

**North American Development Bank**  
**SUMMARY OF PROJECT IMPLEMENTATION ACTIVITIES**

**ACTIVE PROJECTS**

**September 30, 2016**

The North American Development Bank (NADB) provides financing for infrastructure projects that enhance the environmental condition of the U.S.-Mexico border region. NADB works closely with its sister institution, the Border Environment Cooperation Commission (BECC), to help border communities develop and finance affordable, self-sustaining projects with broad community support. Each project must pass through a public participation and certification process performed by BECC in order to be eligible for financing from NADB.

During the third quarter of 2016, NADB had **64** active projects in various stages of project implementation.<sup>1</sup> A total of **US\$871.6 million** in loans and grants has been contracted to help finance those projects, and approximately 84% of those funds have already been disbursed to project sponsors. One project completed construction and/or financing activity during the period, leaving 63 active projects at the end of the quarter. A breakdown of NADB financing by program for the active projects is shown in the table below.

**NADB Funding by Program for Active Projects**  
(U.S. Dollars)

Funding Programs	Active Projects per Program*	Financing Contracted for Active Projects	Pending Disbursement
Loan Program	32	\$ 780,132,143	\$ 95,711,027
Border Environment Infrastructure Fund (BEIF)**	25	84,012,497	44,415,707
NADB-funded grant programs***	11	7,491,671	2,938,291
<b>TOTAL</b>		<b>\$ 871,636,312</b>	<b>\$ 143,065,025</b>

\* Some projects have both a loan and a grant. Likewise, a loan or grant may cover more than one project.

\*\* BEIF: EPA-funded grant program that offers financing for the implementation of municipal drinking water and wastewater infrastructure projects.

\*\*\* NADB-funded grant programs include the Community Assistance Program (CAP), the Solid Waste Environmental Program (SWEP) and the Water Conservation Investment Fund (WCIF).

To date, NADB has contracted a cumulative total of approximately US\$2.76 billion in loans and grants to help finance 228 certified projects estimated to cost a total of US\$8.2 billion to build. Of the financing contracted, 95% has been disbursed to project sponsors for the implementation of 216 projects. Of the 228 projects financed by the Bank, 164 have completed construction and all financing activity, except for the amortization of loans. An additional US\$161.3 million in loans and grants has been approved to support 13 projects.

The implementation status of NADB-funded active projects is presented in the following pages.

<sup>1</sup> Active projects are defined as those projects with NADB funding contracted that are in the process of being implemented and/or for which NADB financing is pending disbursement.

**PROJECT****Ahumada, Chihuahua, Mexico****Los Santos Solar I Project**

**Type:** Renewable energy  
**Total Cost:** Reserved  
**Total NADB Funding:** US \$18,500,000  
**BECC Certification:** 4 / 1 / 15  
**Residents to Benefit:** 21,016

**DESCRIPTION**

Construction of a 13.7-MW<sub>AC</sub> solar energy plant using polycrystalline photovoltaic modules mounted on a single-axis tracker system.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing the citizens of Ahumada, Chihuahua with a safe, reliable energy alternative. Specifically, more than 16,509 metric tons/year of carbon dioxide (CO<sub>2</sub>), as well as other pollutants, such as nitrogen oxides (NO<sub>x</sub>), are estimated to be displaced as a result of this project.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, *Los Santos Solar I, S.A.P.I. de C.V.*, which has signed power purchase agreements with the private educational group, La Salle in Mexico, and the global cable company, Leoni, S.A. de C.V. On April 1, 2015, the Bank approved a US\$18.6 million market-rate loan for the construction of the project, and a US\$18.5 million loan agreement was signed on August 24, 2015, and disbursements began in November of the same year.

**IMPLEMENTATION STATUS**

Construction of the solar park began in September 2015 and is approximately 80% complete.

**Anthony, New Mexico, USA****Anthony Lift Station Replacement Project**

**Type:** Wastewater  
**Total Cost:** US \$2,811,400  
**Total NADB Funding:** US \$2,811,400  
**BECC Certification:** 5 / 6 / 16  
**Residents to Benefit:** 8,700

Replacement of the Sonic Lift Station, including construction of a force main and gravity line, to convey wastewater to the Anthony Wastewater Treatment Plant.

**Community Benefits**

Elimination of the risk of sewage overflows in populated areas surrounding the existing lift station. Increased flow capacity and operational efficiency reducing energy consumption and operation and maintenance costs.

The Bank is a source of grant funds through the Border Environment Infrastructure Fund (BEIF). On February 29, 2016, EPA approved the Bank's recommendation to provide US\$2.81 million in BEIF construction assistance for this project. The corresponding grant agreement was signed on June 17, 2016.

Bidding for construction of the lift station is expected to begin in November 2016.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Brownsville, Texas, USA****Wastewater Collection System and Residential Connections in FM 511-802 Colonias**

**Type:** Wastewater  
**Total Cost:** US \$29,741,651  
**Total NADB Funding:** US \$3,628,140  
**BECC Certification:** 11 / 24 / 15  
**Residents to Benefit:** 2,630

Construction of a wastewater collection system, including seven new lift stations, rehabilitation of three lift stations and installation of up to 465 new residential connections and decommissioning of on-site sanitary systems in the FM 511-802 colonias, southeast of Brownsville, TX.

**Community Benefits**

First-time access to wastewater collection and treatment services for a previously unserved area. Reduction of environmental and health hazards associated with inadequate on-site wastewater treatment systems, thus providing a cleaner, healthier environment for local residents. Specifically, an estimated 210,000 gallons a day (gd) of sewage will be collected and treated through the new system.

The Bank is a source of grant funds through the BEIF, to complement a loan and grant from the Texas Water Development Board (TWDB) and equity contributions from the local utility, Brownsville Public Utility Board (BPUB). On August 14, 2015, EPA approved the Bank's recommendation to provide US\$3.63 million in BEIF construction assistance for the installation of sewer hookups. The corresponding grant agreement was signed on March 11, 2016.

Construction of the wastewater collection system, including seven new lift stations and rehabilitation of three existing lift stations was completed with other sources of funding.

Bidding for the installation of hookups to be funded by the Bank is expected to begin in November 2016.

**Cameron County Irrigation District No. 6, Texas, USA****Replacement of the River Pump Station**

**Type:** Water conservation  
**Total Cost:** US \$1,979,663  
**Total NADB Funding:** US \$989,832  
**BECC Certification:** 12 / 16 / 08  
**Residents to Benefit:**

Installation of two supplemental pumps and motors in the District's river pump station and construction of a pipeline to connect the pumps to the canal system.

**Community Benefits**

Increased water conveyance efficiency, thereby reducing water losses from seepage and evaporation, as well as reduced energy and maintenance requirements. Annual water savings are estimated at 13,385 acre-feet/year, and energy savings at 832,030 kwh/yr.

The Bank is a source of grant funds through the WCIF to complement funding provided by the irrigation district. On December 16, 2008, the Bank approved a US\$989,832 WCIF grant to be applied towards the purchase of the equipment. The corresponding grant agreement was signed on April 16, 2009. The first disbursement was made in November 2014.

Work on the pump station began in September 2014 and was completed in February 2016.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Ciudad Juarez, Chihuahua, Mexico****Construction of the South-South Wastewater Treatment Plant**

<b>Type:</b>	Wastewater
<b>Total Cost:</b>	US \$42,296,065
<b>Total NADB Funding:</b>	US \$17,305,920
<b>BECC Certification:</b>	12 / 10 / 09
<b>Residents to Benefit:</b>	180,000

Construction of the first phase of the South-South treatment plant (11.41 mgd), as well as the South-South collector (10 km).

**Community Benefits**

Reduction of environmental and health hazards associated with untreated wastewater flows, thus providing a cleaner, healthier environment for local residents on both sides of the Rio Grande. Specifically, an estimated 8.56 mgd of wastewater will be treated prior to discharge.

The Bank is a source of grant funds through the BEIF, as well as a direct lender, to complement Mexican federal and state grants and an equity contribution from the private concessionaire under a build-operate-transfer (BOT) agreement. On November 9, 2009, EPA approved the Bank's recommendation to provide US\$8 million in BEIF funding for the construction of the collector. On December 10, 2009, the Bank approved a peso-denominated, market-rate loan for US\$7.83 million for construction of the treatment plant, bringing its total participation in the project to US\$15.35 million. The loan agreement was signed with the private concessionaire on March 29, 2010, and the BEIF grant agreement was signed with the local utility on April 22, 2010. The first loan disbursement was made in September 2012. The final loan disbursement was made on June 5, 2013. To help cover cost overruns stemming from the relocation of the plant and delays in construction startup, on May 8, 2014, the Bank approved a US\$1.48 million loan increase for a total loan of US\$9.31 million, bringing the Bank's total participation in the project to US\$17.31 million. The amended loan agreement was signed on May 28, 2014. The additional loan funds were fully disbursed on July 21, 2014. The loan is in amortization. Disbursement of the BEIF grant began in October 2014.

The utility decided to relocate the plant closer to the city to reduce construction costs. This change reduced the length of the collector from 22 km to approximately 10.36 km, thus eliminating the second phase of construction. All the required environmental assessments and clearances for the new plant site were completed in September 2012. The treatment plant was constructed under a BOT agreement. It was completed in April 2014 and began operations the same month.

Construction of the 10.36-km collector began in 2010. To date, approximately 8 km of the collector have been completed. Construction of an additional 1.68 km of pipeline funded by the Bank was completed in August 2016. The same month, construction began on the last 0.6 km of the collector to be funded by the state water agency, JCAS, and work is expected to be completed in December 2016.

**PROJECT**

**DESCRIPTION**

**NADB PARTICIPATION**

**IMPLEMENTATION STATUS**

**Ciudad Juarez, Chihuahua, Mexico**

**Comprehensive Paving Project to Improve Urban Mobility**

**Type:** Air quality  
**Total Cost:** US \$156,361,052  
**Total NADB Funding:** US \$30,816,641  
**BECC Certification:** 7 / 17 / 12  
**Residents to Benefit:** 1,332,131

Construction or rehabilitation of six vehicle overpasses and 15 roadways (approx. 25.9 km of new paving and 41.6 km of paving rehabilitation), as well as the lining of a section of the 2-A drain with concrete.

**Community Benefits**

Better air quality for residents in both Juarez and El Paso, TX, by facilitating traffic flows and reducing travel times through better road conditions. Specifically, new paving and roadway improvements are expected to prevent the emission of 677 metric tons/year of PM<sub>10</sub>, while better mobility will help reduce vehicle emissions, including an estimated 412 metric tons/year of volatile organic compound (VOC) emissions, 1,551 metric tons/year of carbon monoxide (CO) emissions and 270 metric tons/year of nitrogen oxides (NO<sub>x</sub>) emissions. Improved road conditions will also provide safer roadways for motorists and allow faster access for emergency services, such as police, firemen and ambulances.

The Bank is a direct lender to complement funding from the City and *Movicon Infraestructura y Pavimentos, S.A.P.I. de C.V.*, the special-purpose company created by the contractor selected to carry out the project under a long-term public-private partnership agreement. On July 17, 2012, the Bank approved a peso-denominated, market-rate loan for up to US\$132.91 million to cover 85% of the project costs. On April 22, 2013, a loan agreement for US\$127.93 million was signed with Movicon. The commitment for the remaining US\$4.98 million was cancelled. On June 23, 2014, the Bank signed an amended loan agreement with Movicon that reduced the loan amount to US\$30.82 million and cancelled the commitment for the remaining US\$97.04 million. The loan was fully disbursed on July 15, 2014. The loan is in amortization.

Construction began in May 2013 and was substantially complete in December 2015. The remaining punch-list items are expected to be completed by November 2016.

