

2021 Green Bond Impact Report



Contents

Message from Management	1
About NADBank	2
NADBank Green Bond Program	3
Use of proceeds	6
Eligible Projects and Impact	10
Project Selection and Allocation Process	15
NADBank Financial Summary	16

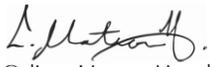
Message from Management

In 2021 the North American Development Bank (NADBank) continued to develop and finance meaningful investments that improve environmental conditions and quality of life in the U.S.-Mexico border region. By year-end, NADBank had provided US\$3.3 billion in loans and grants to finance 288 projects representing a total investment of US\$10.2 billion benefitting more than 18.7 million people. Also, during the year, the Mexican Green Finance Advisory Council (CCFV) recognized the Bank's leadership as the first multilateral bank to issue a green bond in the international market for financing projects in Mexico.

Our Green Bond Program has been a fundamental tool for raising capital to implement these important projects. It is also part of our commitment to offer genuine climate and environmental investment opportunities to private investors. We are proud to share with our investors and stakeholders the results of NADBank's Green Bond Program in our third Green Bond Impact Report.

This report covers the allocation of proceeds and environmental impact from NADBank's three green bonds. The proceeds have been used to support 10 renewable energy projects with an installed capacity of 1,393 megawatts, sufficient to serve 478,600 households annually and mitigate 2,032,470 tons of carbon dioxide. In addition, four sustainable water and wastewater projects were also financed benefitting 826,790 people by providing 2,381 liters per second of wastewater treatment capacity and improved water services, along with one landfill expansion project benefitting 54,258 people with the capacity to continue properly disposing of 130 tons a day of waste. Of the US\$478 million raised through the bonds, 94% has already been allocated to eligible projects.

The positive results of this program bolster our continued commitment to a cleaner and more prosperous border region as it transitions to a greener economy.


Calixto Mateos Hanel
Managing Director


John Beckham
Deputy Managing Director


Salvador López Córdova
Chief Environmental Officer

About NADBank



NADBank is a binational financial institution established and capitalized by the Governments of the United States and Mexico with the mandate to finance infrastructure projects that preserve, protect or enhance the environment in the U.S.-Mexico border region.

NADBank is headquartered in San Antonio, Texas in the United States and has an office in Ciudad Juarez, Chihuahua, Mexico. It began operations on November 10, 1994. The mandate of the Bank is defined in an agreement between the two governments (the [Charter](#)).

The projects financed by NADBank must be located within 100 kilometers (62 miles) north of the U.S.-Mexico international boundary in the U.S. states of Texas, New Mexico, Arizona and California and within 300 kilometers (186 miles) south of the border in the Mexican states of Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, Sonora and Baja California.

Each project undergoes a thorough certification and approval process that takes into consideration environmental, technical and financial criteria, as well as ensures public access to information. Each project must demonstrate compliance with all applicable environmental regulations, as well as help prevent, control or reduce environmental pollutants, improve the drinking water supply or protect flora and fauna, so as to improve human health, promote sustainable development or contribute to a higher quality of life.



NADBank Green Bond Program

Since 2018, NADBank has issued three green bonds totaling US\$478 million that have supported 15 projects to date. All proceeds of the green bonds are managed and allocated to infrastructure projects in accordance with the Bank's [Green Bond Framework](#), which was first developed in 2018 and was updated in 2020. The framework is consistent with the rules established by the International Capital Market Association in the Green Bond Principles and received a positive [second-party opinion](#) from an independent reviewer.

Projects financed through the program fall into one of the four eligible categories shown in Table 1.

NADBank issued its first green bond in July 2018 for CHF 125 million maturing in 2026. The net proceeds from this issue, equivalent to US\$126 million, were allocated to six renewable energy projects.

In 2020 NADBank issued two additional green bonds: a CHF 180-million bond maturing in 2028 and a CHF 160-million bond maturing in 2033, equivalent to US\$186 and US\$166 million, respectively. As of December 2021, US\$322 million from these two issues had been allocated to 14 projects.

TABLE 1: ELIGIBLE PROJECT CATEGORIES



Renewable Energy

- ◇ Solar parks
- ◇ Wind farms



Energy Efficiency

- ◇ Building upgrades
- ◇ Industrial equipment retrofits
- ◇ Public lighting



Sustainable Water and Wastewater Management

- ◇ Improvements to water systems
- ◇ Improvements to wastewater collection, treatment and reuse systems
- ◇ Water conservation
- ◇ Storm drainage & flood control



Pollution Prevention and Control

- ◇ Industrial emission reduction
- ◇ Waste treatment & disposal
- ◇ Site remediation

TABLE 2: NADBANK GREEN BOND ALLOCATION SUMMARY

Green Bond Issue	% Allocated	No. of Projects Supported	Greenhouse Gas Emissions Avoided (CO ₂ tons/year)
CHF 125M maturing 2026	100	6	1,470,192
CHF 180M maturing 2028	100	8	1,310,325
CHF 160M maturing 2033	82	7	274,194

* Seven of the 15 projects have received allocations from more than one bond.

As of December 31, 2021, renewable energy made up 90% of the proceeds allocated to date with US\$401 million in total allocations across all three issues. The remaining 10% was allocated to water-related projects (9%) and a solid waste management project (1%) and came from the issues maturing in 2028 and 2033.

