

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

**ACTIVE PROJECTS**

**March 31, 2018**

The North American Development Bank (NADB) provides financing and other support for infrastructure projects that enhance the environmental condition of the U.S.-Mexico border region. NADB works closely with border communities, state agencies and other entities to develop and finance affordable, self-sustaining projects with broad community support. Each project must pass through a public participation and certification process to be eligible for financing from NADB.

During the first quarter of 2018, NADB had **61** active projects in various stages of project implementation.<sup>1</sup> A total of **US\$649 million** in loans and grants has been contracted to help finance those projects, and approximately 71% of those funds have already been disbursed to project sponsors. One project completed construction and/or financing activity during the period, leaving 60 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	24	\$ 541,844,593	\$ 147,105,337
NADB-funded grant programs**	13	7,591,974	3,006,365
Border Environment Infrastructure Fund (BEIF)***	28	99,547,638	38,585,602
<b>TOTAL</b>		<b>\$ 648,984,205</b>	<b>\$ 188,697,304</b>

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

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

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

To date, NADB has contracted a cumulative total of approximately US\$3.01 billion in loans and grants to help finance 244 certified projects estimated to cost a total of US\$9.32 billion to implement. Of the financing contracted, 94% has been disbursed to project sponsors for the implementation of 235 projects. Of the 244 projects financed by the Bank, 183 have completed construction and financing activity (except for the amortization of loans) and/or have otherwise been closed out.

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****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Ahumada, Chihuahua, Mexico****Los Santos Solar I Project**

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

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**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gases, thus improving air quality, while providing the citizens of Ahumada with a safe, reliable energy alternative. Specifically, the project is expected to help prevent the emission of more than 16,509 metric tons/year of carbon dioxide (CO<sub>2</sub>), as well as other pollutants.

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.

Construction of the solar park began in September 2015 and was completed in December 2017. Commercial operations began on July 1, 2017.

**Ahumada, Chihuahua, Mexico****Equipment for Sanitary Landfill Operations**

**Type:** Solid waste  
**Total Cost:** US \$292,000  
**Total NADB Funding:** US \$300,000  
**Certification Date:** 6 / 16 / 16  
**Residents to Benefit:** 11,457

Acquisition of new equipment for landfill operations, including a mini-loader skid steer, water truck, 3.5 or 4-ton truck with hydraulic dump, vehicle scale, portable generator, portable welder and pressure washer.

**Community Benefits**

Improved landfill operations for the proper disposal of up to 10 metric tons of solid waste per day in compliance with applicable laws and regulations, reducing risks for soil and groundwater contamination, as well as the transmission of vector-related diseases.

The Bank is a source of grant funds through the Community Assistance Program (CAP), which complements the landfill construction project funded jointly by the Municipality and the Mexican federal government. On June 16, 2016, the Bank approved a CAP grant for up to US\$300,000 to cover the equipment costs, including possible fluctuations in the exchange rate. The corresponding grant agreement was signed on December 12, 2016.

Bidding to procure the landfill equipment began in August 2017. Contracts for the purchase of a flatbed truck and water tank truck were awarded in October 2017, with delivery expected in May 2018. The remaining equipment is expected to be rebid in the second quarter of 2018.

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

**Type:** Wastewater  
**Total Cost:** US \$2,811,400  
**Total NADB Funding:** US \$2,811,400  
**Certification Date:** 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 began in April 2017; however, the bids received exceeded available funding. A new bidding process began in March 2018, with contract award expected in May 2018.

**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  
**Certification Date:** 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. The initial disbursement occurred in September 2017.

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.

Construction for the installation of hookups funded by the Bank began in July 2017 and is approximately 82% complete.

**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  
**Certification Date:** 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.

Construction began in September 2014, and the pump station was completed and went into operation in June 2016. However, the station is underperforming because of problems with the pumps. The District is working to modify the pumps in order to improve their performance.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Central Region, Coahuila, Mexico****Equipment for Sanitary Landfill Operations**

Type:	Solid waste
Total Cost:	US \$554,340
Total NADB Funding:	US \$500,000
Certification Date:	6 / 16 / 16
Residents to Benefit:	345,797

Acquisition of a bulldozer for the Central Region Landfill, which serves the municipalities of Castaños, Frontera, Monclova, Nadadores and San Buenaventura.

**Community Benefits**

Improved landfill operations for the proper disposal of up to 400 metric tons of solid waste per day in compliance with applicable laws and regulations, reducing risks for soil and groundwater contamination, as well as the transmission of vector-related diseases.