**Ciudad Juarez, Chihuahua, Mexico**

**South Wastewater Treatment Plant Cogeneration and Improvements Project**

**Type:** Renewable energy / solid waste  
**Total Cost:** US \$4,100,000  
**Total NADB Funding:** US \$3,493,014  
**BECC Certification:** 5 / 14 / 15  
**Residents to Benefit:**

Construction of a 1.35-MW cogeneration facility and improvements to the sludge management system, in the South Wastewater Treatment Plant (WWTP).

**Community Benefits**

Improved air quality by capturing and using the biogas produced during the sludge digestion process to generate about 40% of the WWTP's electricity requirements. This renewable energy alternative will help displace greenhouse gases produced by traditional fossil-fuel based energy generation. Specifically, an estimated 11,563 metric tons/year of carbon dioxide (CO<sub>2</sub>), as well as other pollutants, are estimated to be displaced as a result of this project. Improved sludge management is expected to reduce the volume of biosolids transported and disposed of in the municipal landfill, from 121,977 to 104,551 yds<sup>3</sup>/year.

The Bank is a direct lender to complement an equity contribution from the private concessionaire, Degremont, S.A. de C.V., under a build-operate-transfer (BOT) agreement. On May 14, 2015, the Bank approved a peso-denominated, market-rate loan for up to US\$3.49 million to cover 85% of project costs. The loan agreement was signed with the private concessionaire on December 14, 2015, and disbursements began the same month.

Construction on both the cogeneration facility and sludge improvements began in July 2015 and is approximately 95% complete. Project completion is pending the electrical connection to the grid by the Mexican utility (CFE).

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Clint, Texas, USA****Wastewater Collection Improvements Project**

**Type:** Wastewater  
**Total Cost:** US \$11,564,152  
**Total NADB Funding:** US \$2,300,000  
**BECC Certification:** 12 / 10 / 09  
**Residents to Benefit:** 1,099

Construction of a wastewater collection system, including a lift station, a force main, and 289 residential sewer hookups.

**Community Benefits**

Provision of first-time wastewater collection and treatment services for 95% of population. Reduction of environmental and health hazards associated with inadequate on-site wastewater treatment systems, thus providing a cleaner, healthier environment for local residents. Specifically, an estimated 86,500 gd of sewage will be collected and treated.

The Bank is a source of grant funds through the BEIF, to complement loans from the Texas Water Development Board (TWDB) and USDA-RD, as well as a grant from the USDA-RD and equity contributions from the local utility, Lower Valley Water District (LVWD). On November 13, 2009, EPA approved the Bank's recommendation to provide US\$2.3 million in BEIF construction assistance for the project. The corresponding grant agreement was signed on February 25, 2010, and disbursements began in December of the same year.

Construction of the lift station and trunk lines was completed in May 2012. Construction of Phase I of the sewer system was completed in August 2012. Construction of Phase II of the sewer system was completed in January 2015.

**Colonia Esperanza, Chihuahua, Mexico****Wastewater Collection and Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$2,177,756  
**Total NADB Funding:** US \$430,000  
**BECC Certification:** 9 / 28 / 07  
**Residents to Benefit:** 1,267

Construction of a sewer system and wastewater treatment plant.

**Community Benefits**

First-time wastewater collection and treatment services to 100% of the community, which will eliminate potential environmental and health risks associated with untreated sewage.

The Bank is a source of grant funds through the BEIF, to complement state and federal funding. On September 7, 2007, EPA approved the Bank's recommendation to provide US\$430,000 in BEIF funding for construction of the project. The BEIF grant agreement was signed on October 25, 2007 and disbursements began in March 2008.

The first phase of the sewer system, as well as the treatment plant, including pretreatment works, were completed in the third quarter of 2009. Construction of additional Bank-funded sewer lines was completed in October 2010. The lift station, grit removal system, and sewers lines financed with Mexican funds were completed in October 2011.

The electrical connection to the pump station has been completed; however, during the start-up and testing phase of the pump station, sewage leaks were detected in the pipe intersections due to vandalism of the valves. Repairs by the utility were completed in September 2015, thus completing the entire project.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Don Martin Irrigation District 004  
Anahuac, Nuevo Leon, Mexico****Modernization and Improvements to Don Martin  
Irrigation District 004**

<b>Type:</b>	Water conservation
<b>Total Cost:</b>	US \$49,792,308
<b>Total NADB Funding:</b>	US \$30,769,231
<b>BECC Certification:</b>	12 / 3 / 14
<b>Residents to Benefit:</b>	18,480

Lining of the main distribution canal, enclosing secondary canals and installing metering systems to measure the volume delivered to users, and modernizing irrigation systems.

**Community Benefits**

Lining and enclosing canals and replacing traditional surface or flood irrigation practices with more efficient technologies will reduce water losses from evaporation and filtration, which in turn will help reduce the volume of water pumped from the reservoir to a sustainable level.

The Bank is participating as a direct lender to complement the capital investments of the State of Nuevo Leon. On December 3, 2014, the Bank approved a market-rate loan for up to US\$76.92 million to support two projects. Of this amount, an estimated US\$30.77 million is expected to go to the water conservation project and the remaining US\$46.15 million to a street paving project for the metropolitan area of Monterrey. An initial loan tranche for US\$7.62 million was contracted on March 19, 2015, and fully disbursed in June 2015.

Construction on the main and secondary canals began in 2012 with federal and state funding. Between 2012 and 2014 approx. 7.5 km of main canal and approx. 61 km of secondary canals were completed. Construction of approx. 17.5 km of main canal and 14.6 km of secondary canals was completed in the third quarter of 2015.

**El Millón, Chihuahua, Mexico****Wastewater Collection and Treatment Project**

<b>Type:</b>	Wastewater
<b>Total Cost:</b>	US \$1,308,687
<b>Total NADB Funding:</b>	US \$440,559
<b>BECC Certification:</b>	5 / 4 / 10
<b>Residents to Benefit:</b>	823

Construction of a sewer system, including residential hookups, as well as the construction of a wastewater treatment plant, which will also provide service to the communities of Jesus Carranza y Tres Jacales.

**Community Benefits**

Elimination of potential environmental and health risks associated with untreated sewage by providing first-time wastewater collection and treatment services to 100% the community's population.

The Bank is a source of grant funds through the BEIF, to complement state and federal funding. On March 26, 2010, EPA approved the Bank's recommendation to provide US\$440,559 in BEIF funding for construction of the project. The corresponding grant agreement was signed on September 24, 2010, and the initial disbursement occurred in June 2011.

The sewer system and the first phase of the general collector were completed with Mexican funds in May 2011. The treatment plant financed with Mexican funds was completed in March 2012. The second phase of the general collector funded by the Bank was completed in August 2012.

Since the project came in under budget, complementary and ancillary works to provide access to wastewater services to additional households were included in the project. Construction of the additional works was completed in July 2014, thus concluding the entire project.

**El Paso, Texas, USA****Storm Water Project**

<b>Type:</b>	Storm water
<b>Total Cost:</b>	US \$67,500,000
<b>Total NADB Funding:</b>	US \$53,000,000
<b>BECC Certification:</b>	9 / 4 / 09
<b>Residents to Benefit:</b>	742,062

Construction, expansion and improvements to the storm water system in the Central, East, Mission Valley, Northeast, and Northwest watersheds.

**Community Benefits**

Improved flood controls will protect human life, property and the environment, as well as reduce the risks associated with the transmission of waterborne diseases and human contact with stagnant and/or contaminated flood water. System improvements will also help recharge the Hueco Bolson aquifer.

The Bank is a direct lender to complement equity contributions from the City and a loan from the TWDB. On September 4, 2009, the Bank approved a US\$53 million market-rate loan to cover 78.5% of total project costs. The loan was contracted and fully disbursed in the form of a municipal bond purchase through the Build America Bond program on September 29, 2009. The loan is in amortization.

Drainage improvements under 18 contracts have been completed.

Construction of the Magnolia lift station and force main was completed in September 2016. The last drainage improvement contract is expected to be completed in October 2016.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Engelman Irrigation District No. 6,  
Hidalgo County, Texas, USA****Water Conservation Improvements Project**

**Type:** Water conservation  
**Total Cost:** US \$1,206,266  
**Total NADB Funding:** US \$475,000  
**BECC Certification:** 10/ 30 / 07  
**Residents to Benefit:**

Construction of storm-water transfer pump station, installation of a geomembrane liner in the reservoir, and replacement of leaking pipelines.

**Community Benefits**

Reduced water losses from seepage, resulting in an estimated average annual savings of 831 acre-feet. Increased water supply by transferring storm water to irrigation system. Improved water conveyance and delivery efficiency and reduced energy consumption by an estimated average of 54,034 KWH a year.

The Bank is a source of grant funds through the WCIF to complement the district's own resources, including in-kind services. On October 30, 2007, the Bank approved a US\$475,000 WCIF grant to be applied towards construction of the project. The corresponding grant agreement was signed on February 15, 2008. Disbursements began in January 2010. The final disbursement was made on September 2, 2016.

A contract for the purchase of pipes was awarded in September 2009. Installation of the pipeline was completed in May 2012. Construction of the pump station began in March 2015 and was completed in May 2016.

Due to increased costs for the pump station and pipe installation, the District has postponed the last project component (installation of the reservoir liner) indefinitely, reducing the scope of the certified project. Therefore, construction is complete as of May 2016.

**Ensenada, Baja California, Mexico****Desalination Plant**

**Type:** Water  
**Total Cost:** US \$ 55,809,352  
**Total NADB Funding:** US \$ 31,649,114  
**BECC Certification:** 12/ 6 / 12  
**Residents to Benefit:** 96,000

Construction of a seawater desalination facility with the capacity to produce 5.7 mgd of drinking water.

**Community Benefits**

Development of a necessary water supply source to ensure sustainable and reliable drinking water services for residents of Ensenada, contributing to the preservation of groundwater resources and human health.

The Bank is a direct lender to complement a Mexican federal grant and equity contributions from the private concessionaire under a build-operate-transfer (BOT) agreement. On December 6, 2012, the Bank approved a peso-denominated, market-rate loan for up to US\$22.02 million to cover approximately 50% of the project costs. On October 1, 2013, the corresponding loan agreement was signed with the private concessionaire. The loan was fully disbursed on December 18, 2014. To help cover cost overruns mainly due to some design modifications, on June 16, 2016, the Bank approved a US\$9.63 million loan increase, for a total loan of US\$31.65 million. The amended loan agreement was signed on September 20, 2016.

The project is being implemented under a BOT agreement. Construction began in November 2014 and is approximately 70% complete.

**PROJECT****Frontera Ribereña, Tamaulipas, Mexico****Regional Solid Waste Project**

**Type:** Solid waste  
**Total Cost:** US \$3,427,027  
**Total NADB Funding:** US \$1,552,143  
**BECC Certification:** 12 / 16 / 08  
**Residents to Benefit:** 67,035

**DESCRIPTION**

Construction of a regional sanitary landfill and two solid waste transfer stations, closure of five existing open-air dumpsites, and purchase of equipment for the communities of Camargo, Guerrero, Gustavo Díaz Ordaz, Mier and Miguel Alemán.

**Community Benefits**

Reduction of environmental and health risks associated with inadequate solid waste disposal. Elimination of smoke from uncontrolled fires at the open-air sites, which will also benefit residents in several neighboring U.S. communities in Starr County, TX.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the SWEP to complement funding from the state government. On December 16, 2008, the Bank approved a peso-denominated SWEP grant equivalent to US\$1.55 million for the project. The corresponding grant agreement was signed on April 13, 2009, and disbursements began in October of the same year. The final disbursement was made on March 31, 2010.

