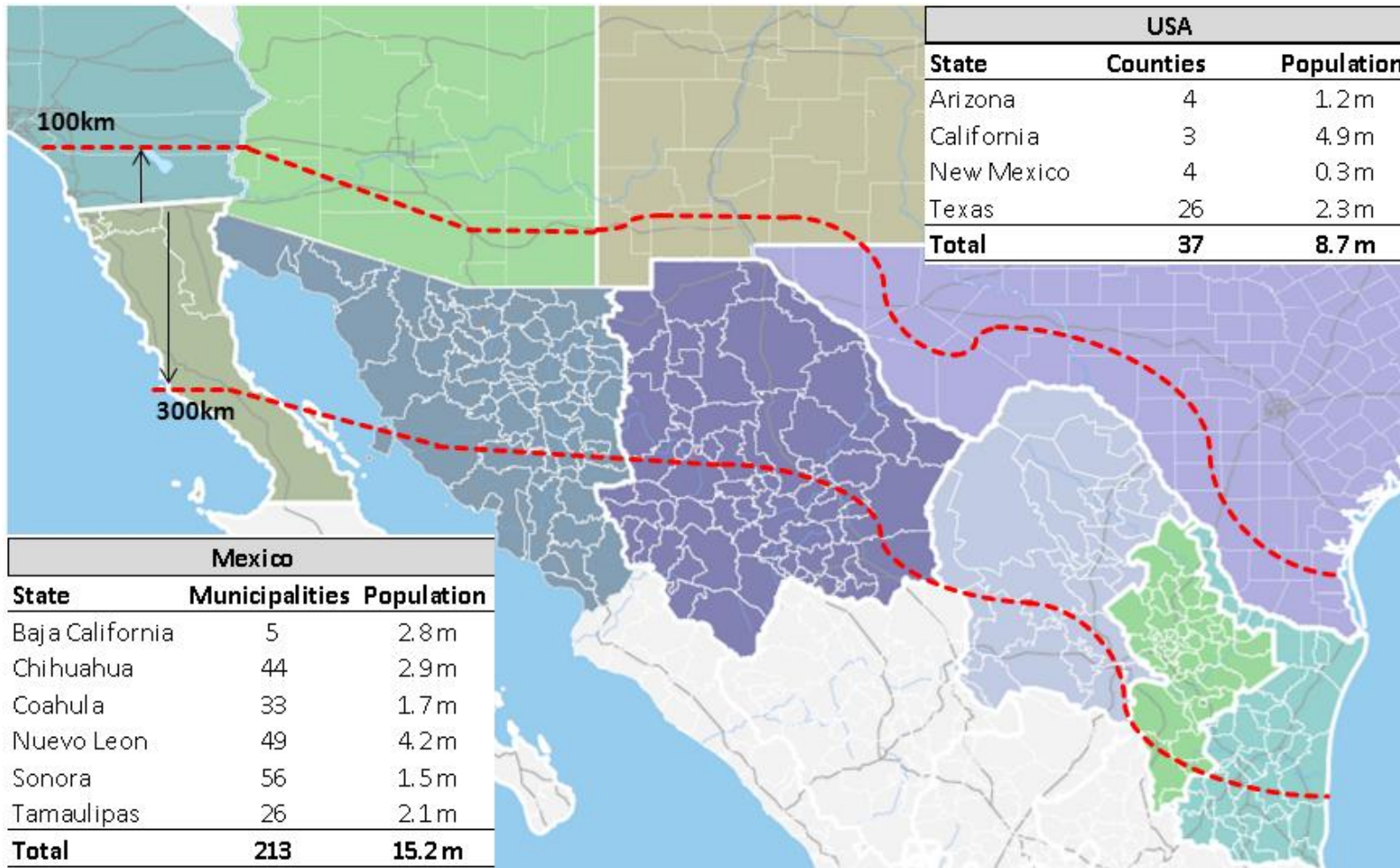
Renewable Energy

- Wind
- Solar
- Hydroelectric
- Geothermal
- Bio-fuels
- Biomass
- Methane capture

Energy Efficiency

- Public lighting
- Equipment replacement
- Water efficiency programs

NADB Jurisdiction



The North American Development Bank (NADB)