The Bank is a source of grant funds through the CAP, to complement funding provided by the *Patronato Pro Limpieza de los Municipios de la Región Centro del Estado de Coahuila, A.C.*, the non-profit organization that operates the regional sanitary landfill. On June 16, 2016, the Bank approved a CAP grant for up to US\$500,000 to cover up to 90% of the equipment costs. The corresponding grant agreement was signed on February 8, 2017.

Bidding to procure the landfill equipment began in November 2017, and a contract for the purchase of a bulldozer was awarded in December. The bulldozer is expected to be delivered in the second quarter of 2018.

**Ciudad Juarez, Chihuahua, Mexico****Construction of the South-South Wastewater Treatment Plant**

Type:	Wastewater
Total Cost:	US \$42,296,065
Total NADB Funding:	US \$17,305,920
Certification Date:	12 / 10 / 09
Residents to Benefit:	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 9.7 km of the collector have been completed. In August 2016, 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 July 2018.

**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  
**Certification Date:** 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 the U.S. Department of Agriculture Rural Development (USDA-RD), as well 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  
**Certification Date:** 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****Dixieland, California, USA****SEPV Imperial Solar Project**

**Type:** Renewable energy  
**Total Cost:** Reserved  
**Total NADB Funding:** US \$11,000,000  
**Certification Date:** 11 / 15 / 16  
**Residents to Benefit:** 6,436

**DESCRIPTION**

Construction of two solar facilities with a combined capacity of 5 MWac, using crystalline photovoltaic modules mounted on a single-axis tracker system.

**Community Benefits**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gases, thus improving air quality, while providing the citizens of Dixieland, with a safe, reliable energy alternative. Specifically, the project is expected to help prevent the emission of more than 4,319 metric tons/year of carbon dioxide (CO<sub>2</sub>), as well as other pollutants, such as nitrogen oxides.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, SEPV Imperial, LLC., which has signed a power purchase agreement with Imperial Irrigation District (IID). On November 11, 2016, the Bank approved a US\$11.0 million market-rate loan for the construction of the project. The loan agreement was signed on March 21, 2017, and disbursements began the same month.

**IMPLEMENTATION STATUS**

Construction on both solar plants began in June 2016 and was completed in February 2017. Commercial operation of both facilities began on December 31, 2016.

**Douglas, Arizona, USA****Bay Acres Wastewater Collection System and Wastewater Treatment Plant Expansion**

**Type:** Wastewater  
**Total Cost:** US \$16,332,904  
**Total NADB Funding:** US \$7,475,697  
**Certification Date:** 11 / 17 / 16  
**Residents to Benefit:** 17,378

Construction of a new wastewater collection system, including the installation of residential connections and the decommissioning of septic tanks, as well as upgrades to and expansion of the wastewater treatment plant from 2.0 million to 2.6 million gallons a day (gd).

**Community Benefits**

Provision of first-time wastewater collection and treatment services for the entire neighborhood. 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 96,000 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 from the Water Infrastructure Finance Authority of Arizona (WIFA) and a grant from the U.S. Department of Agriculture Rural Development (USDA-RD). On November 17, 2016, EPA approved the Bank's recommendation to provide US\$7.48 million in BEIF construction assistance for the project. The corresponding grant agreement was signed on April 19, 2017.

Bidding for wastewater treatment plant upgrades began in September 2017. The bids received exceeded available funding, so the City obtained additional funding from WIFA. The construction contract was awarded in March 2018, with work expected to begin in April 2018.

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

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

**DESCRIPTION**

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.

**NADB PARTICIPATION**

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.

**IMPLEMENTATION STATUS**

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 County, Texas, USA****Cuadrilla Wastewater Collection and Treatment Project**

**Type:** Wastewater  
**Total Cost:** US \$1,800,000  
**Total NADB Funding:** US \$1,800,000  
**Certification Date:** 3 / 3 / 17  
**Residents to Benefit:** 85

Replacement and expansion of the sewer system, construction of package wastewater treatment plant (WWTP) with the capacity to treat an average of 8,000 gallons per day and removal of the existing WWTP.

**Community Benefits**

Access to improved wastewater collection services for 27 households, eliminating the risk of exposure to untreated or inadequately wastewater discharges. Approximately 8,000 gallons a day of wastewater will be collected and treated.

