

# 2015

Year in Review





# Message from Management

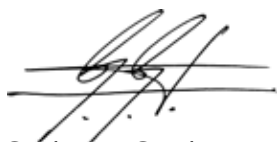
2015 was a year of transition and expansion for the North American Development Bank (NADB) and the Border Environment Cooperation Commission (BECC), as the two institutions began working toward full integration into a single entity, as well as addressing new types of environmental projects. Ongoing collaboration efforts with other public and private organizations also generated greater synergies in support of additional initiatives to improve the well-being of border residents.

As always, the development and financing of environmental infrastructure remains a priority resulting in the certification of 14 new projects and the approval of more than US\$257 million in financing for their implementation. While half of these projects were related to water and wastewater improvements, they also included an industrial emission control system for a steel mill in Monclova, Coahuila, and a cogeneration facility to generate electricity using the biogas from a wastewater treatment plant in Ciudad Juarez, Chihuahua. Moreover, several previous projects began operations, including the first cross-border renewable energy project, which is exporting electricity generated in a wind farm in Mexico to the United States for consumption, as well as a border-wide financing program for the purchase or lease of low-emission buses in Mexico. Both institutions continue to explore and promote additional areas, such as energy efficiency and desalination.

From an institutional standpoint, NADB and BECC worked proactively on various initiatives to integrate their operations and internal processes in preparation for their consolidation into a single entity once the governments of the United States and Mexico complete their respective domestic authorization processes. These ongoing efforts include aligning information and accounting systems, harmonizing policies and taking preliminary steps to begin integrating staff in various departments, which will ensure a seamless transition and allow the merged institution to remain focused on its mission of preserving, protecting and enhancing the environment of the border region and advancing the well-being of its communities.

One area that is almost fully integrated is technical assistance, as NADB and BECC were already working to establish a joint program prior to approval of full integration. In January 2015, these efforts culminated in the establishment of a single committee to oversee and manage the program, which led to the approval of an unprecedented number of technical assistance projects. Together, NADB and BECC authorized US\$1.93 million in grants to support 35 studies, training seminars or other measures, mainly to help border communities develop projects or strengthen their institutional capacities. As part of these efforts, the two institutions have also forged alliances with several public and private organizations that share their environmental objectives in order to secure additional support for the development and execution of these activities.

During this transition phase, we look forward to your ongoing support as we continue working with our numerous border partners for many successful years to come.



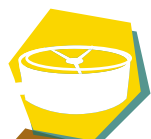
Gerónimo Gutiérrez  
Managing Director, NADB



María Elena Giner  
General Manager, BECC

# 2015 Highlights

## Projects



**50%** of the approved projects in the **water sector**, including **first wastewater treatment system for Delicias, Chihuahua**, a community of 130,900 residents.



First **cogeneration project to convert biogas** from wastewater treatment to energy certified for financing.



First project to **prevent industrial emissions** for a steel mill in Mexico certified for financing.



**First buses** financed under a border-wide public transportation improvement program in Mexico.



First **cross-border renewable energy project** began operations, exporting electricity generated in a wind farm in Mexico to the United States for consumption.

## Financing



- › **US\$196 million** in new financing **contracted** for projects in 9 of the 10 border states.
- › **US\$261.8 million** in loans and grants **disbursed** to 38 projects scattered throughout the 10 border states.
- › First co-financing transactions with the **Overseas Private Investment Corporation (OPIC)** for projects in Mexico.
- › Loan portfolio **grew** by **11.7%** to a total of US\$1.3 billion.

## Technical Assistance



**US\$1.93 million** in grants approved by **NADB and BECC** to support 35 studies, seminars, and other development activities.



**US\$1.03 million** in grants approved through the **Project Development Assistance Program (PDAP)**, funded by the **U.S. Environmental Protection Agency (EPA)** and administered by BECC, for development of 7 water and wastewater projects.



**US\$713,799** in grants approved through **U.S.-Mexico Border 2020 Program** for 14 initiatives aimed at addressing existing environmental and public health needs along the border.