**IMPLEMENTATION STATUS**

Land for the sanitary landfill has been purchased, and the regional utility, *Servicios de Limpia de la Frontera Ribereña Tamaulipeca*, has been created to operate the facility. The sanitary landfill and transfer stations were completed in March 2010 and are in operation. The open-air dumpsite in Cd. Mier has been closed.

Closure of the dumpsites in the four remaining communities is pending.

**General Bravo, Nuevo Leon, Mexico****Ventika Wind Energy Project**

**Type:** Renewable energy  
**Total Cost:** Reserved  
**Total NADB Funding:** US \$70,000,000  
**BECC Certification:** 2 / 19 / 14  
**Residents to Benefit:** 256,328

Construction of a 126-MW wind energy farm with 42 wind turbines on rural land east of the town of General Bravo, as well as two substations and a transmission line that will also serve the Ventika II Wind Energy Project.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, more than 303,518 metric tons of carbon dioxide (CO<sub>2</sub>) per year and 751 metric tons of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants, are estimated to be displaced as a result of this project.

The Bank is a direct lender to the project company, TEG Energía, S.A. de C.V. (TEG), which has signed power purchase agreements with several private companies under self-supply schemes. On February 19, 2014, the Bank approved a market-rate loan for up to US\$70 million for construction of the project. The corresponding loan agreement was signed on April 8, 2014 and disbursements began the same month.

Construction of the wind farm with 42 wind turbines, has been completed and began commercial operations in April 2016.

**PROJECT****General Bravo, Nuevo Leon, Mexico****Ventika II Wind Energy Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$70,000,000
<b>BECC Certification:</b>	2 / 19 / 14
<b>Residents to Benefit:</b>	260,832

**DESCRIPTION**

Construction of a 126-MW wind energy farm with 42 wind turbines on rural land east of the town of General Bravo, as well as two substations and a transmission line that will also serve the Ventika Wind Energy Project.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, more than 308,431 metric tons of carbon dioxide (CO<sub>2</sub>) per year and 763 metric tons of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants, are estimated to be displaced as a result of this project.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, TEG Energía, S.A. de C.V. (TEG), which has signed power purchase agreements with several private companies under self-supply schemes. On February 19, 2014, the Bank approved a market-rate loan for up to US\$70 million for construction of the project. The corresponding loan agreement was signed on April 8, 2014 and disbursements began the same month.

**IMPLEMENTATION STATUS**

Construction of the wind farm with 42 wind turbines, has been completed and began commercial operations in April 2016.

**General Cépeda, Coahuila, Mexico****EDPR Wind Energy Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$95,000,000
<b>BECC Certification:</b>	11 / 5 / 15
<b>Residents to Benefit:</b>	384,153

Construction of a 199.5-MW wind energy farm with 95 wind turbines, as well as two substations and a transmission line.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, more than 381,424 metric tons of carbon dioxide equivalent (CO<sub>2e</sub>) per year, as well as other air pollutants, are estimated to be displaced as a result of this project.

The Bank is a direct lender to the project company, *Eólica de Coahuila, S.A. de C.V.*, which has signed power purchase agreement with the mining company Industrias Peñoles, S.A.B. de C.V. under a self-supply scheme. On November 5, 2015, the Bank approved a market-rate loan for up to US\$95 million for construction of the project. A US\$92.89 million loan agreement was signed on May 26, 2016, and disbursements began in June 2016.

Construction of the wind farm began in December 2015 and is approximately 58.2% complete.

**PROJECT****Güémez, Tamaulipas, Mexico****La Mesa Wind Energy Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$40,000,000
<b>BECC Certification:</b>	2 / 5 / 15
<b>Residents to Benefit:</b>	91,127

**DESCRIPTION**

Construction of a 49.5-MW wind energy farm with 15 wind turbines, as well as a substation and transmission line, in Mesa El Melón located east of Ciudad Victoria.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, more than 71,165 metric tons of carbon dioxide (CO<sub>2</sub>) per year and 248 metric tons of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants, are estimated to be displaced as a result of this project.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, *Compañía Eólica La Mesa, S.A. de C.V.*, which has signed power purchase agreement with the retailer Grupo Soriana under a self-supply scheme. On February 5, 2015, the Bank approved a market-rate loan for up to US\$40 million for construction of the project. The corresponding loan agreement was contracted in Mexican pesos on March 31, 2015 and the loan proceeds were fully disbursed on April 30, 2015.

**IMPLEMENTATION STATUS**

Construction of the wind farm began in May 2015 and is approximately 81% complete.

**Güémez, Tamaulipas, Mexico****Victoria Wind Energy Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$40,000,000
<b>BECC Certification:</b>	2 / 5 / 15
<b>Residents to Benefit:</b>	92,639

Construction of a 49.5-MW wind energy farm with 15 wind turbines, as well as a substation and transmission line, in Mesa El Melón located east of Ciudad Victoria.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, more than 72,345 metric tons of carbon dioxide (CO<sub>2</sub>) per year and 252 metric tons of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants, are estimated to be displaced as a result of this project.

The Bank is a direct lender to the project company, *Compañía Eoloeléctrica de Ciudad Victoria, S. A. de C. V.*, which has signed power purchase agreement with the retailer Grupo Soriana under a self-supply scheme. On February 5, 2015, the Bank approved a market-rate loan for up to US\$40 million for construction of the project. The corresponding loan agreement was contracted in Mexican pesos on March 31, 2015, and the loan proceeds were fully disbursed on April 30, 2015.

Construction of the wind farm began in May 2015 and is approximately 92% complete.

**PROJECT****Hermosillo, Sonora, Mexico****Comprehensive Paving Project**

**Type:** Air quality  
**Total Cost:** US \$68,252,267  
**Total NADB Funding:** US \$19,607,843  
**BECC Certification:** 5 / 3 / 11  
**Residents to Benefit:** 154,400

**DESCRIPTION**

Paving of 1,548,668 square meters (m<sup>2</sup>) of dirt roads.

**Community Benefits**

Increased street paving coverage will reduce air pollution and respiratory ailments caused by airborne dust particles generated by traffic on unpaved streets, thus improving the quality of life for local residents. Improved neighborhood security by providing safer roadways and allowing easier access for police, firemen, and ambulances.

**NADB PARTICIPATION**

The Bank is a direct lender, to complement the City's own funding. On May 3, 2011, the Bank approved a US\$19.61 million market-rate loan to cover approximately 28% of the project costs. The corresponding loan agreement was signed on May 16, 2011, and the loan proceeds were fully disbursed on June 9, 2011. The loan is in amortization.

**IMPLEMENTATION STATUS**

Paving of 388,334 m<sup>2</sup> of roads financed by the Bank has been completed, which also included the installation of approximately 23,000 m of waterlines and 12,000 m of sewer lines.

**Hermosillo, Sonora, Mexico****Wastewater Treatment Plant Project**

**Type:** Wastewater  
**Total Cost:** US \$86,150,041  
**Total NADB Funding:** US \$47,815,334  
**BECC Certification:** 4 / 1 / 11  
**Residents to Benefit:** 784,342

Construction of a 57 mgd wastewater treatment plant and extension of the collector main.

**Community Benefits**

Reduction of environmental and health hazards associated with untreated wastewater discharges, thus providing a cleaner, healthier environment for local residents.

The Bank is a direct lender with another commercial bank, to complement Mexican federal grant funding and equity contributions from the private concessionaire under a build-operate-transfer (BOT) agreement. On April 1, 2011, the Bank approved a US\$47.82 million market-rate loan for the concessionaire to cover approximately 56% of the project costs. On September 10, 2012, the private concessionaire contracted a peso-denominated loan with NADB and another commercial bank for an estimated total of US\$46.17 million. Of that amount, NADB will provide up to US\$34.62 million to cover 40.2% of project costs. The initial loan disbursement was made in June 2013. The final disbursement of the NADB loan in pesos occurred on September 11, 2015, for a total of US\$31.57 million.

Construction began in March 2013 under a BOT agreement, with the plant scheduled to be completed and in operation by August 2015. In April 2015, the BOT contractor and the utility agreed to include the construction of three additional discharge lines in the scope of work, extending the construction period about six months. The connection to the electrical grid by the Mexican utility (CFE) is in process, and plant commissioning and start-up is scheduled to begin in October 2016.

**PROJECT****Hermosillo, Sonora, Mexico****Basic Urban Infrastructure Project**

**Type:** Basic urban infrastructure  
**Total Cost:** US \$66,287,118  
**Total NADB Funding:** US \$ 19,103,090  
**BECC Certification:** 5 / 9 / 13  
**Residents to Benefit:** 784,342

**DESCRIPTION**

Construction and rehabilitation of waterlines and sewer lines, upgrades to one water pump station and two lift stations, and construction of two wastewater treatment plants: the Bahía de Kino plant (0.46 MGD) and the La Victoria / Tazajal, plant for (0.34 MGD), as well as paving of 422,691 m<sup>2</sup> of dirt roads, expansion and rehabilitation of 404,307 m<sup>2</sup> of existing roadways and installation of a traffic management and control system.

**Community Benefits**

Street paving and roadway improvements are expected to contribute to the reduction of 252 metric tons/year of PM<sub>10</sub>, while better mobility and less congestion will help reduce vehicle emissions, including an estimated 121 metric tons/year of volatile organic compound (VOC) emissions, 272 metric tons/year of carbon monoxide (CO) emissions and 64 metric tons/year of nitrogen oxides (NO<sub>x</sub>). In addition, an estimated 4,500 households will have access to first-time wastewater services, and new wastewater facilities will increase treatment capacity by an estimated 0.80 mgd.

**NADB PARTICIPATION**

The Bank is a direct lender to complement funding from the municipal, state and federal governments. On May 9, 2013, the Bank approved a peso-denominated market-rate loan for up to US\$39.37 million to finance approximately 59% of the project costs. A loan agreement for US\$19.10 million was signed with the City on May 24, 2013. In July 2013, the City informed the Bank that it would not contract the remaining US\$20.27 million in approved loan funds, thus reducing the Bank's participation to about 29% of the project cost.

The Bank provided technical assistance through the TAP for the preliminary designs of the Bahía de Kino and La Victoria/Tazajal wastewater treatment plants, which were completed in October 2013.

**IMPLEMENTATION STATUS**

Construction of drinking water, wastewater, storm water, and paving works began in 2010 with the Municipality's funds. Between 2010 and 2012, approximately 110,000 m<sup>2</sup> of dirt roads were paved and approximately 170,000 m<sup>2</sup> of roadways were rehabilitated. The paving of approximately 77,374 m<sup>2</sup> of streets was completed in December 2015.

Bidding for additional paving contracts (approx. 250,000 m<sup>2</sup>) is underway with contract award scheduled for November 2016.

**Hidalgo County, Texas, USA****North Alamo Regional Wastewater Collection and Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$11,778,174  
**Total NADB Funding:** US \$1,896,456  
**BECC Certification:** 6 / 16 / 16  
**Residents to Benefit:** 1,616

Construction of a 0.50-mgd regional wastewater treatment plant (WWTP) and wastewater collection systems in six *colonias*: Alberta Acres, El Charro # 2, Isaac's Subdivision, L.J. #1, Muniz Subdivision and Tower Road Estates, including installation of residential connections and decommissioning of on-site wastewater disposal systems.

**Community Benefits**

First-time access to wastewater collection and treatment services for 400 homes, reducing the risk of environmental and health hazards associated with raw sewage spills and discharges from inadequate on-site disposal systems. Approximately 0.17 mgd of untreated or inadequately treated wastewater will be collected for treatment.