The Bank is a source of grant funds through the BEIF. On March 3, 2017, EPA approved the Bank's recommendation to provide US\$1.80 million in BEIF construction assistance for the project. The corresponding grant agreement was signed with the Lower Valley Water District (LVWD) on April 27, 2017.

An issue with the renewal of the WWTP discharge permit has delayed start-up of the project. LVWD is considering its options.

**El Paso County, Texas, USA****Vista del Este Water System Replacement Project**

**Type:** Water  
**Total Cost:** US \$1,564,000  
**Total NADB Funding:** US \$500,000  
**Certification Date:** 11 / 17 / 16  
**Residents to Benefit:** 1,068

Replacement of the water distribution system and service connections in the *colonia* Vista del Este.

**Community Benefits**

Provision of safe and reliable drinking water services for 340 households, eliminating service disruptions and reducing water losses from line breaks by approximately 5 million gallons annually.

The Bank is a source of grant funds through the CAP, to complement funding from El Paso County, TX. On November 17, 2016, the Bank approved a CAP grant for up to US\$500,000 to cover approximately 32% of the project costs. The corresponding grant agreement was signed on May 25, 2017.

Bidding for construction is expected to begin in June 2018.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Ensenada, Baja California, Mexico****Desalination Plant**

<b>Type:</b>	Water
<b>Total Cost:</b>	US \$ 55,809,352
<b>Total NADB Funding:</b>	US \$ 31,600,920
<b>Certification Date:</b>	12 / 6 / 12
<b>Residents to Benefit:</b>	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\$9.58 million loan increase, for a total loan of US\$31.60 million. The amended loan agreement was signed on September 20, 2016. The additional loan funds were fully disbursed on August 15, 2017. The loan is in amortization.

The project is being implemented under a BOT agreement. Construction began in November 2014 and is approximately 98% complete.

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

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

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.

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.

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.



**PROJECT****Galeana, Chihuahua, Mexico****Santa Maria Solar Park Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$55,500,000
<b>Certification Date:</b>	6 / 22 / 17
<b>Residents to Benefit:</b>	195,340

**DESCRIPTION**

Construction of a 141.3-MW solar park using photovoltaic modules mounted on a single-axis tracker system in a rural area in the municipality of Galeana, about 30 miles southeast of Nuevo Casas Grandes.

**Community Benefits**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gas emissions, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of an estimated 161,881 metric tons/year of carbon dioxide (CO<sub>2</sub>) and 565 metric tons/year of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, Fistera Energy Santa María 1, S.A.P.I. de C.V., which has signed power purchase agreement with a subsidiary of the Mexican federal electricity utility, Comisión Federal de Electricidad (CFE). On June 22, 2017, the Bank approved a market-rate loan for up to US\$55.50 million for construction of the project. A loan agreement for US\$30.0 million was contracted on September 18, 2017, and disbursements began the same month.

**IMPLEMENTATION STATUS**

Construction of the solar park began in September 2017 and is approximately 23% complete.

**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>Certification Date:</b>	2 / 5 / 15
<b>Residents to Benefit:</b>	91,127

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

**Community Benefits**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gases, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of more than 71,165 metric tons/year of carbon dioxide (CO<sub>2</sub>) and 248 metric tons/year of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants.

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. The loan is in amortization.

Construction of the wind farm began in May 2015 and is substantially complete. Commercial operations began on June 1, 2017.

**PROJECT****Güémez, Tamaulipas, Mexico****Vicente Guerrero Wind Energy Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$30,000,000
<b>Certification Date:</b>	2 / 8 / 17
<b>Residents to Benefit:</b>	224,287

**DESCRIPTION**

Construction of a 117.3-MW wind farm with 34 wind turbines, as well as a substation and transmission line, in a rural area located east of Ciudad Victoria.

**Community Benefits**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gas emissions, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of an estimated 177,716 metric tons/year of carbon dioxide (CO<sub>2</sub>) and 620 metric tons/year of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants.

**NADB PARTICIPATION**

The Bank is a direct lender to the project company, *Compañía Eólica Vicente Guerrero, S.A. de C.V.*, which has signed power purchase agreement with the retailer Grupo Soriana under a self-supply scheme. On February 8, 2017, the Bank approved a market-rate loan for up to US\$30 million for construction of the project. The corresponding loan agreement was contracted in Mexican pesos on September 14, 2017. The loan was fully disbursed on January 22, 2018.