# 14 New Projects in 2015

representing a total estimated investment of US\$883.6 million

Projects Certified	Location	Population Benefitted	NADB Funding	
			Type	Amount
<b>Water and Wastewater Improvements</b>				
1 Wastewater Collection System and Residential Connections in FM 511-802 Colonias	Brownsville, TX	2,630	BEIF	\$ 3.63
2 Wastewater Treatment Infrastructure	Delicias, CHIH	130,962	Loan	5.33
3 Mesilla Water System Improvements Project	Mesilla, NM	1,450	BEIF	0.70
4 Water Main Replacement on Crawford Street	Nogales, AZ	1,178	CAP	0.50
5 Rehabilitation of the Wastewater System in the Downtown Area	Sabinas, COAH	3,027	CAP	0.50
6 Camino Real Regional Authority Wastewater Treatment Project	Sunland Park, NM	6,438	BEIF	8.00
7 Wastewater Treatment Plant Improvements	Willcox, AZ	3,757	BEIF	4.62
<b>Air Quality Improvements</b>				
1 Particle Emissions Control System for a Steel Mill	Monclova, COAH	216,206	Loan	23.20
2 Basic Urban Infrastructure Project*	Playas de Rosarito, BC	90,668	Loan	13.65
<b>Clean Energy</b>				
1 Los Santos Solar I Project	Ahumada, CHIH	21,016	Loan	18.50
2 EDPR Wind Energy Project	General Cepeda, COAH	384,153	Loan	95.00
3 La Mesa Wind Energy Project	Guemez, TAMPS	91,127	Loan	40.00
4 Victoria Wind Energy Project	Guemez, TAMPS	92,639	Loan	40.00
5 South Wastewater Treatment Plant Cogeneration and Improvements Project	Juarez, CHIH	-	Loan	3.49
		<b>1,045,251</b>		<b>\$ 257.12</b>

BEIF = Border Environment Infrastructure Fund funded by the U.S. Environmental Protection Agency; CAP = NADB-funded Community Assistance Program

\* Basic urban infrastructure includes a mix of street paving, water and sewer lines, storm drainage and street lighting improvements.

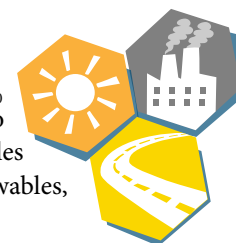
## Main benefits anticipated

### Expanding wastewater services...



- › 465 new wastewater connections providing first-time service to an estimated 1,785 residents
- › 2 new wastewater treatment plants with a combined capacity of 9.4 million gallons a day
- › 7.9 million gallons a day of sewage to be collected for proper treatment

### Improving air quality...



- › 74,194 m<sup>2</sup> of roads to be paved or repaved to prevent emission of 32.8 metric tons/year of PM<sub>10</sub>
- › Steel mill pollution control system to collect up to 30,700 metric tons/year of total suspended particles
- › 313.6 MW of new generation capacity from renewables, to displace 553,000 metric tons of CO<sub>2</sub> a year

# New Financing in 2015

committed to support 16 environmental infrastructure projects

## Financing Contracts Signed in 2015

(US\$ Millions)