The Bank is a source of grant funds through the BEIF, to complement grant and loan funding from the Texas Water Development Board (TWDB) and the utility's own resources. On May 2, 2016, EPA approved the Bank's recommendation to provide US\$1.90 million in BEIF funding for construction of the project. The corresponding grant agreement was signed with the North Alamo Water Supply Corporation (NAWSC) on July 22, 2016.

Construction of the regional WWTP, four lift stations and sewer lines in the Isaacs, L. J. # 1 and Muniz subdivisions is underway with state funds. Bidding for construction of NADB-funded components began in September 2016, with construction scheduled to begin in December 2016.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Hidalgo County Irrigation District  
No. 16, Texas, USA****Water Conservation Improvement Project**

**Type:** Water conservation  
**Total Cost:** US \$3,517,998  
**Total NADB Funding:** US \$1,376,697  
**BECC Certification:** 3/ 19 / 04  
**Residents to Benefit:**

Upgrade of re-lift pump stations No. 1 & 2, re-lining of 5 miles of the main canal with membrane and installation of a computerized pump control system in the district's conveyance system.

**Community Benefits**

Estimated savings in water from reduced seepage and spillage is 2,371 acre-feet a year. Estimated savings in energy through more efficient pumping systems is 62,768 KWH/year.

The Bank is a source of grant funds through the WCIF to complement funding from the state government and the district's own resources, including in-kind services and a short-term loan. On March 31, 2005, the Bank approved a US\$1.38 million WCIF grant to be applied towards construction of the project. The grant agreement was signed on September 7, 2005. The initial grant disbursement occurred in November 2014.

Due to budgetary constraints, the irrigation district has reduced the scope of the project, which will be implemented in three phases: 1) installation of a 48-inch discharge line in Pump Station No. 1, 2) relining 2 miles of the main canal, and 3) installation of a flow control system in the main canal.

Construction of the discharge line in Pump Station No. 1 was completed January 2015. Installation of the flow control system began in September 2016 and is expected to be completed by November of the same year. Relineing of 2 miles of the main canal is expected to begin in November 2016.

**Holtville, California, USA****Wastewater Treatment Plant Improvements**

**Type:** Wastewater  
**Total Cost:** US \$14,347,260  
**Total NADB Funding:** US \$6,889,870  
**BECC Certification:** 2 / 24 / 14  
**Residents to Benefit:** 6,594

Rehabilitation and upgrades to the wastewater treatment system.

**Community Benefits**

Better quality of effluent discharged from the plant in compliance with federal and state requirements for ammonia and other pollutants, thereby contributing to the protection of aquatic ecosystems and helping to improve water quality conditions in the Pear Drain, Alamo River and Salton Sea.

The Bank is a source of grant funds through the BEIF, to complement grant and loan funding from California's Clean Water State Revolving Fund (CWSRF). On December 11, 2013, EPA approved the Bank's recommendation to provide US\$3.56 million in BEIF funding for construction of the project. The corresponding grant agreement was signed on August 25, 2014. On June 15, 2015, EPA approved an additional US\$3.33 million in BEIF funds to cover increased costs based on actual procurement results, bringing total BEIF participation in this project to US\$6.89 million. The amended grant agreement was signed on June 22, 2015, and disbursements began in October 2015.

Work to upgrade the treatment plant began in August 2015 and is about 75% complete.

**Jesús Carranza, Chihuahua, Mexico****Wastewater Collection and Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$1,308,687  
**Total NADB Funding:** US \$440,559  
**BECC Certification:** 5 / 4 / 10  
**Residents to Benefit:** 558

Construction of a sewer system, including residential hookups, which will be connected to the new treatment plant in El Millón, CHIH.

**Community Benefits**

Elimination of potential environmental and health risks associated with untreated sewage by providing first-time wastewater collection and treatment services to 100% the community's population.

The Bank is a source of grant funds through the BEIF, to complement state and federal funding. On March 26, 2010, EPA approved the Bank's recommendation to provide US\$440,559 in BEIF funding for construction of the project. The corresponding grant agreement was signed on September 24, 2010, and the initial disbursement occurred in June 2011.

The sewer system and the first phase of the general collector were completed with Mexican funds in May 2011. The treatment plant financed with Mexican funds was completed in March 2012. The second phase of the general collector funded by the Bank was completed in August 2012.

Since the project came in under budget, complementary and ancillary works to provide access to wastewater services to additional households was included in the project. Construction of the additional works was completed in July 2014, thus concluding the entire project.

**PROJECT****Llera de Canales, Tamaulipas, Mexico****Tres Mesas Wind Energy Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$55,000,000
<b>BECC Certification:</b>	6 / 25 / 14
<b>Residents to Benefit:</b>	255,424

**DESCRIPTION**

Construction of a 148.5-MW wind energy farm with 45 wind turbines, as well as two substations and overhead transmission lines in Mesa la Sandia located south of Ciudad Victoria.

**Community Benefits**

Displacement of greenhouse gases produced by traditional fossil-fuel based energy generation, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, more than 200,599 metric tons of carbon dioxide (CO<sub>2</sub>) per year and 700 metric tons of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants, are estimated to be displaced as a result of this project.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, *Frontera Renovable, S. de R.L. de C.V.*, which has signed power purchase agreements with two retailers, Sigma Alimentos, S.A. de C.V. and Wal-Mart de Mexico, S.A.B. de C.V. under the self-supply scheme. On June 25, 2014, the Bank approved a market-rate loan for up to US\$55 million for construction of the project. The corresponding loan agreement was contracted in Mexican pesos on March 31, 2015, and the loan proceeds were fully disbursed on May 7, 2015.

**IMPLEMENTATION STATUS**

Construction of the wind farm began in May 2015 and is approximately 89% complete.

**Matamoros, Tamaulipas, Mexico****Improvements to the Water and Wastewater Systems and Construction of the West Wastewater Treatment Plant**

<b>Type:</b>	Water / wastewater
<b>Total Cost:</b>	US \$69,724,558
<b>Total NADB Funding:</b>	US \$28,784,961
<b>BECC Certification:</b>	7 / 17 / 12
<b>Residents to Benefit:</b>	160,879

The project consists of improvements to the drinking water system, as well as three major wastewater components: 1) rehabilitation and expansion of the sewer collection infrastructure in the western zone of the city; 2) construction of sewer collection infrastructure in 34 subdivisions in the southwestern zone of the city; and 3) construction of the 12.33-mgd West Wastewater Treatment Plant.

**Community Benefits**

Expansion of the wastewater collection and treatment system will prevent untreated sewage discharges from going into storm drains and canals that empty into Laguna Madre and Rio Grande River, which will reduce environmental pollution and the risk of waterborne diseases, thus providing a safer and healthier source of water for the city, as well as for downstream users. Specifically, an estimated 9.47 mgd of wastewater will be collected and treated. In addition, an estimated 7,131 households will have first-time access to wastewater services.

The Bank is a source of grant funds through the BEIF and a direct lender, to complement state and federal grant funding, as well as equity contributions from the local water utility, JAD. On July 16, 2012, EPA approved the Bank's recommendation for a total of US\$16 million in BEIF construction assistance to support the wastewater components of the project. On July 17, 2012, the Bank approved a market-rate peso-denominated loan for US\$12.78 million for the project. As a result, Bank participation in this project totals US\$28.78 million. The corresponding loan and grant agreements were signed on November 6 and 28, 2012, respectively. The initial BEIF and loan disbursements were made in April and June 2013, respectively. The final loan disbursement was made on December 18, 2013. The loan is in amortization.

Seven lift stations and related force mains have been completed with Mexican funding. The West collector and a lift station, force main and the interconnection to Lift Station No. 10 funded by the Bank were completed in the second quarter of 2015.

Construction of the treatment plant has been completed and is in the testing phase.

**PROJECT****Mesilla, New Mexico, USA****Water System Improvements Project**

Type:	Water
Total Cost:	US \$761,646
Total NADB Funding:	US \$698,115
BECC Certification:	11 / 23 / 15
Residents to Benefit:	1,450

**DESCRIPTION**

Construction of three new waterlines to provide network looping in the water distribution system and connect 12 homes.

**Community Benefits**

Provision of first-time water service to 12 households, and improved system operations and reliability by preventing stagnate conditions that negatively impact water quality, reducing the risks associated with waterborne diseases.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the BEIF, to complement a grant from the New Mexico Environmental Department (NMED). On August 14, 2015, EPA approved the Bank's recommendation to provide US\$698,115 in BEIF construction assistance for the project. The corresponding grant agreement was signed on February 29, 2016.

**IMPLEMENTATION STATUS**

Bidding for construction is underway with contract award expected in October 2016.

**Mexicali, Baja California, Mexico****Municipal Paving Project**

Type:	Air quality
Total Cost:	US \$46,407,054
Total NADB Funding:	US \$7,292,823
BECC Certification:	12 / 8 / 11
Residents to Benefit:	59,881

Paving of 1,094,668 square meters (m<sup>2</sup>) of dirt roads.

**Community Benefits**

Increased street paving coverage will reduce air pollution and respiratory ailments caused by airborne dust particles generated by traffic on unpaved streets, thus improving the quality of life for local residents, as well as helping Imperial County improve conditions influencing its designation as a non-attainment area for PM<sub>10</sub>. Improved neighborhood security by providing safer roadways and allowing easier access for police, firemen, and ambulances.

The Bank is a direct lender to complement state and municipal funding. On December 8, 2011, the Bank approved a US\$11.02 million market-rate loan for the city to cover approximately 24% of the project costs. The corresponding loan agreement was signed on January 19, 2012, and the initial loan disbursement was made in March of the same year. The final disbursement was made on July 30, 2013, leaving an unused balance of US\$3.73 million and reducing the Bank's participation in the project to US\$7.29 million. The loan is in amortization.

Twelve paving contracts (331,687 m<sup>2</sup>), which also included replacement of storm drainage, water and sewer lines, were completed in June 2012. Construction under eight paving contracts (205,222 m<sup>2</sup>) was completed in June 2014.

**Mexicali, Baja California, Mexico****Rehabilitation of the Wastewater Collection System in Colonias Loma Linda and Esperanza**

Type:	Wastewater
Total Cost:	US \$1,364,240
Total NADB Funding:	US \$593,990
BECC Certification:	12 / 3 / 14
Residents to Benefit:	2,230

Replacement of deteriorated sanitary sewer lines in the Loma Linda and Esperanza subdivisions.

**Community Benefits**

Reduced risk of environmental and health hazards associated with raw sewage spills and discharges, thus providing a safer and healthier environment for local residents, as well as preventing the potential contamination of shared water bodies, such as the New River.

The Bank is a source of grant funds through the BEIF, to complement federal grants. On October 23, 2014, EPA approved the Bank's recommendation to provide US\$593,990 in BEIF funds for the construction of the project. The corresponding grant agreement was signed on April 7, 2015, and disbursements began in September 2015.

Construction of the sewer lines in the Esperanza subdivision financed with Mexican funds began in August 2015 and was completed in November 2015. Construction of the sewer lines in the Loma Linda subdivision funded by the Bank began in October 2015 and was completed in January 2016.

**PROJECT****Mexican Border Region****Border-wide Public Transportation Improvement Program in Mexico (Pilot)**

**Type:** Public transportation  
**Total Cost:** US \$11,401,815  
**Total NADB Funding:** US \$7,043,411  
**BECC Certification:** 6 / 24 / 14  
**Residents to Benefit:**

**DESCRIPTION**

Financing program to support the purchase or lease of low-emission buses manufactured by DINA Camiones, S.A. de C.V. within the 300-km border region in Mexico, in which the Bank operates.