**IMPLEMENTATION STATUS**

Construction of the wind farm began in December 2017 and is approximately 3% complete.

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

<b>Type:</b>	Wastewater
<b>Total Cost:</b>	US \$86,150,041
<b>Total NADB Funding:</b>	US \$47,815,334
<b>Certification Date:</b>	4 / 1 / 11
<b>Residents to Benefit:</b>	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) was completed in September 2016. The plant began operations in November 2016.

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

<b>Type:</b>	Basic urban infrastructure
<b>Total Cost:</b>	US \$66,287,118
<b>Total NADB Funding:</b>	US \$ 19,103,090
<b>Certification Date:</b>	5 / 9 / 13
<b>Residents to Benefit:</b>	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.

Contracts for additional paving rehabilitation works (approx. 175,000 m<sup>2</sup>) were awarded in August 2017. Work began in November 2017 and was substantially complete in March 2018.

**Hermosillo, Sonora, Mexico****Orejana Solar Park Project**

<b>Type:</b>	Renewable energy
<b>Total Cost:</b>	Reserved
<b>Total NADB Funding:</b>	US \$50,000,000
<b>Certification Date:</b>	7 / 7 / 17
<b>Residents to Benefit:</b>	175,417

Construction of a 122.2-MW solar park using photovoltaic modules mounted on a single-axis tracker system in a rural area west of the city of Hermosillo.

**Community Benefits**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gas emissions, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of an estimated 163,808 metric tons/year of carbon dioxide (CO<sub>2</sub>) and 571 metric tons/year of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants.

The Bank is a direct lender to the project company, *Fisterra Energy Orejana S.R.L. de C.V.*, which has signed power purchase agreement with a subsidiary of the Mexican federal electricity utility, *Comision Federal de Electricidad (CFE)*. On July 7, 2017, the Bank approved a market-rate loan for up to US\$50.00 million for construction of the project. A loan agreement for US\$26.75 million was contracted on September 18, 2017, and disbursements began the same month.

Construction of the solar park began in September 2017 and was approximately 25% complete.

**PROJECT****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  
**Certification Date:** 6 / 16 / 16  
**Residents to Benefit:** 1,616

**DESCRIPTION**

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.

**NADB PARTICIPATION**

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, and disbursements began in March 2017.

**IMPLEMENTATION STATUS**

Construction of four lift stations and installation of sewer lines in the Isaacs, L. J. # 1 and Muniz subdivisions have been completed with state funds.

Construction of the regional WWTP, also funded by the state, is approximately 99% complete. Construction of a lift station and sewer lines in the El Charro #2 subdivision funded by the Bank began in March 2017 and is approximately 87% complete.

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

**Type:** Wastewater  
**Total Cost:** US \$14,347,260  
**Total NADB Funding:** US \$6,889,870  
**Certification Date:** 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 was completed in May 2017. The plant is in full operation.

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

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

**DESCRIPTION**

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.

**NADB PARTICIPATION**

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.

**IMPLEMENTATION STATUS**

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.

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

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

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**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gases, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of more than 200,599 metric tons/year of carbon dioxide (CO<sub>2</sub>) and 700 metric tons/year of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants.

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. The loan is in amortization.

Construction of the wind farm began in May 2015 and is substantially complete. Full commercial operations began on April 1, 2017.

**PROJECT****Madera, Chihuahua, Mexico****Equipment for Sanitary Landfill Operations**

**Type:** Solid waste  
**Total Cost:** US \$292,000  
**Total NADB Funding:** US \$300,000  
**Certification Date:** 6 / 16 / 16  
**Residents to Benefit:** 17,050

**DESCRIPTION**

Acquisition of new equipment for landfill operations, including a mini-loader skid steer, water truck, 3.5 or 4-ton truck with hydraulic dump, vehicle scale, portable generator, portable welder and pressure washer.

**Community Benefits**

Improved landfill operations for the proper disposal of up to 17 metric tons of solid waste per day in compliance with applicable laws and regulations, reducing risks for soil and groundwater contamination, as well as the transmission of vector-related diseases.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the CAP, which complements the landfill construction project funded jointly by the Municipality and the Mexican federal government. On June 16, 2016, the Bank approved a CAP grant for up to US\$300,000 to cover the equipment costs, including possible fluctuations in the exchange rate. The corresponding grant agreement was signed on December 12, 2016.