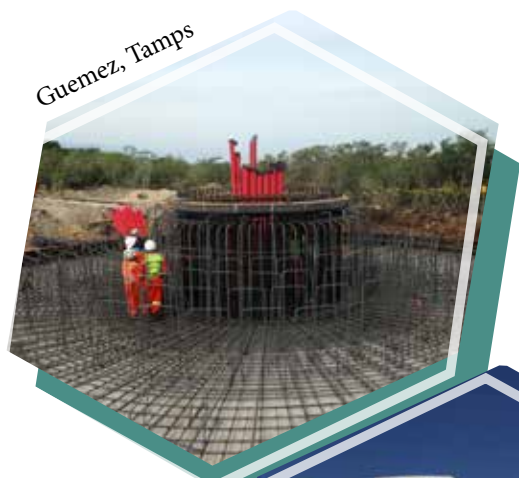
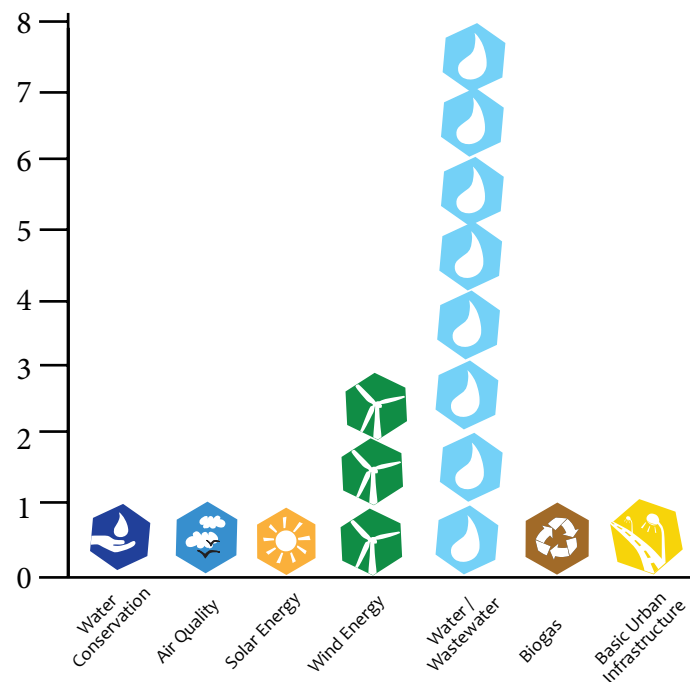
Program	No. of Projects	Amount
Loans	8	\$ 178.26
BEIF Grants	5	16.22
CAP Grants	3	1.45
<b>Total</b>	<b>16</b>	<b>\$ 195.93</b>

BEIF = EPA-funded Border Environment Infrastructure Fund

CAP = NADB-funded Community Assistance Program

## How Funding was Committed in 2015

(No. of projects)



# Disbursements in 2015

invested in 38 environmental infrastructure projects along the border

## Financing Disbursed in 2015

(US\$ Millions)

Program	No. of Projects	Amount
Loans	14	\$ 249.56
BEIF Grants	15	8.70
CAP Grants	5	1.27
WCIF Grants	4	2.26
<b>Total</b>	<b>38</b>	<b>\$ 261.78</b>

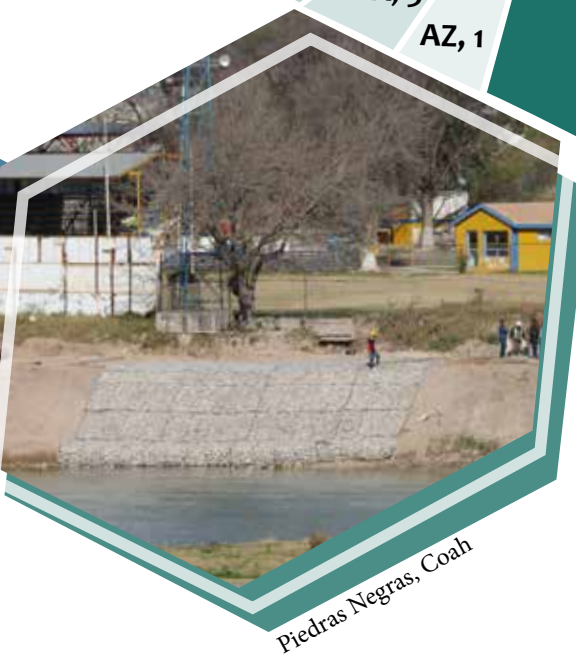
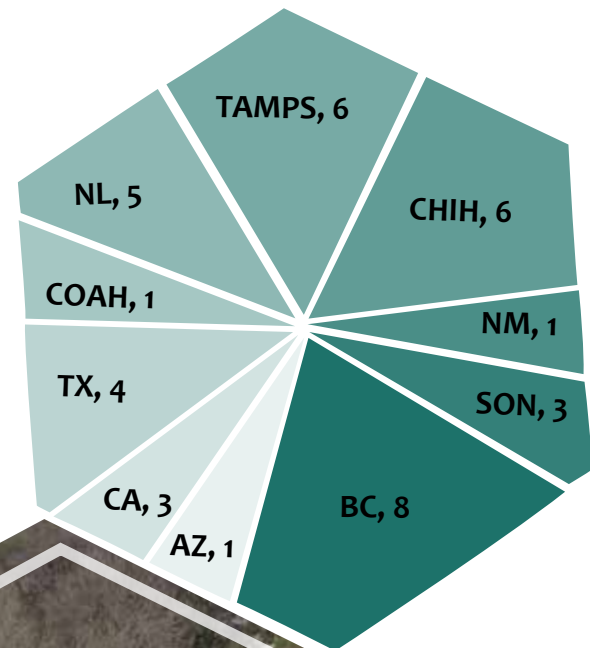
BEIF = EPA-funded Border Environment Infrastructure Fund