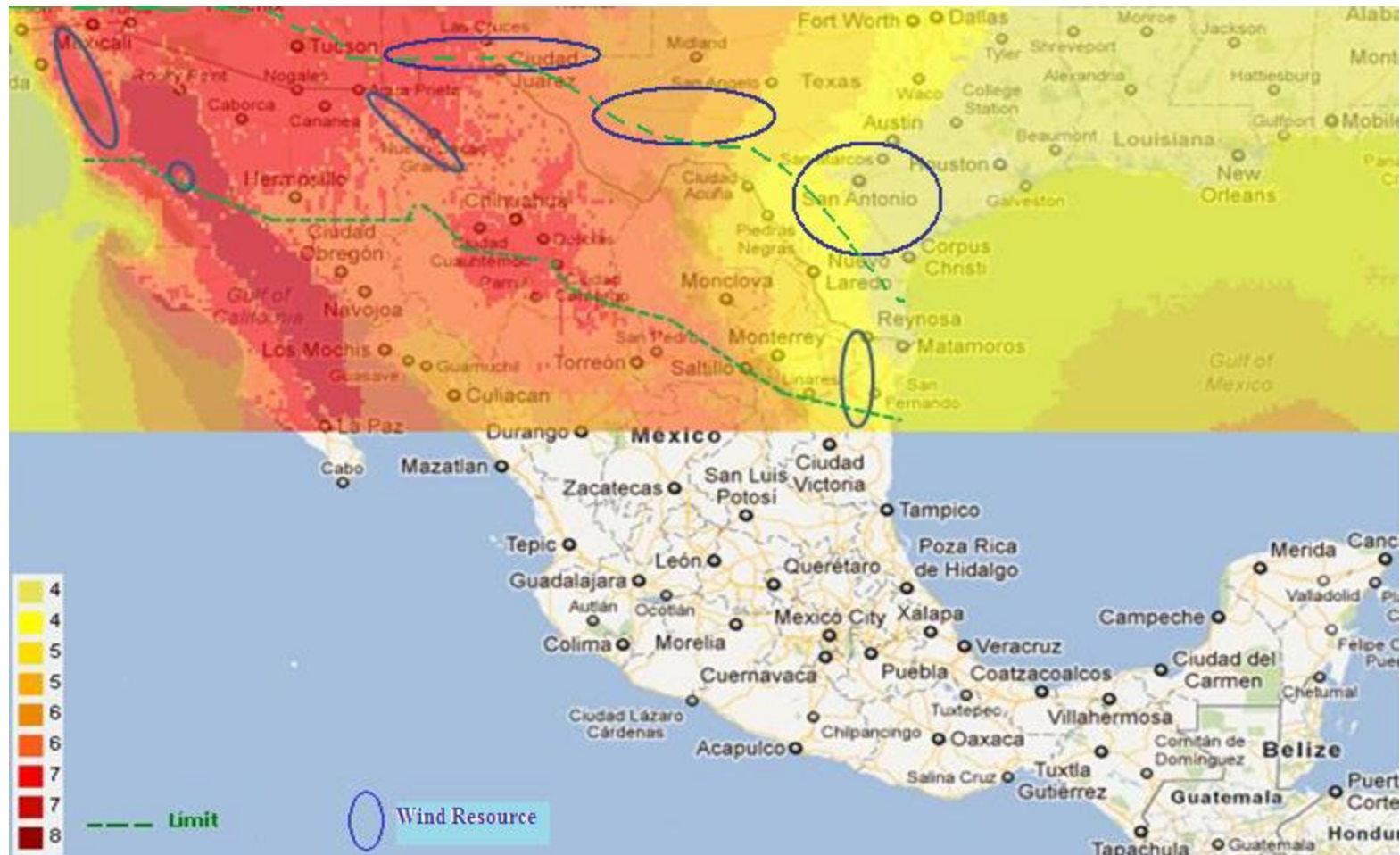


NADB's advantages for the financing of renewable energy projects include:

- Loan terms of up to 25 years:
 - Usually it will be 2 - 3 years less than the term of the PPA.
- Competitive financing:
 - Attractive fees/commissions and competitive rates.
- Fixed and variable rates and both USD and MXN loans.
- NADB's experience in the RE sector allows the Bank to provide guidance throughout the project in subjects related to legal, financial, technical, etc.
- NADB works together with some of the most experienced companies in the sector, including:
 - Garrad Hassan
 - BEW Engineering
 - Chadbourne and Parke
 - Navigant
 - Black & Veatch
 - Large and small sponsors (i.e. Utilities)

Mexico – USA Border Region and The RE Sector

- One of the world's richest areas in terms of RE resources



Source: National Renewable Energy Laboratory

Mexico – USA Border Region and The RE Sector (cont'd)



There are various sources for the financing of RE projects, which include:

- Development and commercial banks, both national and international
- Private equity, either subordinated debt or pure equity play:
 - Through sponsors
 - Through equipment suppliers
- Partners who can be at the same time the off-takers
- Investment funds (Macquarie, Conduit, etc.)
- Debt issuance (USA)
- EPC equity funding
- Sovereign Funds

NADB's Project Financing



- NADB's max loan amount is the lesser of the following:
 - 85% of the total project cost
 - USD\$182M for public sector projects and \$110M for private.
- NADB sizes and amortizes debt based on the project's expected cash flows.
- NADB incorporates a number of variables in its financial models to maximize a project's debt. These models allow the Bank to analyze the expected cash flows.

Detalles del Proyecto	
Nombre	Proyecto A
Turbinas	Marca X
Capacidad de la Turbina	2 MW
Cantidad	40 Turbinas
Tamaño del Proyecto	80 MW

Opciones	
Escenario de Probabilidad	P99
Reserva de Cobertura de Deuda	Carta de Crédito
Desembolsos	Pari Passu

Detalles de Ingresos	
Precio PPA	\$ 125
Inicio de PPA	Ene-13
Término de PPA	Mar-33
Incremento anual de la tarifa de PPA	4%

Producción de Energía		
Escenario de Producción	10 Yr	1 Yr
P50	25.0%	24.5%
P75	24.0%	23.5%
P90	23.0%	22.5%
P95	22.0%	21.5%
P99	21.0%	20.0%
Factor de Planta de Acuerdo a Escen	21.0%	
Disponibilidad		
Factor de Disponibilidad	95.0%	
Degradación Anual	1%	
Estacionalidad		
Trimestre 1	23%	
Trimestre 2	33%	
Trimestre 3	26%	
Trimestre 4	18%	

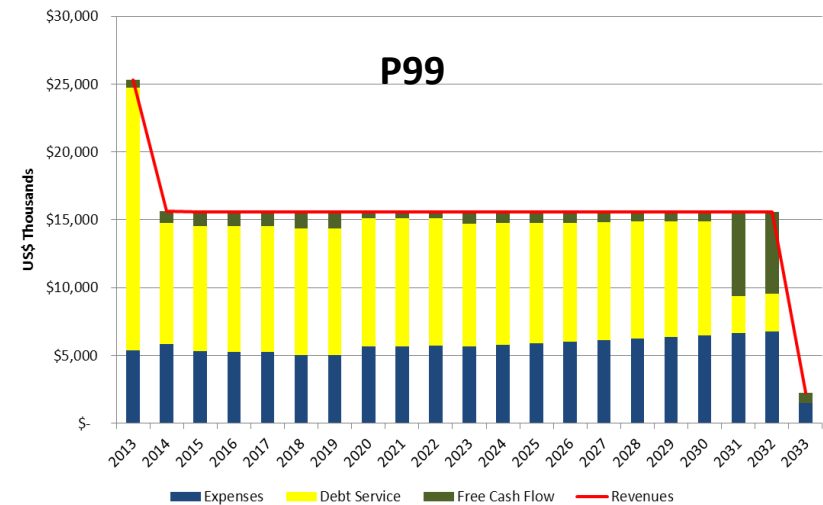
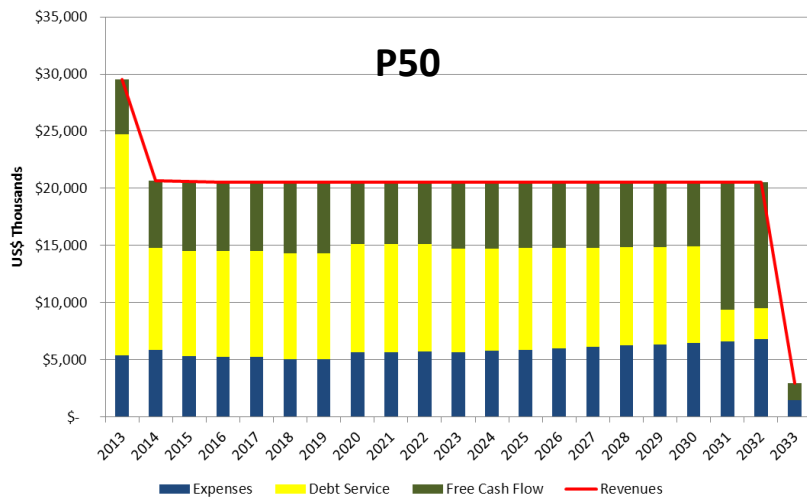
Resultados	
Deuda	
Total de Deuda (miles de USD)	\$ 10,000
% del Costo Total del Proyecto	60%
Cobertura de Deuda	
Promedio	1.40x
Mínimo	1.40x
Cobertura de Intereses	
Promedio	10.50x
Mínimo	2.13x
PPV	12.81x