**Community Benefits**

Use of new diesel buses that at a minimum comply with EPA 2004 standards will lower nitrogen oxides (NOx) and hydrocarbons (HC) emissions by approx. 50% and will achieve nearly 24% lower carbon dioxide (CO<sub>2</sub>) emissions. The reduction in criteria pollutant emissions is even higher for compressed natural gas-fueled vehicles that comply with EPA 2013 emission standards.

**NADB PARTICIPATION**

The Bank is participating as a direct lender to Mercader Financial, S.A., SOFOM, E.R., a captive finance company and affiliate of Dina. On June 24, 2014, the Bank approved a market-rate loan in the form of a revolving line of credit for up to \$120 million pesos (US\$9.12 million) to cover approximately 80% of the financing costs. The corresponding loan agreement was signed on September 30, 2014, and the first disbursement occurred in October 2015. The initial \$120.0 million pesos were fully disbursed in April 2016, for the equivalent of US\$7.04 million. However, due to the revolving nature of the line of credit, Mercader can make monthly payments and have those funds available for draw down again during the disbursement period, which ends in October 2025.

**IMPLEMENTATION STATUS**

During the last quarter of 2015, a total of 33 buses were financed through the program by two public transportation companies. A company in Hermosillo, Sonora obtained 30 diesel buses to replace part of its existing fleet, while another company in Tijuana, Baja California, purchased three diesel buses to expand its fleet. In April 2016, a company in Ciudad Juarez, Chihuahua obtained 25 buses fueled by compressed natural gas to replace part of its existing fleet.

**Mexican Border Region****Border-wide Program for the Purchase of Low-Emission Vehicles in Mexico**

**Type:** Public transportation  
**Total Cost:** US \$34,974,818  
**Total NADB Funding:** US \$27,979,855  
**BECC Certification:** 9 / 13 / 16  
**Residents to Benefit:**

Financing program to support the purchase or lease of low-emission buses manufactured by DINA Camiones, S.A. de C.V. within the 300-km border region in Mexico, in which the Bank operates.

**Community Benefits**

Use of new diesel buses that at a minimum comply with EPA 2004 standards will lower nitrogen oxides (NOx) and hydrocarbons (HC) emissions by approx. 50% and will achieve nearly 24% lower carbon dioxide (CO<sub>2</sub>) emissions. The reduction in criteria pollutant emissions is even higher for compressed natural gas-fueled vehicles that comply with EPA 2013 emission standards.

The Bank is participating as a direct lender to Mercader Financial, S.A., SOFOM, E.R., a captive finance company and affiliate of Dina. On September 13, 2014, the Bank approved a market-rate loan in the form of a revolving line of credit for up to \$500 million pesos (US\$27.98 million) to cover approximately 80% of the cost of new vehicles. The corresponding loan agreement was signed on September 22, 2016, and the first disbursement occurred the same month.

In September 2016, a total of 132 buses were financed through the program by seven public transportation companies. In Monterrey, N.L., three companies obtained 40 compressed natural gas (CNG) buses and 15 diesel buses to replace part of their existing fleets. In Ciudad Juarez, CHIH, two companies obtained 35 CNG buses and 30 diesel buses to replace part of their existing fleets. In Hermosillo, SON, a company obtained 10 diesel buses to replace part of its existing fleet. In Tijuana, B.C., a company obtained two diesel buses to replace part of its existing fleet.

**PROJECT****Miguel Alemán, Tamaulipas, Mexico****Wastewater Collection System Improvements**

Type:	Wastewater
Total Cost:	US \$6,253,776
Total NADB Funding:	US \$1,981,099
BECC Certification:	7 / 17 / 12
Residents to Benefit:	19,230

**DESCRIPTION**

Rehabilitation of the sewer system in the downtown area of the city.

**Community Benefits**

Reduced risk of environmental and health hazards associated with raw sewage spills and discharges, thus providing a safer and healthier environment for local residents. In addition, first-time sewer service will be provided to 1,888 households, which will collect an estimated 399,428 gallons a day of wastewater for treatment.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the BEIF to complement state and federal grant funding. On February 2, 2012, EPA approved the Bank's recommendation for a total of US\$1.98 million in BEIF construction assistance for the project. The corresponding grant agreement was signed on November 28, 2012. The first disbursement occurred in September 2013.

**IMPLEMENTATION STATUS**

Rehabilitation of the sewer system with Mexican funds was carried out in three phases between 2012 and 2014. Construction of the lift station funded by the Bank was completed in December 2014, thus completing the entire certified project.

**Monclova, Coahuila, Mexico****Particle Emissions Control System for a Steel Mill**

Type:	Air Quality
Total Cost:	Reserved
Total NADB Funding:	US \$23,200,000
BECC Certification:	8 / 13 / 15
Residents to Benefit:	216,206

Installation of an emissions control system for the basic oxygen furnace 2 (BOF2) processes at the *Altos Hornos de Mexico, S.A.B. de C.V.* (AHMSA) steel mill.

**Community Benefits**

Improved the air quality in the mill facilities and surrounding urban area by reducing harmful particulate emissions released into the air from the BOF2 steel production process. Specifically, the system is expected to capture approximately 30,070 tons/year of particulate matter, reducing total suspended particulate emissions by 97%.

The Bank is participating as a direct lender to complement the capital investments of AHMSA and a loan from the Mexican mining trust, FIFOMI. On August 13, 2015, the Bank approved a market-rate loan for up to US\$23.2 million for construction of the project. On May 20, 2016, a loan agreement for US\$18.0 million was signed with steel mill's subsidiary, Minera del Norte, S.A. de C.V. (MINOSA).

Procurement for a turnkey engineering, procurement and construction contract for the emission control system is expected to begin in November 2016.

**PROJECT****Monterrey, Nuevo Leon, Mexico****Expansion of the Treated Wastewater Distribution System**

<b>Type:</b>	Wastewater
<b>Total Cost:</b>	US \$66,341,667
<b>Total NADB Funding:</b>	US \$27,306,604
<b>BECC Certification:</b>	6 / 21 / 06
<b>Residents to Benefit:</b>	3,592,474

**DESCRIPTION**

Expansion of the current wastewater reuse system to increase distribution capacity by 17.57 mgd., through construction of 63 miles of pipeline, 10 pump stations and 2 storage tanks.

**Community Benefits**

Using treated wastewater in industrial processes and for the irrigation of green areas frees up available drinking water for human consumption in an area prone to drought and water shortages, as well as provides incentive to comply with effluent standards.

**NADB PARTICIPATION**

The Bank is participating as a direct lender to complement the capital investments of the local utility, *Servicios de Agua y Drenaje de Monterrey* (SADM). On June 21, 2006, the Bank approved a US\$27.31 million market-rate loan to complete the first phase of its expansion plan. The corresponding loan agreement was signed on February 8, 2007, and the final disbursement was made on December 6, 2007. The loan is in amortization.

Through the TAP, the Bank provided support to update the user registry of commercial and industrial wastewater connections, as well as to analyze the quantity and quality of pollutants in their wastewater discharges. The new user database is being shared by the utility and the state environmental protection agency.

**IMPLEMENTATION STATUS**

The two storage tanks, four pump stations, a filtration system and 31.4 miles of treated wastewater pipeline have been completed. Additional works, including the installation of 4.8 miles of treated wastewater lines and construction of a new pump station were completed in December 2013.

**Monterrey, Nuevo Leon, Mexico****Air Quality Improvements through Street Paving for the Monterrey Metropolitan Area**

<b>Type:</b>	Air quality
<b>Total Cost:</b>	US \$62,592,308
<b>Total NADB Funding:</b>	US \$46,153,846
<b>BECC Certification:</b>	12 / 3 / 14
<b>Residents to Benefit:</b>	112,000

Paving of 844,000 to 928,000 m<sup>2</sup> of dirt roads in neighborhoods or areas located within the municipalities of El Carmen, Garcia, General Escobedo, Guadalupe, Juarez, Monterrey, Pesqueria and Salinas Victoria.

**Community Benefits**

Increased street paving coverage will help reduce air pollution and respiratory ailments caused by airborne dust particles generated by traffic on unpaved streets. Specifically, the project is expected to reduce PM<sub>10</sub> emissions by an estimated 1,700 metric tons a year. It will also provide safer roadways for motorists and allow easier access for police, firemen, and ambulances.

The Bank is participating as a direct lender to complement the capital investments of the State of Nuevo Leon. On December 3, 2014, the Bank approved a market-rate loan for up to US\$76.92 million to support two projects. Of this amount, an estimated US\$46.15 million is expected to go to the street paving project in Monterrey and the remaining US\$30.77 million to the water conservation project in Don Martin Irrigation District 004 in Anahuac. An initial tranche for US\$7.62 million was contracted on March 19, 2015 and fully disbursed on June 2015.

Three street paving contracts (approx. 9,500 m<sup>2</sup>) have been completed.

**PROJECT****Naco, Sonora, Mexico****Air Quality and Paving Project**

Type:	Air quality
Total Cost:	US \$909,091
Total NADB Funding:	US\$417,299
BECC Certification:	10 / 30 / 07
Residents to Benefit:	6,108

**DESCRIPTION**

Paving of 18 roadways extending approximately 5.57 km (66,885 m<sup>2</sup>).

**Community Benefits**

Improved air quality and respiratory health conditions in Naco, Sonora, and the neighboring community of Naco, Arizona. Safer roadways for motorists and faster access for emergency services, such as police, firemen and ambulances. Reduced silt in storm runoff clogging sewer lines.

**NADB PARTICIPATION**

The Bank is a direct lender to complement grant funds from the federal, state and municipal government. On October 30, 2007, the Bank approved a US\$417,299 market -rate loan to finance part of the project costs. The corresponding loan agreement was signed on July 16, 2008. The loan was fully disbursed on July 24, 2009 and is currently in amortization.

Additional assistance was provided through the TAP for the design, management and supervision of the paving works.

**IMPLEMENTATION STATUS**

Paving of six roadways (16,206 m<sup>2</sup>) financed by the Bank was completed in April 2011. Six additional roadways (28,494 m<sup>2</sup>) financed with Mexican funds have also been completed.

**Nogales, Arizona, USA****Water Main Replacement on Crawford Street**

Type:	Water
Total Cost:	US \$645,000
Total NADB Funding:	US \$500,000
BECC Certification:	5 / 14 / 15
Residents to Benefit:	1,178

Replacement of the water distribution main on Crawford street, including 49 water connections and seven fire hydrants.

**Community Benefits**

The project will ensure safe and reliable drinking water services, directly benefiting 330 residential connections, by eliminating service interruptions from line breaks, as well as reducing water losses and the risk of water contamination.

The Bank is a source of grant funds through the Community Assistance Program (CAP) to complement funding provided by the City. On May 14, 2015, the Bank approved a US\$500,000 CAP grant to cover up to 77.5% of the project costs. The corresponding grant agreement was signed on December 9, 2015.

Bidding for construction of the waterline is expected to begin in October 2016.

**Nuevo Laredo, Tamaulipas, Mexico****Air Quality and Street Paving Project**

Type:	Air quality
Total Cost:	US \$47,490,347
Total NADB Funding:	US \$36,346,856
BECC Certification:	12 / 16 / 08
Residents to Benefit:	120,000

Paving of 900,000 m<sup>2</sup> of roadways in three sectors in the southwestern area of the city, which includes 13 subdivisions.

**Community Benefits**

Increased paving coverage from 58% to 80%, which will help reduce air pollution from vehicular dust, thus improving respiratory health conditions in the city and neighboring communities on both sides of the border that share the same air basin. Improved neighborhood security by providing safer roadways and allowing easier access for police, firemen, and ambulances.

The Bank is a direct lender to complement funding from the municipal government. On December 16, 2008, the Bank approved a US\$36.35 million market-rate loan to finance 78% of the project costs. The corresponding loan agreement was signed on January 30, 2009, and the final loan disbursement was made on October 2, 2009. The loan is in amortization.