**IMPLEMENTATION STATUS**

Bidding to procure the landfill equipment began in August 2017. A contract for the purchase of a water tank truck was awarded in October 2017. The truck is expected to be delivered in April 2018. The remaining equipment is expected to be rebid in the second quarter of 2018.

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

**Type:** Water / wastewater  
**Total Cost:** US \$69,724,558  
**Total NADB Funding:** US \$28,784,961  
**Certification Date:** 7 / 17 / 12  
**Residents to Benefit:** 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  
**Certification Date:** 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. Disbursements began in April 2017.

**IMPLEMENTATION STATUS**

Construction of the waterlines began in February 2017 and was completed in April 2017.

**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  
**Certification Date:** 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.

Since work on the two sewer systems was completed under budget, EPA agreed to use the remaining funds to purchase mobile pumping equipment to prevent untreated sewage spills into the New River. Bidding for the purchase of this equipment began in October 2017, and the corresponding contracts were awarded in December 2017. Three of the five mobile pumping units were delivered in the first quarter of 2018. The remaining two pumping units are expected to be delivered during the second quarter of 2018.

**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 \$9,338,536  
**Certification Date:** 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. (Dina) 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 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 as of 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 when certain conditions are met during the disbursement period, which ends in October 2025. To date, a total of US\$8.68 million has been disbursed through the credit line.

**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 (CNG) to replace part of its existing fleet. In November 2017, two companies in Guadalupe, Nuevo Leon obtained 10 CNG buses and 8 diesel buses. To date, a total of 76 buses have been financed through the program.

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

**Type:** Public transportation  
**Total Cost:** US \$40,457,758  
**Total NADB Funding:** US \$31,953,094  
**Certification Date:** 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, 2016, the Bank approved a market-rate loan in the form of a revolving line of credit for up to \$500 million pesos 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. The initial \$500.0 million pesos were fully disbursed as of November 2016, for the equivalent of US\$25.80 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 when certain conditions are met during the disbursement period, which ends in September 2026. To date, a total of US\$31.51 million has been disbursed through the credit line.

In 2016, a total of 285 buses—178 diesel and 107 compressed natural gas (CNG)—were financed by 12 public transportation companies to replace or expand their existing fleets in Ciudad Juarez, CHIH; Hermosillo, SON; Tijuana, B.C.; and five municipalities in the metropolitan area of Monterrey, N.L. In 2017, a total of 41 buses (39 diesel and 2 CNG) were financed by four public transportation companies in Ciudad Juarez, CHIH and four municipalities in the metropolitan area of Monterrey, N.L.

In March 2018, a total of 21 buses (15 diesel and 6 CNG) were financed by two public transportation companies in two municipalities in the metropolitan area of Monterrey, N.L. To date, a total of 347 buses have been financed through the program.



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

**Type:** Wastewater  
**Total Cost:** US \$6,253,776  
**Total NADB Funding:** US \$1,981,099  
**Certification Date:** 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.

**Mina, Nuevo Leon, Mexico****El Mezquite Wind Energy Project**

**Type:** Renewable energy  
**Total Cost:** Reserved  
**Total NADB Funding:** US \$105,000,000  
**Certification Date:** 6 / 27 / 17  
**Residents to Benefit:** 432,965

Construction of a 250-MW wind farm with 100 wind turbines, as well as two substations and transmission line, on privately-owned rural land located about 37 miles northwest of the urban area of Monterrey.

**Community Benefits**

Reduced demand for traditional fossil-fuel based energy generation resulting in less greenhouse gas emissions, thus improving air quality, while providing a safe and reliable energy alternative. Specifically, the project is expected to help prevent the emission of an estimated 428,787 metric tons/year of carbon dioxide (CO<sub>2</sub>) and 1,175 metric tons/year of nitrogen oxides (NO<sub>x</sub>), as well as other pollutants.

The Bank is a direct lender to the project company, *Parque Eólico El Mezquite, S.A.P.I. de C.V.*, which has signed power purchase agreements with a subsidiary of the Mexican federal electricity utility, *Comision Federal de Electricidad (CFE)*. On June 27, 2017, the Bank approved a market-rate loan for up to US\$105.00 million for construction of the project. A loan agreement for US\$74.10 million was contracted on September 1, 2017, and the initial disbursement occurred in October of the same year.

Construction of the wind farm began in October 2017 and is approximately 30% complete.

**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  
**Certification Date:** 8 / 13 / 15  
**Residents to Benefit:** 216,206

**DESCRIPTION**

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%.

**NADB PARTICIPATION**

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).