Revisión	
Desembolso Completo	Verdadero
Cobertura de Deuda	Verdadero
Amortización Completa	Verdadero
Revisión Completa	Verdadero

NADB's Project Financing (cont'd)



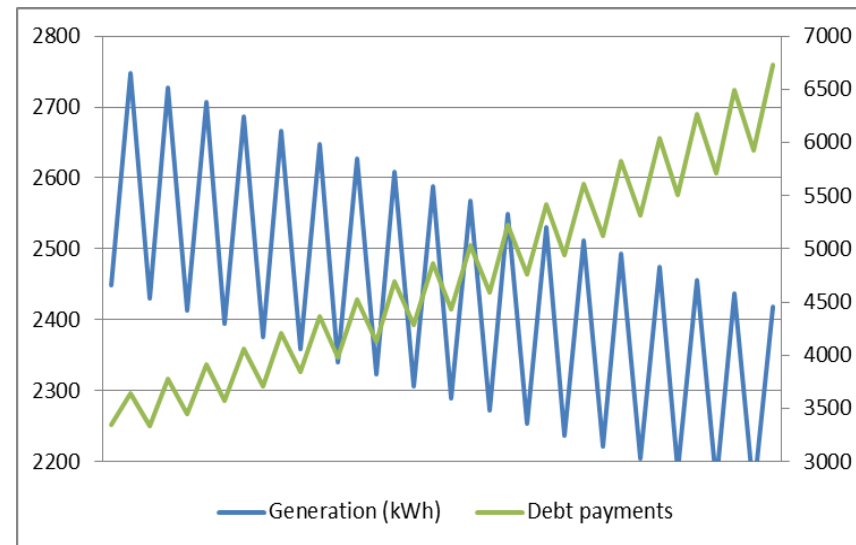
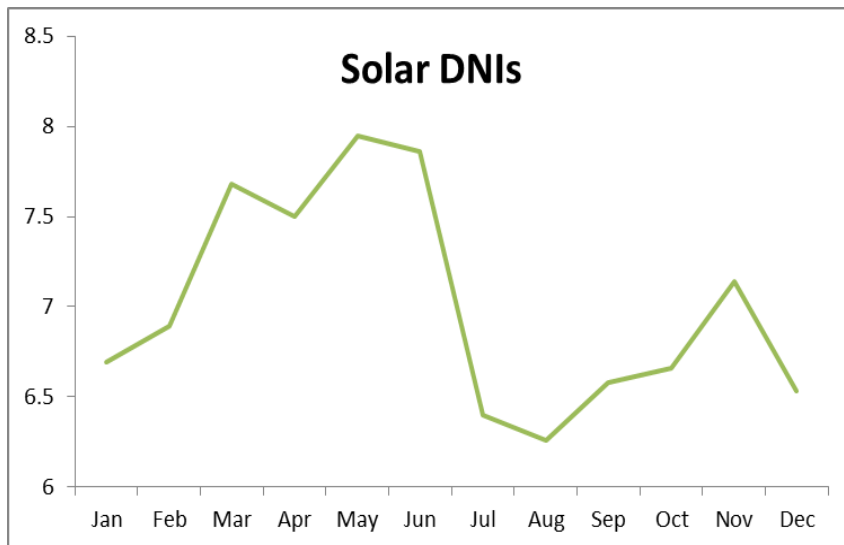
- NADB models different scenarios for each RE project , so that it is able to size the debt accordingly.
- Solar projects debt sizing: Debt service coverage ratio of 1.30x at the P50 production level. NADB's experience shows that solar projects will require about 35%-40% of equity.
- Wind projects: The lesser of 1.40x at the P50 production level or the 1.0x at the P99 production level.