The Bank provided assistance through the TAP for credit ratings, obtained in January 2009. Additional assistance was provided for development of the final design of the paving works.

A total of 131 paving contracts (737,029 m<sup>2</sup>) were awarded. Construction under the last contract was completed in March 2010.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Nuevo Laredo, Tamaulipas, Mexico****Basic Environmental Infrastructure Project**

**Type:** Basic urban infrastructure  
**Total Cost:** US \$35,522,727  
**Total NADB Funding:** US \$9,874,607  
**BECC Certification:** 7 / 17 / 12  
**Residents to Benefit:** 384,033

Construction of waterlines, sewer lines and storm water drainage lines, upgrades to two water pump stations and one lift station, and construction of an 11,400 gd wastewater treatment plant (WWTP), as well as paving of 123,955 m<sup>2</sup> of dirt roads, expansion of and rehabilitation of 332,255 m<sup>2</sup> of existing roadways and construction of four urban overpasses.

**Community Benefits**

Street paving and roadway improvements are expected to contribute to the reduction of 265.4 metric tons/year of PM<sub>10</sub>, while better mobility and less congestion will help reduce vehicle emissions. In addition, an estimated 1,024 households will have access to first-time water service and an estimated 5,116 households will have access to first-time wastewater services. Once all of the sewer connections are installed, an estimated 1.04 mgd of wastewater will be collected and treated. Storm water infrastructure improvements will mitigate the risk of flooding in the urban area and provide proper storm water management, separate from the sewer system.

The Bank is a direct lender to complement funding from the municipal, state and federal governments. On July 17, 2012, the Bank approved a US\$13.26 million market-rate loan to finance approximately 37% of the project costs. The corresponding loan agreement was signed with the City on September 19, 2012. The first loan disbursement was made in November 2012. On March 20, 2013, the Municipality informed the Bank that no additional disbursements would be made under the loan agreement, leaving an unused balance of US\$3.38 million and reducing the Bank's participation in this project to US\$9.87 million.

Thirty-two street paving contracts (approx. 54,355 m<sup>2</sup>) and nine roadway rehabilitation contracts (approx. 185,006 m<sup>2</sup>) have been completed, along with the installation of 52,493 ft. of sewer lines, 2,441 ft. of waterlines and 1,335 ft. of storm drainage lines. Construction of the Héroes de la Independencia overpass has also been completed.

**Nuevo Laredo, Tamaulipas, Mexico****Wastewater Collection System Improvements – Disconnection from Storm Water Sewer**

**Type:** Wastewater  
**Total Cost:** US \$5,007,720  
**Total NADB Funding:** US \$2,897,908  
**BECC Certification:** 7 / 17 / 12  
**Residents to Benefit:** 86,869

Rehabilitation and replacement of six collapsed sewer lines and disconnection of any interconnections with storm water drains.

**Community Benefits**

The project will prevent untreated wastewater discharges into the Rio Grande River, which will reduce environmental contamination and the risk of waterborne diseases, thus providing a safer and healthier source of water for the city, as well as for downstream users. Specifically, an estimated 5.2 million gallons a day of wastewater will be collected and treated prior to being discharged into the river.

The Bank is a source of grant funds through the BEIF to complement federal, state and municipal funding. On July 12, 2012, EPA approved the Bank's recommendation to provide US\$2.90 million in BEIF funds for the construction of the project, and the corresponding grant agreement was signed on September 11, 2012. The initial BEIF disbursement was made in April 2013.

The Lincoln, Monterrey, Niños Heroes, 20 de Noviembre and Guatemala collectors have been completed. Construction of the 5 de Febrero collector was completed in November 2015, thus completing the entire certified project.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Piedras Negras, Coahuila, Mexico****Wastewater System Rehabilitation Project**

**Type:** Wastewater  
**Total Cost:** US \$242,670  
**Total NADB Funding:** US \$218,410  
**BECC Certification:** 5 / 8 / 14  
**Residents to Benefit:** 65,000

Replacement of two sections of the Rio Bravo Collector and the gravity sewer main at Arroyo El Soldado, as well as repairs to Lift Station No. 4.

**Community Benefits**

Reduction of environmental and health hazards associated with untreated wastewater discharges, thus providing a cleaner healthier environment for local residents, as well as for communities downstream. Specifically, the project will prevent up to 2.3 mgd of untreated wastewater discharges.

The Bank is a source of grant funds through the CAP to complement funding provided by the local water utility, SIMAS. On May 8, 2014, the Bank approved a CAP grant for up to US\$250,000 to cover up to 90% of the project costs, including possible fluctuations in the exchange rate and construction contingencies. The corresponding grant agreement was signed on October 23, 2014, and disbursements began in October 2015.

Construction began in September 2015 and was completed in April 2016.

**Playas de Rosarito, Baja California, Mexico****Basic Urban Infrastructure Project**

**Type:** Basic urban infrastructure  
**Total Cost:** US \$14,558,707  
**Total NADB Funding:** US \$13,650,811  
**BECC Certification:** 5 / 14 / 15  
**Residents to Benefit:** 90,688

Paving of approx. 34,518 m<sup>2</sup> of dirt roads, repaving of approx. 39,676 m<sup>2</sup> of roads and other roadway improvements, replacement of aging water and wastewater infrastructure, replacement of street lighting equipment and acquisition of maintenance equipment.

**Community Benefits**

Paving works will help improve air quality by reducing vehicular dust caused by traffic on unpaved roads and relieving traffic congestion at peak hours. Specifically, increased paving coverage is expected to prevent the emission of 32.8 metric tons/year of PM<sub>10</sub>, while better urban mobility will help reduce vehicle emissions, including an estimated 77.43 kg/year of volatile organic compounds, 491 kg/year of carbon monoxide, and 157.54 kg/years of nitrogen oxides. The project will also provide safer roadways for motorists and pedestrians, as well as allow faster access for emergency services. The replacement of street lamps will help reduce energy consumption by approximately 9.6% a year, resulting in an estimated displacement of 33 metric tons/year of carbon dioxide (CO<sub>2</sub>). Additionally, the project will contribute to the provision of adequate water and wastewater services.

The Bank is a direct lender to complement federal funding in support of the new infrastructure and equipment (est. cost of US\$5.11 million), as well as to refinance an existing loan (est. cost of US\$12.0 million) to obtain a longer term and better financing conditions, allowing the Municipality to apply part of the savings toward investments in additional infrastructure needs. On May 14, 2015, the Bank approved a peso-denominated, market-rate loan for an estimated US\$16.25 million to refinance the existing loan and finance up to 80% of the cost of the new infrastructure works and equipment. On June 9, 2015, a loan agreement for up to US\$16.10 million was contracted with the Municipality. On September 1, 2015, the loan was fully disbursed for a total of US\$13.65 million: US\$9.98 to refinance the existing loan and US\$3.67 million to cover part of the cost of the new infrastructure works and equipment.

The Municipality has already paved approximately 23,300 m<sup>2</sup> of roadways.

Two contracts funded by the Bank were awarded in December 2015, and work began the same month. The first contract for asphalt street paving (approx. 32,600 m<sup>2</sup>), including replacement of sewer lines, was completed in June 2016. The second contract for urban revitalization, including concrete street paving (approx. 2,163 m<sup>2</sup>), sidewalks, public lighting, green areas and replacement of water and sewer lines, was completed in August 2016. Bidding for a paving contract (7,912 m<sup>2</sup>) is underway and expected to be awarded in October 2016.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Praxedis G. Guerrero, Chihuahua, Mexico****Expansion and Rehabilitation of the Water Distribution System**

**Type:** Water  
**Total Cost:** US \$1,831,625  
**Total NADB Funding:** US \$549,488  
**BECC Certification:** 12 / 8 / 11  
**Residents to Benefit:** 3,641

Construction of water transmission and distribution lines and an elevated storage tank, as well as installation of four chlorine disinfection units, telemetry system and 600 new water hookups and replacement of 270 old water connections.

**Community Benefits**

Provide safe and reliable drinking water service to 100% of the community, thus reducing the risk of infections associated with low water quality.

The Bank is a source of grant funds through the BEIF, to complement state and federal funding. On June 28, 2011, EPA approved the Bank's recommendation to provide US\$549,488 in BEIF funding for the construction of this project. The corresponding grant agreement was signed on July 31, 2012. Disbursements began in March 2015.

Construction of Phases I & II, including the storage tank and 50% of the transmission and distribution lines, was completed with Mexican funding in 2010 and 2011. Construction of Phase III waterlines was completed in June 2013. Construction of Phase V transmission lines was completed with Mexican funds in July 2014. The final project component, Phase IV waterlines funded by the Bank, was completed in September 2015, thus completing the entire certified project.

**Reynosa, Tamaulipas, Mexico****Wastewater Collection and treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$15,658,735  
**Total NADB Funding:** US \$7,080,512  
**BECC Certification:** 5 / 6 / 16  
**Residents to Benefit:** 266,853

Expansion of the Wastewater Treatment Plant No. 2 (WWTP 2), to increase capacity from 5.7 mgd to 17.1 mgd, as well as construction of Lift Station No. 278, rehabilitation of Lift Station No. 1 and decommissioning of three lift stations.

**Community Benefits**

Expansion of wastewater treatment coverage will prevent untreated sewage discharges from entering the Rio Grande River, which will reduce environmental pollution and the risk of waterborne diseases, thus providing a safer and healthier source of water for the city, as well as for downstream users. Specifically, an estimated 9.0 mgd of wastewater will be collected and treated.

The Bank is a source of grant funds through the BEIF, to complement federal funding provided through the Mexican federal water agency, CONAGUA. On March 23, 2016, EPA approved the Bank's recommendation to provide US\$7.08 million in BEIF funding for the construction of this project. The corresponding grant agreement was signed on June 16, 2016.

Construction to expand WWTP 2 began in 2014 with Mexican funds and is approximately 90% complete. Bidding for construction of lift stations 1 and 278 will begin in November 2016, with contract award expected in January 2017.

**PROJECT****Sabinas, Coahuila, Mexico****Rehabilitation of the Wastewater System in the Downtown Area**

**Type:** Wastewater  
**Total Cost:** US \$728,138  
**Total NADB Funding:** US \$500,000  
**BECC Certification:** 11 / 6 / 15  
**Residents to Benefit:** 3,027

**DESCRIPTION**

Replacement of sewer lines and connections in downtown Sabinas.

**Community Benefits**

Reduced risk of exposure to untreated wastewater discharges from line breaks and overflowing manholes. Improved hydraulic capacity and flow rates will help prevent silting and septic conditions in the system.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the CAP to complement funding provided by the Municipality. On November 6, 2015, the Bank approved a US\$500,000 CAP grant to cover up to 68.7% of the project costs. The corresponding grant agreement was signed on December 2, 2015.

Technical assistance was also provided for geotechnical analyses and topographical surveys to support development of the final design.

**IMPLEMENTATION STATUS**

Bidding for replacement of the sewer lines began in August 2016, with construction expected to begin in November 2016.

**San Agustín, Chihuahua, Mexico****Water and Wastewater Improvements Project**

**Type:** Water / wastewater  
**Total Cost:** US \$2,641,447  
**Total NADB Funding:** US \$792,440  
**BECC Certification:** 11 / 8 / 12  
**Residents to Benefit:** 1,569

Construction of new sewer system with 711 residential connections, an elevated water storage tank, and water distribution and transmission lines; installation of disinfection systems for two water wells; and expansion of the El Millón Wastewater Treatment Plant by 0.12 mgd.