**IMPLEMENTATION STATUS**

The contract for engineering and equipment for the emission control system was awarded in March 2018. Engineering work is scheduled to begin in April and be completed by November 2018.

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

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

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.

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.

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.

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

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

**DESCRIPTION**

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.

**NADB PARTICIPATION**

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. Disbursements began in July 2017.

**IMPLEMENTATION STATUS**

Construction of the waterline began in March 2017 and was completed in August 2017.

**Nogales, Sonora, Mexico****Expansion of the Water and Wastewater Systems to the Southwest Area of Nogales, Sonora**

**Type:** Water / wastewater  
**Total Cost:** US \$10,483,888  
**Total NADB Funding:** US \$5,259,444  
**Certification Date:** 11 / 17 / 16  
**Residents to Benefit:** 16,701

Expansion of the water distribution and wastewater collection systems to unserved areas of the Flores Magón, Las Torres, Luis D. Colosio, El Rastro, Las Primavera, and Jardines de la Montaña subdivisions, including installation of residential connections.

**Community Benefits**

Provision of first-time wastewater collection and treatment services, reducing the potential for groundwater and surface water contamination by eliminating the use of cesspools and direct discharges of untreated sewage into yards and streets, thus providing a cleaner, healthier environment for local residents. Specifically, an estimated 0.93 million gallons a day of wastewater will be collected and treated. Provision of drinking water service for households currently not connected to the distribution system.

The Bank is a source of grant funds through the BEIF to complement federal, state and municipal funding. On November 9, 2016, EPA approved the Bank's recommendation to provide US\$5.26 million in BEIF funds for the construction of the project, and the corresponding grant agreement was signed on July 10, 2017. The initial disbursement was made in February 2018.

The first phase of wastewater lines was completed with Mexican funding in December 2016.

Construction of the Collector Tecnológico funded by the Bank began in February 2018 and is approximately 9% complete.

**PROJECT****DESCRIPTION****NADB PARTICIPATION****IMPLEMENTATION STATUS****Nuevo Casas Grandes, Chihuahua, Mexico****Equipment for Sanitary Landfill Operations**

**Type:** Solid waste  
**Total Cost:** US \$500,000  
**Total NADB Funding:** US \$500,000  
**Certification Date:** 6 / 16 / 16  
**Residents to Benefit:** 59,337

Acquisition of new equipment for landfill operations, including a bulldozer, backhoe, dump truck, water tank truck, 3.5 or 4-ton truck with hydraulic dump, vehicle scale, portable generator, portable welder and pressure washer.

**Community Benefits**

Improved landfill operations for the proper disposal of up to 55 metric tons of solid waste per day in compliance with applicable laws and regulations, reducing risks for soil and groundwater contamination, as well as the transmission of vector-related diseases.

The Bank is a source of grant funds through the Community Assistance Program (CAP), which complements the landfill construction project funded jointly by the Municipality and the Mexican federal government. On June 16, 2016, the Bank approved a CAP grant for up to US\$500,000 to cover the equipment costs. The corresponding grant agreement was signed on December 12, 2016. Disbursements began in December 2017.

Bidding to procure the landfill equipment began in June 2017, but no fully responsive bids were received. A new bid process was carried out in September 2017, and contracts for the purchase of a dump truck, water tank truck, bulldozer, backhoe loader and 4-ton truck were awarded in November 2017. The equipment was delivered in February 2018, and training was provided to the operator of the solid waste landfill.

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

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

**DESCRIPTION**

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, which will help prevent the emission of an estimated 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.

**NADB PARTICIPATION**

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.

**IMPLEMENTATION STATUS**

The Municipality has already paved approximately 23,300 m<sup>2</sup> of roadways. A contract funded by NADB for asphalt street paving (approx. 32,600 m<sup>2</sup>), including replacement of sewer lines, was completed in June 2016. A second contract funded by NADB 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. A third paving contract (7,912 m<sup>2</sup>) funded by NADB was completed in September 2017.

The last project component, replacement of street lighting equipment, is under development, and bidding for its acquisition and installation is expected to begin the third quarter of 2018.

**Praxedis G. Guerrero, Chihuahua, Mexico****Expansion and Rehabilitation of the Water Distribution System**

<b>Type:</b>	Water
<b>Total Cost:</b>	US \$1,831,625
<b>Total NADB Funding:</b>	US \$549,488
<b>Certification Date:</b>	12 / 8 / 11
<b>Residents to Benefit:</b>	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.