NADB's Project Financing (cont'd)



- As previously discussed, debt amortization is usually calculated over a term that will be 2 years less than the PPA's term.
- Debt amortization profile always keeps the required DSCR throughout the term of the loan. Some of the variables taken into consideration include:
 - Generation Profiles
 - Seasonality
 - PPA's price escalation
 - Degradation



Credit Analysis and Loan Process



Request for Financing

Review of Project's Scope and Cost

Financial / Technical / Legal / Insurance Due Diligence

Loan Proposal

- **Revenue / Source of Payment Analysis**
 - Historical Analysis
 - Cash Flow Projections
- **Guarantee Analysis**
- **Credit Risk Analysis**
 - Borrower and/or Guarantor Credit Rating
 - Risk Analysis
- **Loan Payment Mechanism**
- **Term Sheet**



Approval by Internal Funding Committee and Board

Loan Closing

- **Loan and Guarantee Documentation and Signing**



Implementation

- **Disbursement of Loan Proceeds**



NADB's Experience in the RE Sector



- NADB has financed nearly 800 MW in RE projects, and currently works on numerous other projects.
- NADB has experience in project financing both as the sole lender or as part of a club.

Ocotillo
Wind Project
265 MW



Loan: USD 110 M

Imperial Valley Co, CA • 2012

El Porvenir
Wind Project
54 MW



Loan: USD 51 M

Reynosa, Tamps. • 2012

Los Vientos 1A
Wind Project
200 MW



Loan: USD 110 M

Willacy Co, TX • 2012

Los Vientos 1B
Wind Project
202 MW



Loan: USD 110 M

Willacy Co, TX • 2012

Solar Project
20 MW_{AC}



Loan: USD 65 M

Picture Rocks, AZ • 2012

Solar Project
23 MW_{AC}



Loan: USD 77.4 M

Niland, CA • 2011

Solar Project
10 MW_{AC}



Loan: : USD 35 M

Presidio, TX • 2012

Solar Project
5 MW_{AC}



Loan: USD 13.1 M

Tucson, AZ • 2012

NADB's Experience in the RE Sector (cont'd)



Ocotillo - 265 MW



Ocotillo, California

Project Summary:

- Loan USD\$110M
- PPA 20 years
- Off-taker: San Diego Gas and Electric
- Siemens Turbines
- End of construction December 2012.
- Over 175 thousand metric tons of CO₂/ year will be displaced on its first operational year.

El Porvenir - 54 MW



Reynosa, Tamaulipas

Project Summary:

- Loan USD\$51M
- PPA 15 years
- Off-taker: Soriana
- Vestas Turbines
- Over 90 thousand metric tons of CO₂/ year will be displaced on its first operational year.
- Construction to begin December 2012.

SunPeak - 23 MW

Project Summary:

- Commercial operation date
Aug 1, 2012
- USD\$77M loan
- +99 thousand polycrystalline panels
- Off-taker: Imperial Irrigation District
- 30-year PPA
- Over 20 thousand metric tons of CO₂/ year will be displaced



*Niland,
California*

Astrosol - 5 MW



Tucson, Arizona

Project Summary:

- Loan USD\$13M
- 40 acres
- PPA 20 years
- Off-taker: Tucson Electric Power
- Amorphous silicon (thin film) solar panels
- Over 7 thousand metric tons of CO₂/ year will be displaced
- Commenced operations May 11, 2012



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