**Community Benefits**

Provision of first-time wastewater collection and treatment services to the entire community, thus reducing the potential for groundwater and surface water contamination by eliminating the use of latrines, septic tanks, and wastewater discharges to open-air drains. Specifically, an estimated 109,786 gallons a day of sewage will be collected and treated. Safer and more reliable drinking water services will also be extended to 100% of the population.

The Bank is a source of grant funds through the BEIF, to complement federal funding provided through the Mexican federal water agency, CONAGUA. On February 2, 2012, EPA approved the Bank's recommendation to provide US\$792,440 in BEIF funding for the construction of this project. The corresponding grant agreement was signed on June 13, 2013. The initial BEIF disbursement occurred in April 2015.

All the project components financed with Mexican funds, including upgrades to two water wells, construction of an elevated water tank, waterlines, sewer lines and residential connections, as well as the expansion of the El Millón Wastewater Treatment Plant (WWTP), were completed by August 2012. Construction of the final component, the General Collector funded by the Bank, as well as the additional repair work to a force main, was completed in October 2015, thus completing the entire certified project.

**PROJECT****San Luis Rio Colorado, Sonora, Mexico****Construction of a Sanitary Landfill, Closure of the Existing Open-air Dumpsite and Improvements in the Municipal Sanitation Services**

<b>Type:</b>	Solid waste
<b>Total Cost:</b>	US \$4,009,762
<b>Total NADB Funding:</b>	US \$1,584,771
<b>BECC Certification:</b>	10 / 16 / 01
<b>Residents to Benefit:</b>	161,795

**DESCRIPTION**

Construction of a sanitary landfill, closure of the existing open-air dumpsite, and improvements in solid waste management services.

**Community Benefits**

Improvements in the sanitation services will provide 100% collection service coverage for community residents. Closing the open-air dumpsite will reduce environmental pollution and the health risks to which residents are currently exposed.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the SWEP, as well as a direct lender to complement federal, state and municipal funding. On August 20, 2002, the Bank approved a low-interest loan for up to US\$1.08 million and a US\$500,000 SWEP grant for the project. Both the loan and grant agreement were signed on June 7, 2003. The final loan disbursement was made on July 21, 2005. The final SWEP disbursement was made on January 23, 2007. The loan was repaid in full July 31, 2012.

A solid waste management study funded through the TAP was completed in July 2004. A study to identify and implement solutions for closure of the open-air dumpsite funded through TAP, was completed in May 2014.

**IMPLEMENTATION STATUS**

Construction of the landfill was completed in September 2005. Equipment to operate the landfill has been purchased and delivered.

Closure of the old open-air dumpsite is pending. The study to identify and implement solutions for closure of the open-air dumpsite was completed in May 2014. The Municipality is reviewing its options and seeking additional sources of funding.

**San Luis Rio Colorado, Sonora, Mexico****Street Paving and Rehabilitation Project**

<b>Type:</b>	Air quality
<b>Total Cost:</b>	US \$14,672,150
<b>Total NADB Funding:</b>	US \$8,597,631
<b>BECC Certification:</b>	9 / 17 / 13
<b>Residents to Benefit:</b>	178,380

Paving of 235,200 m<sup>2</sup> of dirt roads, rehabilitation of 124,800 m<sup>2</sup> of existing roadways in the city center; and construction of two bridges across existing irrigation canals.

**Community Benefits**

Street paving and improved urban mobility will help reduce air pollution caused by vehicular dust and traffic congestion, thus improving respiratory health conditions for local residents, and may also help Yuma County improve conditions influencing its designation as a non-attainment area for PM<sub>10</sub>. The project will also provide safer roadways for motorists; facilitate access to emergency, security and other public services; reduce travel times; and foster economic development.

The Bank is a direct lender to complement federal, state and municipal funding. On September 17, 2013, the Bank approved a peso-denominated, market-rate loan for US\$8.60 million to cover approximately 63% of the project costs. The corresponding loan agreement was signed on September 18, 2013. The loan proceeds were fully disbursed on November 22, 2013. The loan is in amortization.

Three paving contracts (64,546 m<sup>2</sup>) funded by the City were completed between July 2013 and June 2014. Two of the three Phase I street paving contracts (49,600 m<sup>2</sup>), including one vehicular bridge, funded by the Bank were completed in November 2014. The third Phase I paving contract, including one vehicular bridge, funded by the Bank was completed in May 2015. Construction under two Phase II paving contracts in the downtown area was completed in October 2015. Construction of a storm water collector and retention pond began in September 2015 and was completed in December 2015.

The City intends to use the remaining loan funds to purchase and install street furniture. Bidding for the purchase of the street furniture is expected to begin in November 2016.

**PROJECT****San Luis Rio Colorado, Sonora, Mexico****Expansion of the Wastewater Collection System in B Avenues**

**Type:** Wastewater  
**Total Cost:** US \$6,909,378  
**Total NADB Funding:** US \$3,454,689  
**BECC Certification:** 5 / 8 / 14  
**Residents to Benefit:** 16,122

**DESCRIPTION**

Expansion of the sewer system in eight sectors of the city, including the installation of up to 4,369 residential sewer hookups.

**Community Benefits**

Provision of first-time wastewater collection and treatment services to an estimated 16,122 residents, increasing wastewater collection coverage from 63% to 70% of the population. Elimination of a potential source of groundwater contamination from inadequate onsite disposal systems. Specifically, an estimated 1.06 mgd of wastewater will be collected and treated.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the BEIF, to complement Mexican federal funding. On May 8, 2014, EPA approved the Bank's recommendation to provide US\$3.45 million in BEIF funding for construction of the project. The corresponding grant agreement was signed on June 30, 2014, and disbursements began in December of the same year.

**IMPLEMENTATION STATUS**

Construction began with Mexican funds in June 2013. As of September 2015, expansion of the sewer system in four sectors of the city has been completed. Four contracts for the installation of residential sewer connections were completed in June 2016.

Two additional contracts for the construction of residential sewer lines were awarded in June 2016, and the work is expected to take six months to complete.

**Santiago, Nuevo Leon, Mexico****Storm Water Infrastructure Project**

**Type:** Storm water  
**Total Cost:** US \$435,000  
**Total NADB Funding:** US \$398,000  
**BECC Certification:** 5 / 9 / 13  
**Residents to Benefit:** 20,000

Construction of a storm water collection main in the community of Los Fierros.

**Community Benefits**

Improved storm water management will prevent unsanitary conditions, including flooding and surface ponding, thereby eliminating possible exposure to stagnant water and reducing the risk for waterborne diseases.

The Bank is a source of grant funds through its CAP to complement funding provided by the City. On May 9, 2013, the Bank approved a US\$333,000 CAP grant for construction of the project, and the corresponding grant agreement was signed on July 3, 2013. To help cover increased costs due to necessary design modifications, on May 8, 2014, the Bank approved an additional US\$65,000 in CAP funds, bringing the total CAP grant to US\$398,000. The amended grant agreement was signed on July 15, 2014 and the initial disbursement occurred in October 2014.

Construction of the storm water main began in September 2014 and was completed in October 2015. A contract for construction of complimentary components was completed in September 2016, thus completing the entire certified project.

**Socorro, Texas, USA****Cotton Valley Wastewater Collection Project**

**Type:** Wastewater  
**Total Cost:** US \$1,292,577  
**Total NADB Funding:** US \$1,292,577  
**BECC Certification:** 12 / 3 / 14  
**Residents to Benefit:** 288

Construction of a new gravity sewer system for the Cotton Valley subdivision, including 78 sewer connections and decommissioning of 78 septic tanks.

**Community Benefits**

Provision of first-time wastewater collection and treatment services to the entire community, thus eliminating the environmental and health risks associated with the use of deteriorated and mismanaged septic tanks. Specifically, an estimated 30,000 gallons a day of sewage will be collected and treated.

The Bank is a source of grant funds through the BEIF. On July 16, 2014, the EPA approved the Bank's recommendation to provide US\$1.29 million in BEIF construction assistance for the project. The corresponding grant agreement was signed on January 29, 2015.

Bidding for construction of the sewer system is scheduled to begin in November 2016.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Sonoyta, Sonora, Mexico****Wastewater Collection and Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$4,099,371  
**Total NADB Funding:** US \$2,295,089  
**BECC Certification:** 12 / 16 / 08  
**Residents to Benefit:** 12,439

Construction of the first phase of a new wastewater treatment plant to replace the current facility, and expansion of the sewer system in four subdivisions.

**Community Benefits**

Extension of sewer services to currently unserved areas thereby increasing wastewater collection coverage to 88% and reducing potential environmental and health risks associated with untreated sewage. Improved effluent from new plant will reduce contamination of the Sonoyta River and will meet federal standards for reuse in irrigation. Elimination of foul odors generated by the existing lagoons.

The Bank is a source of grant funds through the BEIF, to complement municipal, state and federal funding, as well as equity contributions from the local water utility. On November 19, 2008, EPA approved the Bank's recommendation to provide US\$810,040 in BEIF funding for construction of this project. The corresponding grant agreement was signed on April 12, 2010, and the first BEIF disbursement occurred in April 2011. On November 24, 2014, EPA agreed to provide an additional US\$1.49 million in BEIF construction assistance to help cover construction costs related to necessary design modifications, bringing total BEIF participation in the project to just under US\$2.30 million. The amended grant agreement was signed on December 1, 2014.

Construction of sewer system expansion with Mexican funds has been completed.

Construction of the wastewater treatment plant was delayed by a technical problem. Modifications to the plant design were completed in the last quarter of 2014. A contract to complete construction of the plant was awarded in January 2016, and work is 70% complete.

**Sunland Park and Santa Teresa, New Mexico, USA****Camino Real Regional Authority Wastewater Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$11,700,000  
**Total NADB Funding:** US \$8,000,000  
**BECC Certification:** 4 / 23 / 15  
**Residents to Benefit:** 6,438

Replacement of the 0.5-mgd North Wastewater Plant (WWTP) with a new 1.0-mgd package WWTP using extended aeration technology, and rehabilitation of the View Pointe Lift Station.

**Community Benefits**

Increased wastewater treatment capacity and improved effluent quality in compliance with current permit requirements, eliminating the risk of untreated or inadequately treated sewage discharges. Specifically, the new plant will treat 0.70 mgd of wastewater generated by the 1,981 residential connections currently served by the North WWTP, and has the capacity to be expanded to meet future demand.

The Bank is a source of grant funds through the BEIF, to complement a grant from the State of New Mexico. On December 23, 2014, EPA approved the Bank's recommendation to provide US\$8.0 million in BEIF funds for the construction of the project. The corresponding grant agreement was signed on May 18, 2015.

The hold placed on the project by the U.S. Environmental Protection Agency (EPA) has been released. Bidding for construction of the plant is expected to begin January 2017.

**PROJECT****Tecate, Baja California, Mexico****Expansion of Water and Wastewater Services to Unserved Areas of the Piedra Angular Colonia**

**Type:** Water / wastewater  
**Total Cost:** US \$447,802  
**Total NADB Funding:** US \$403,022  
**BECC Certification:** 12 / 3 / 14  
**Residents to Benefit:** 644

**DESCRIPTION**

Construction of a sewer system, including installation of 174 residential connections and decommissioning of existing on-site wastewater systems, as well as extending the water distribution system to provide access to 51 unserved households.

**Community Benefits**

Provision of first-time wastewater collection and treatment services to the entire community, reducing the risk of contamination of groundwater resources from substandard on-site disposal systems, including shared water bodies such as the Tecate River. Specifically, an estimated 34,000 gallons a day of sewage will be collected and treated. In addition, the project will provide access to drinking water service for households that are currently not connected to the distribution system.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the CAP to complement funding provided by the local water utility, CESPTTE. On December 3, 2014, the Bank approved a CAP grant for up to US\$450,000 to cover up to 90% of the project costs, including possible fluctuations in the exchange rate and construction contingencies. The corresponding grant agreement was signed on February 13, 2015. The first disbursement of the CAP grant occurred in March 2016.