CAP = NADB-funded Community Assistance Program

WCIF = NADB-funded Water Conservation Investment Fund

## Where Funding was Invested in 2015

(No. of projects per state)



# Providing Technical Support & Building Capacities

In January 2015, a single joint committee was established to oversee and administer the joint BECC-NADB Technical Assistance Program, which provides grants in three categories: project development, institutional capacity-building measures and training, and sector studies to identify needs and generate knowledge about a new sector or technology.

During the course of the year, the committee approved a total of US\$1.93 million to support 35 studies, training seminars and other development activities. The majority of this funding will be used to support needs assessments and final designs of energy efficiency improvements in water utility operations in eight border communities, various water system studies for seven communities and the development and presentation of several training seminars and workshops mainly focused on water utility management, green infrastructure, energy efficiency and solid waste management.

In addition, BECC administers the Project Development Assistance Program (PDAP) funded by EPA for the development and design of water and wastewater projects. During 2015, grants totaling US\$1.03 million were approved to support seven projects: five in the U.S. and two in Mexico.

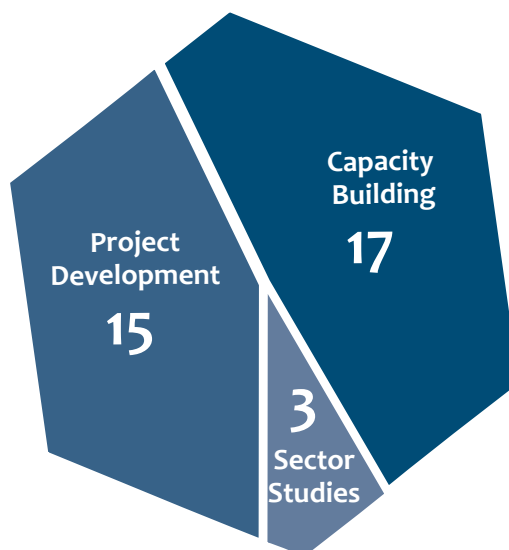
## BECC-NADB Technical Assistance Approved in 2015

(US\$ Millions)

Category	No. of Projects	Grant Amount
Project Development	15	\$ 0.88
Capacity Building	17	0.69
Sector Studies	3	0.36
<b>Total</b>	<b>35</b>	<b>\$ 1.93</b>

## Distribution of Technical Assistance Approved in 2015

(No. of grants approved)





## Best practices on waste management

Developed and presented by the Latin American and Caribbean water center, *Centro del Agua para América Latina y el Caribe* (CDA) of the Monterrey Technological Institute (ITESM), the three-day seminar is aimed at providing urban sanitation departments with the tools for developing a comprehensive waste management program, including waste collection, disposal, transportation and recycling. The seminar, which was presented twice in the state of Coahuila and once in Chihuahua in 2015, was attended by a total of 81 local officials representing 37 communities, as well as delegates from the state environmental agencies and representatives of a few private waste management companies. Following these seminars, certification and funding applications were received for five solid waste projects in those two states.