**PROJECT****Región Cinco Manantiales, Coahuila, Mexico****Equipment for Sanitary Landfill Operations and Waste Collection**

<b>Type:</b>	Solid waste
<b>Total Cost:</b>	US \$551,950
<b>Total NADB Funding:</b>	US \$500,000
<b>Certification Date:</b>	6 / 16 / 16
<b>Residents to Benefit:</b>	77,800

**DESCRIPTION**

Acquisition of a backhoe and water tank truck for landfill operations, as well as five garbage collection trucks for the municipalities of Allende, Morelos, Nava, Villa Unión and Zaragoza.

**Community Benefits**

Improved landfill operations for the proper disposal of up to 75 metric tons of solid waste per day in compliance with applicable laws and regulations, reducing risks for soil and groundwater contamination, as well as the transmission of vector-related diseases. Improved collection services for an estimated 21,600 households.

**NADB PARTICIPATION**

The Bank is a source of grant funds through the Community Assistance Program (CAP), to complement funding provided by the *Asociación Pro-limpieza de los Cinco Manantiales de Coahuila, A.C.* the non-profit organization that operates the regional sanitary landfill. On June 16, 2016, the Bank approved a CAP grant for up to US\$500,000 to cover up to 90% of the equipment costs. The corresponding grant agreement was signed on February 2, 2017. Disbursements began in December 2017.

**IMPLEMENTATION STATUS**

Bidding to procure landfill and waste collection equipment began in August 2017. A contract for the purchase of two garbage collection trucks for the communities of Morelos and Villa Union was awarded in September 2017, and the two trucks were delivered in February 2018.

A new bidding process for the remaining equipment began in January 2018, with contract award expected in the second quarter of 2018.

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

<b>Type:</b>	Wastewater
<b>Total Cost:</b>	US \$15,658,735
<b>Total NADB Funding:</b>	US \$7,080,512
<b>Certification Date:</b>	5 / 6 / 16
<b>Residents to Benefit:</b>	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, preventing 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. The initial disbursement occurred in May 2017.

Construction to expand WWTP 2 began in 2014 with Mexican funds and is expected to be completed by December 2018. Construction of Lift Stations 1 and 278 funded by the Bank began in May 2017, and is approximately 67% complete.

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

**Type:** Wastewater  
**Total Cost:** US \$614,978  
**Total NADB Funding:** US \$500,000  
**Certification Date:** 11 / 6 / 15  
**Residents to Benefit:** 1,694

**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. The first disbursement occurred in April 2017.

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

**IMPLEMENTATION STATUS**

Construction for replacement of the sewer lines began in April 2017 and was completed in January 2018.

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

**Type:** Water / wastewater  
**Total Cost:** US \$2,641,447  
**Total NADB Funding:** US \$792,440  
**Certification Date:** 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>Certification Date:</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 SWEF, 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 SWEF 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 SWEF 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>Certification Date:</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 used the remaining loan funds to purchase and install street furniture. A contract for purchase of the street furniture was awarded in June 2017. Work to install the furniture began in September 2017 and was completed in January 2018, thus completing the entire certified project.



**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  
**Certification Date:** 5 / 8 / 14  
**Residents to Benefit:** 14,023

**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 14,023 residents, increasing wastewater collection coverage from 80% to 84% of the population. Elimination of a potential source of groundwater contamination from inadequate onsite disposal systems. Specifically, an estimated 0.92 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 had been completed. Four contracts for the installation of residential sewer connections were completed in June 2016. Construction of residential sewer lines in two additional sectors (Oriente and Poniente) was completed in December 2016. Installation of residential sewer connections in the Poniente sector was completed in July 2017.

Installation of residential sewer connections in the Oriente sector, as well as the construction of sewer lines in the last two sectors (Jazmin and Las Flores) were completed in March 2018. Installation of residential sewer connections in the last two sectors was also completed March 2018, 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  
**Certification Date:** 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. The first BEIF disbursement occurred in October of 2017.

A contract for construction of the sewer system was awarded in April 2017. Construction startup was delayed by dewatering issues. Work began in October 2017 and is approximately 92% complete.

**PROJECT****Sonoyta, Sonora, Mexico****Wastewater Collection and Treatment Project**

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

**DESCRIPTION**

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.

**NADB PARTICIPATION**

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.