**IMPLEMENTATION STATUS**

Construction of the sewer system and extension of the water system to connect unserved households began in November 2015 and was completed in July 2016.

**PROJECT****Tijuana and Playas de Rosarito,  
Baja California, Mexico****Expansion of the Water and Wastewater Systems**

<b>Type:</b>	Water / wastewater
<b>Total Cost:</b>	US \$48,420,000
<b>Total NADB Funding:</b>	US \$28,330,900
<b>BECC Certification:</b>	7 / 21 / 09
<b>Residents to Benefit:</b>	1,111,891

**DESCRIPTION**

Expansion of the water distribution and wastewater collection systems in Tijuana, expansion of the wastewater collection system in Playas de Rosarito, upgrades to the Rosarito I Wastewater Treatment Plant (WWTP) and completion of the La Morita WWTP and the Tecolote-La Gloria WWTP.

**Community Benefits**

Reduction of environmental and health hazards associated with inadequate sewage disposal, thus providing a cleaner, healthier environment for local residents. An estimated 3 mgd of wastewater will be collected and treated prior to being discharged into the Pacific Ocean. Provision of first-time water services to currently unserved areas.

**NADB PARTICIPATION**

The Bank is a direct lender to complement funding from the local water utility, CESPT. In addition, several components of this project are expected to receive BEIF grants, along with matching Mexican grants. On July 21, 2009, the Bank approved a market-rate loan for up to US\$27.96 million for the project. On July 17, 2009, EPA approved the Bank's recommendation to provide a total of US\$2.20 million in BEIF funds as follows: US\$1.36 million for the Rosarito I WWTP and US\$845,682 for the Aztlán, Independencia and Lomas de Rosarito sewer systems. The three sewer systems were completed with Mexican funds, so all of the BEIF funds will be used to fund the Rosarito I WWTP. On September 18, 2009, a US\$22.08 million loan agreement was signed for the first tranche of the loan and disbursements began in December of the same year. The utility determined that the remainder of the loan was unnecessary and decided not to contract the second tranche. As a result, on August 6, 2010, the unsigned portion of the loan was cancelled, reducing the Bank's participation in this project to US\$24.28 million. On February 1, 2011, two additional components were certified for funding under this loan: the La Morita WWTP and the Tecolote-La Gloria WWTP. On February 16, 2011, EPA approved the Bank's recommendation to provide a US\$1.50 million BEIF grant for expansion of the Ejido Plan Libertador sewer system in Playas de Rosarito and a US\$430,567 BEIF grant for expansion of the Alcatrazes sewer system in Tijuana. As a result, total Bank participation in this project comes to US\$26.21 million. On October 26, 2012, three additional components were certified for funding under this loan: the La Cuesta sewer system, the Farallon Collector and the SEDUE-SAAS force main. On December 3, 2014, additional sewer rehabilitation works in Tijuana were certified for partial funding under this loan, along with US\$3 million in BEIF funds, bringing Bank participation to US\$29.20 million. As of July 27, 2015, a total of US\$871,505 in BEIF funds has been deobligated from three projects, reducing Bank participation to US\$28.33 million.

**IMPLEMENTATION STATUS**

Five water storage tanks totaling 11,000 m<sup>3</sup>, two pump stations, and waterlines in four subdivisions have been completed, as well as two wastewater force mains. Construction of the 9-km Matanuco collector was completed in July 2010. The La Morita plant has also been completed and began operations in August 2010. The La Cuesta sewer system in Tijuana was completed in January 2013. Rehabilitation of the SEDUE-SAAS force main was completed in April 2013. Expansion of the Rosarito I WWTP was completed in September 2013. Rehabilitation of the Farallón collector was completed in February 2014. The sewer lines in Ejido Plan Libertador in Playas de Rosarito and in Col. Alcatrazes in Tijuana, were completed in December 2013. Additional sewer connections related to these two projects were completed in September 2014. Rehabilitation of four wastewater collectors was completed in December 2015. Construction on the fourth phase of the Sanchez Taboada collector was completed in February 2016. Rehabilitation of two sections of the same collector funded by the Bank began in July 2015 and was completed in February 2016.

The Tecolote-La Gloria plant is approximately 55% complete; but construction is currently on hold due to a contractor dispute. Two contracts for residential hookups in Tijuana were completed in September 2016. The rehabilitation of three collectors began in September 2016, and the work is expected to take six months to complete.

**PROJECT****Tijuana, Baja California, Mexico****Construction of the Tecolote-La Gloria Wastewater Treatment Plant**

**Type:** Wastewater  
**Total Cost:** US \$8,228,555  
**Total NADB Funding:** US \$4,129,079  
**BECC Certification:** 2 / 1 / 11  
**Residents to Benefit:** 187,036

**DESCRIPTION**

Construction of the 8.7 mgd Tecolote-La Gloria Wastewater Treatment Plant.

**Community Benefits**

Reduction of environmental and health hazards associated with untreated sewage discharges that affect local residents, as well as other communities along the Pacific coast, including California.

**NADB PARTICIPATION**

The Bank is providing loan funds to complete the financing for this project, which also includes funding from the local water utility, CESPT, as well as Mexican federal grants and a loan from the Japan Bank of International Cooperation (JBIC). On September 18, 2009, NADB and CESPT signed a US\$22.08 million loan agreement to finance several water and wastewater works. Approximately US\$4.13 million of that loan is being applied towards the implementation of this project.

**IMPLEMENTATION STATUS**

The Tecolote-La Gloria plant is approximately 55% complete; but construction is currently on hold due to a contractor dispute.

**Tijuana, Baja California, Mexico****Rehabilitation of the Wastewater Collection Main Lines and Residential Wastewater Connections**

**Type:** Wastewater  
**Total Cost:** US \$7,045,723  
**Total NADB Funding:** US \$4,041,881  
**BECC Certification:** 12 / 3 / 14  
**Residents to Benefit:** 524,908

Replacement of deteriorated sanitary sewer collection lines and installation of residential wastewater connections.

**Community Benefits**

Improvements to the wastewater collection and conveyance system and first-time sewer services for about 2,000 residents in three neighborhoods will reduce environmental and health hazards associated with inadequate sewage disposal. An estimated 90,156 gallons a day of wastewater will be collected and treated, preventing the potential contamination of shared water bodies, such as the Tijuana River and eventually, the Pacific Ocean.

The Bank is a direct lender and source of grant funds through the BEIF, to complement federal and state grants. This project is component of a larger water and wastewater project funded by an NADB loan. Some of the proceeds from that loan will also be applied to the construction of this project. On October 23, 2014, EPA approved the Bank's recommendation to provide US\$3.00 million in BEIF funds for the construction of the project. The corresponding grant agreement was signed on March 24, 2015, and disbursements began in July 2015.

Rehabilitation of four wastewater collectors financed with Mexican funds were completed in December 2015. Rehabilitation of two sections of the same collector funded by the Bank began in July 2015 and was completed in February 2016.

Two contracts for residential hookups were completed in September 2016. The rehabilitation of three collectors began in September 2016, and the work is expected to take six months to complete.

**PROJECT****Tombstone, Arizona, USA****Drinking Water System Improvements**

**Type:** Water  
**Total Cost:** US \$ 742,000  
**Total NADB Funding:** US \$ 500,000  
**BECC Certification:** 6 / 16 / 16  
**Residents to Benefit:** 1,380

**DESCRIPTION**

Improvements to the water system, including installation of a system to blend water from Well No. 1 with spring water to reduce arsenic concentrations and replacement of the pump station and related pipes at Well No. 2, as well as repairs to storage infrastructure, a SCADA control system and macro-meters.

**Community Benefits**

Improved water quality by reducing arsenic concentrations to acceptable levels in compliance with revised federal regulations. More efficient use of water sources through improved system controls and infrastructure.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the CAP to complement funding provided by the City. On June 16, 2016, the Bank approved a CAP grant for up to US\$500,000 to cover about 67% of the project costs. The corresponding grant agreement was signed on August 15, 2016.

**IMPLEMENTATION STATUS**

Bidding for construction is expected to begin in late October 2016.

**Tornillo, Texas, USA****Arsenic Treatment and Wastewater Collection Project**

**Type:** Water / wastewater  
**Total Cost:** US \$ 3,75,072  
**Total NADB Funding:** US \$ 3,75,072  
**BECC Certification:** 8 / 28 / 14  
**Residents to Benefit:** 3,500

Construction of an arsenic treatment facility (ATF) for water wells No. 2 and 3, as well as 19 new residential wastewater connections that will be incorporated into the ATF waste line.

**Community Benefits**

Improved water quality by reducing arsenic concentrations to acceptable levels in compliance with current federal regulations, as well as removing iron and manganese ions. First-time sewer service for 19 households, eliminating approximately 5,600 gallons per day of inadequately treated and untreated wastewater.

The Bank is a source of grant funds through the BEIF. On May 8, 2014, EPA approved the Bank's recommendation to provide US\$3.25 million in BEIF construction assistance for this project. The corresponding grant agreement was signed on November 14, 2014. On May 4, 2016, EPA approved an additional US\$498,612 in BEIF funds to cover increased costs based on actual procurement results, bringing total BEIF participation in this project to US\$3.75 million. The amended grant agreement was signed on May 12, 2016.

Construction of the arsenic treatment facility and related works began in June 2016, and is approximately 53% complete.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Tres Jacales, Chihuahua, Mexico****Wastewater Collection and Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$1,037,010  
**Total NADB Funding:** US \$168,882  
**BECC Certification:** 5 / 4 / 10  
**Residents to Benefit:** 275

Construction of a sewer system, including residential hookups, which will be connected to the new treatment plant in El Millón, CHIH.

**Community Benefits**

Elimination of potential environmental and health risks associated with untreated sewage by providing first-time wastewater collection and treatment services to 100% the community's population.

The Bank is a source of grant funds through the BEIF, to complement state and federal funding. On March 26, 2010, EPA approved the Bank's recommendation to provide US\$168,882 in BEIF funding for construction of the project. The corresponding grant agreement was signed on September 24, 2010, and the initial disbursement occurred in June 2011.

The sewer system and the first phase of the general collector were completed with Mexican funds in May 2011. The treatment plant financed with Mexican funds was completed in March 2012. The second phase of the general collector funded by the Bank was completed in August 2012.

Since the project came in under budget, complementary and ancillary works that will provide access to wastewater services to additional households were included in the project. Construction of the additional works was completed in July 2014, thus concluding the entire project.

**Willcox, Arizona, USA****Wastewater Treatment Plant Improvements**

**Type:** Wastewater  
**Total Cost:** US \$ 11,329,056  
**Total NADB Funding:** US \$ 4,618,182  
**BECC Certification:** 5 / 14 / 15  
**Residents to Benefit:** 3,757

Upgrades to the wastewater treatment plant, changing it from a lagoon system to an oxidation ditch process.

**Community Benefits**

Improved quality of the treated water discharged to Cochise Lake, reducing health risks associated with environmental deterioration and water contamination. Additionally, the City will be able to continue using treated wastewater to irrigate the golf course, rather than potable water resources.

The Bank is a source of grant funds through the BEIF to complement a grant and loan from the U.S. Department of Agriculture Rural Development (USDA-RD). On March 24, 2015, EPA approved the Bank's recommendation to provide US\$4.62 million in BEIF construction assistance for this project. The corresponding grant agreement was signed on June 11, 2016.

Bidding for construction will begin in late October 2016, with contract award scheduled for December of the same year.