## Fostering green infrastructure

In 2015, BECC and NADB expanded their promotion of the green infrastructure initiative, which focuses on showing communities how to use natural processes to improve water quality and manage water quantity by restoring the hydrologic function. Throughout the year, a total of five events were held to teach green infrastructure practices that can be integrated into existing features of the built environment, such as streets, parking lots, and landscaped areas, and can be a viable option for managing storm water in highly urbanized areas. The events included the second annual Border Green Infrastructure Forum in Tucson, Arizona, and an interactive webinar to explore the current legal framework for promoting green infrastructure projects in Mexico. Two workshops involving a hands-on demonstration project were also hosted in San Luis Río Colorado, Sonora and Ramos Arizpe, Coahuila.



**“ This technique could be applied to any type of landscaping at a very low cost. It also prevents water overflows and, therefore, street flooding, as these green areas will easily use more than 150,000 liters of water that will no longer run off to the streets. ”**

– Eglantina Canales, Coahuila State Secretary of the Environment

# Partnering with Other Entities

In carrying out their mission, BECC and NADB pursue partnerships with other public and private organizations in an effort to promote environmental initiatives and projects on the border and identify additional support for their development and implementation. One of the most long-standing and successful partnerships is with EPA, which funds the Border Environment Infrastructure Fund (BEIF), PDAP and initiatives through the U.S.-Mexico Border 2020 Program. On the Mexican side, the federal water agency, *Comisión Nacional del Agua* (CONAGUA) has been instrumental in supporting water-related projects. Additional collaborative initiatives during 2015 are highlighted in the box.

## U.S.-Mexico Border 2020 Program

Since 2005, BECC has actively participated in this program, a collaborative effort developed by EPA and the Mexican Ministry of Environment and Natural Resources (SEMARNAT) aimed at jointly addressing existing environmental and public health needs along the border. In 2015, EPA approved US\$713,799 in grants to support 14 initiatives, mainly in the areas of solid and hazardous waste management and air quality.

### Other Collaborative Initiatives in 2015

- › **Technical support for development of water and wastewater projects in Mexico**, with the German development bank, *Kreditanstalt für Wiederaufbau* (KfW).
- › **Water utility management training**, with the Latin American and Caribbean water center, *Centro del Agua para América Latina y el Caribe* (CDA) and the School of Government and Public Transformation (EGTP) of the Monterrey Technological Institute (ITESM).
- › **Sustainable e-waste management and recycling system in Mexicali, Baja California**, with the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB), the Massachusetts Institute of Technology (MIT), SEMARNAT, EPA, the Baja California Ministry of Environmental Protection and the *Universidad Autónoma de Baja California* (UABC).
- › **State climate action plans**, with the U.S. Agency for International Development (USAID) through its Mexico Low Emissions Development Program (MLED) and the Climate Works Foundation through its Latin America Regional Climate Initiative.
- › **Energy efficiency improvements in water utilities**, with the public-private partnership Green Hub/MDB Advisors LLC and USAID through its Global Development Alliance and the Baja California State Water Commission.
- › **Coahuila energy efficiency learning network for water utilities**, with the non-profit German corporation, *Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH, México* (GIZ), and the Coahuila State Water and Wastewater Commission.