**IMPLEMENTATION STATUS**

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. With work approximately 70% complete, another technical problem arose, which caused the project to be put on hold in the third quarter of 2016. The technical issues have been addressed. Construction resumed in February 2018 and is approximately 35% complete.

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

**Type:** Wastewater  
**Total Cost:** US \$12,700,000  
**Total NADB Funding:** US \$9,000,000  
**Certification Date:** 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. On May 8, 2017, EPA agreed to provide an additional US\$1.00 million in BEIF construction assistance to help cover increased costs based on actual procurement results, bringing total BEIF participation in this project to US\$9.00 million. The initial disbursement occurred in December 2017. The grant agreement was amended to include the additional funding and was signed on January 15, 2018.

Construction of the new WWTP began in July 2017 and is approximately 61% complete.

**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  
**Certification Date:** 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, CESPTE. 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>Certification Date:</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. Two contracts for residential hookups in Tijuana were completed in September 2016. The rehabilitation of three collectors began in September 2016, and the work was completed in May 2017.

The Tecolote-La Gloria plant is approximately 55% complete; but construction is currently on hold due to a contractor dispute. Rehabilitation of the collector Las Américas began in August 2017 and is expected to be completed in May 2018.

**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  
**Certification Date:** 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  
**Certification Date:** 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\$3.0 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 a 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 was completed in May 2017.

Rehabilitation of the collector Las Américas began in August 2017 and is expected to be completed in May 2018.

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

**Type:** Water  
**Total Cost:** US \$ 742,000  
**Total NADB Funding:** US \$ 500,000  
**Certification Date:** 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. The first disbursement occurred in February 2018.

**IMPLEMENTATION STATUS**

Bidding for construction of the project began in March 2017; however, the bids received exceeded available funding. A new bidding process began in September 2017, and a contract was awarded in October 2017. Construction began in December 2017 and is approximately 28% complete.

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

**Type:** Water / wastewater  
**Total Cost:** US \$ 3,750,072  
**Total NADB Funding:** US \$ 3,750,072  
**Certification Date:** 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, and disbursements began in September 2016.

Construction of the arsenic treatment facility and related works began in June 2016. Work was substantially complete, and the ATF began operations in February 2017. The remaining work was completed in September 2017.

**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  
**Certification Date:** 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.

**U.S. Border Region****Border-wide Financing Program to Improve Water and Energy Efficiency in the United States**

**Type:** Energy efficiency/water conservation  
**Total Cost:** US \$63,000,000  
**Total NADB Funding:** US \$50,000,000  
**Certification Date:** 9 / 13 / 16  
**Residents to Benefit:**

Property Assessed Clean Energy (PACE) funding program for qualified energy efficiency, renewable energy and water conservation improvements in non-residential properties located within the 100-km border region in United States, in which the Bank operates. The program is currently available in San Diego, Imperial and Riverside Counties in California and Cameron and Willacy Counties in Texas.

**Community Benefits**

Energy efficiency and renewable energy projects can lower baseload and peak demand on electricity systems, curtailing the possibility of rolling brownouts and reducing greenhouse gas emissions generated by traditional fossil-fuel based plants. Water conservation projects will reduce demand on aquifers and other supply sources, boosting their sustainability. Cost savings related to reduced energy and/or water consumption, as well as improved property values and compliance with new building codes.

The Bank is participating as a direct lender to CleanFund Commercial PACE Capital, Inc. a specialty finance company. On September 13, 2016, the Bank approved a market-rate loan in the form of a revolving line of credit for up to US\$50.0 million to cover approximately 79% of the financing costs. A financing agreement for US\$25.0 million was signed on June 22, 2017.

CleanFund is reviewing projects for financing through the program.

**PROJECT**

**Willcox, Arizona, USA**

**Wastewater Treatment Plant Improvements**

**Type:** Wastewater  
**Total Cost:** US \$ 14,857,866  
**Total NADB Funding:** US \$ 4,698,210  
**Certification Date:** 5 / 14 / 15  
**Residents to Benefit:** 3,757

**DESCRIPTION**

Upgrades to the wastewater treatment plant (WWTP), 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.

**NADB PARTICIPATION**

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. On March 28, 2017, EPA agreed to provide an additional US\$80,028 in BEIF construction assistance to help cover construction management costs, bringing total BEIF participation in this project to US\$4.70 million. Disbursements began in July 2017.

**IMPLEMENTATION STATUS**

Construction of upgrades to the WWTP began in June 2017 and is approximately 33% complete.