# SUMMARY OF ANNUAL PROJECT ACTIVITY 2011-2015

(US\$ Millions)

	2015	2014	2013	2012	2011
<b>Project Development</b>					
<b>Total number approved</b>	<b>14</b>	<b>16</b>	<b>19</b>	<b>19</b>	<b>14</b>
Water <sup>1</sup>	7	10	8	8	8
Solid waste management	-	-	-	1	-
Air quality <sup>2</sup>	1	1	1	1	3
Basic urban infrastructure <sup>3</sup>	1	1	1	1	1
Clean and efficient energy <sup>4</sup>	5	4	9	8	2
Estimated population to benefit (millions)	1.05	1.55	1.31	2.80	1.29
Total estimated cost	\$ 833.6	\$ 1,312.8	\$ 709.9	\$ 1,797.4	\$ 568.6
No. of public meetings held	8	10	12	14	7
<b>Project Implementation</b>					
Construction completed	12	20	12	12	8
Construction start-up	11	11	17	5	2
Projects in construction at year-end	40	38	41	39	38
<b>Project Financing</b>					
<b>Total disbursements</b>	<b>\$ 261.78</b>	<b>\$ 270.03</b>	<b>\$ 232.88</b>	<b>\$ 514.98</b>	<b>\$ 97.52</b>
NADB loans	249.56	254.16	214.96	501.50	80.35
NADB grants <sup>5</sup>	3.52	1.20	0.46	1.75	0.40
Border Environment Infrastructure Fund <sup>6</sup>	8.70	14.67	17.46	11.74	16.77
<b>Technical Assistance</b>					
<b>NADB/BECC</b>					
No. of studies approved	35	15	15	11	14
Funding approved	\$ 1.93	\$ 0.84	\$ 0.92	\$ 0.89	\$ 1.07
<b>Project Development Assistance Program<sup>6</sup></b>					
No. of studies approved	8	19	15	11	17
Funding approved	\$ 1.03	\$ 1.69	\$ 2.36	\$ 1.08	\$ 0.85
<b>Border 2012/2020<sup>6,7</sup></b>					
No. of studies approved	14	29	-	9	25
Funding approved	\$ 0.71	\$ 1.49	\$ -	\$ 0.44	\$ 1.14

<sup>1</sup> Includes drinking water, wastewater, storm drainage and water conservation projects.

<sup>2</sup> Includes street paving and other roadway improvements, public transportation, international crossings and industrial emissions.

<sup>3</sup> These projects consist of a mix of works from different sectors, such as roadway improvements, water and wastewater lines, storm drainage and public lighting.

<sup>4</sup> Includes solar, wind and biogas projects, as well as public lighting.

<sup>5</sup> Grant financing funded from NADB's retained earnings.

<sup>6</sup> Programs fully funded by the U.S. Environmental Protection Agency (EPA) and administered by NADB or BECC.

<sup>7</sup> B2012/2020 program runs on a two-year grant cycle with grants awarded in 2011 and 2014.

# About us

NADB and BECC were established by the U.S. and Mexican governments for the purpose of helping develop and finance environmental infrastructure projects to preserve, protect and enhance the quality of life of people living along the U.S.-Mexico border. As part of this effort, both entities also offer technical assistance to build institutional capacity and support the long-term sustainability of projects.

Under their mandate, NADB and BECC support environmental projects related to water, waste management, air quality, clean energy and energy efficiency, among others, located within 100 km north of the international boundary in the four U.S. states of Texas, New Mexico, Arizona and California and within 300 km south of the border in the six Mexican states of Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, Sonora, and Baja California.

In December 2014, the Board of Directors approved a resolution recommending that the two governments integrate NADB and BECC into a single entity to streamline their processes and improve coordination of their respective activities, which will maximize the services provided to border communities and make more efficient use of available resources. Under the integration, the mission, purposes and functions of the institutions will be preserved, and the geographic jurisdiction and environmental mandate will remain unchanged.

For the annual reports and audited financial statements of the institutions, visit their respective websites.

# Credits

## A joint NADB-BECC publication

**Photography:** Cover bottom left photo: Courtesy of public transportation company, SICTUHSA. Nuevo Casas Grandes photo: Courtesy of *Jurado y Asociados Consultores*. Solar park photos: Courtesy of SunPeak Solar LLC. Anacuitas Aqueduct photos: Courtesy of HCCID#9. Playas de Rosarito photo: Courtesy of *MG Proyectos e Infraestructura del norte S de RL de CV*. All other photos by NADB/BECC.

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