**TABLE 3: ALLOCATION BY SECTOR
(MILLION USD, AS OF DECEMBER 31, 2021)**

	Renewable Energy	Sustainable Water & Wastewater Management	Energy Efficiency	Pollution Prevention and Control	Total Allocation
CHF 125M maturing 2026	\$ 126	\$ -	\$ -	\$ -	\$ 126
CHF 180M maturing 2028	175	11	-	-	186
CHF 160M maturing 2033	100	29	4	3	136
Total	\$ 401	\$ 40	\$ 4	\$ 3	\$ 448

BayWa Corazon Solar Project



Webb County, Texas
Benefitting 138,970 residents
NADBank Loan: US\$62.9 million

This 200-megawatt solar park located about 16 miles northeast of the city of Laredo, is expected to produce 537 gigawatt-hours of electricity equivalent to the annual consumption of 38,074 households, providing a safe and reliable clean energy alternative that reduces the demand for traditional fossil-fuel based energy generation and the related greenhouse gas emissions, displacing approximately 258,338 tons/year of carbon dioxide (CO₂).

Use of Proceeds

1. Green Bond Maturing in 2026 — CHF 125 million, equivalent to US\$126 million

All the proceeds of this issue were allocated to six renewable energy projects in Mexico and the United States.

**TABLE 4: GREEN BOND MATURING IN 2026
SUMMARY OF ALLOCATION OF PROCEEDS AND IMPACT**

Project	Sector	State, Country	Impacts ¹			Bond Allocation	Share of Bond	Bond Share of Project Costs
			CO ₂ Emissions Avoided (tons/year)	Population Benefitted by Water/ Wastewater Service	New Solid Waste Management Capacity (tons/day)	Million USD	%	%
SEPV Imperial Solar Park	Renewable energy	CA, USA	4,097			\$ 3	2	18
EDPR Wind Farm	Renewable energy	Coah., Mexico	353,929			53	42	16
Puerto Libertad Solar Park	Renewable energy	Son., Mexico	440,390			34	27	9
El Mezquite Wind Farm	Renewable energy	N.L., Mexico	367,601			17	14	6
Orejana Solar Park	Renewable energy	Son., Mexico	155,178			8	7	7
Santa María Solar Park	Renewable energy	Chih., Mexico	148,775			10	8	7
Total			1,470,192			\$ 126	100	

¹ Impact of entire project based on corresponding project closeout report.

2. Green Bond Maturing in 2028 — CHF 180 million, equivalent to US\$186 million

As of December 2021, all proceeds of this bond had been allocated. This issue spans two years of allocations with seven projects receiving funds in 2020 and an eighth project receiving funds in 2021. Five of these projects also received allocations from the 2026 bond.

**TABLE 5: GREEN BOND MATURING IN 2028
SUMMARY OF ALLOCATION OF PROCEEDS AND IMPACT**

Project	Sector	State, Country	Impacts ¹			Bond Allocation Million USD	Share of Bond %	Bond Share of Project Costs %
			CO ₂ Emissions Avoided (tons/year)	Population Benefitted by Water/ Wastewater Service	New Solid Waste Management Capacity (tons/day)			
2020 Allocations								
Don Diego Solar Park ²	Renewable energy	Son., Mexico	169,443			\$ 100	54	77
El Mezquite Wind Farm	Renewable energy	N.L., Mexico	367,601			21	11	7
Santa María Solar Park	Renewable energy	Chih., Mexico	148,775			17	9	12
Orejana Solar Park	Renewable energy	Son., Mexico	155,178			16	8	13
Chihuahua WWTPs ²	Water	Chih., Mexico	9,583	809,232		11	6	76
SEPV Imperial Solar Park	Renewable energy	CA, USA	4,097			5	3	31
Puerto Libertad Solar Park	Renewable energy	Son., Mexico	418,371			1	1	0
2021 Allocations								
El Centro Solar Park ³	Renewable energy	CA, USA	15,036			14	8	
Total			1,310,325	809,232		\$ 186	100	

¹ Impact of entire project based on the corresponding closeout report.

² Anticipated impact of entire project based on corresponding certification document.

³ Project cost information is confidential.

WWTPs – Wastewater treatment plants

3. Green Bond Maturing in 2033 — CHF 160 million, equivalent to US\$166 million

Proceeds from this bond issued in May 2020 are still in the process of being allocated. At the end of that year US\$13 million from this issue had been allocated to four projects, including a commitment for a project that is still disbursing. An additional US\$123 million was allocated to three projects during 2021, for a total of seven projects with allocations from this issue.

**TABLE 6: GREEN BOND MATURING IN 2033
SUMMARY OF ALLOCATION OF PROCEEDS AND IMPACT**

Project	Sector	State, Country	Impacts ¹			Bond Allocation Million USD	Share of Bond %	Bond Share of Project Costs %
			CO ₂ Emissions Avoided (tons/year)	Population Benefitted by Water/ Wastewater Service	New Solid Waste Management Capacity (tons/day)			
2020 Allocations								
Wildcat energy storage ²	Energy efficiency	CA, USA	819			\$ 4	3	
Jim Hogg water project	Water	TX, USA		4,558		4	2	94
Maverick landfill ³	Solid waste	TX, USA			130	3	2	73
Presidio water project	Water	TX, USA		4,000		2	1	33
2021 Allocations								
Corazon Solar Park	Renewable energy	TX., USA	258,338			63	38	23
Lower Valley Water District project	Water	TX., USA		9,000		23	14	100
El Centro Solar Park ²	Renewable energy	CA., USA	15,036			37	22	
Total allocated			274,193	17,558	130	\$ 136	82	
Pending allocation						\$ 30	18	

¹ Anticipated impact of entire project based on the corresponding certification document.

² Project cost information is confidential.

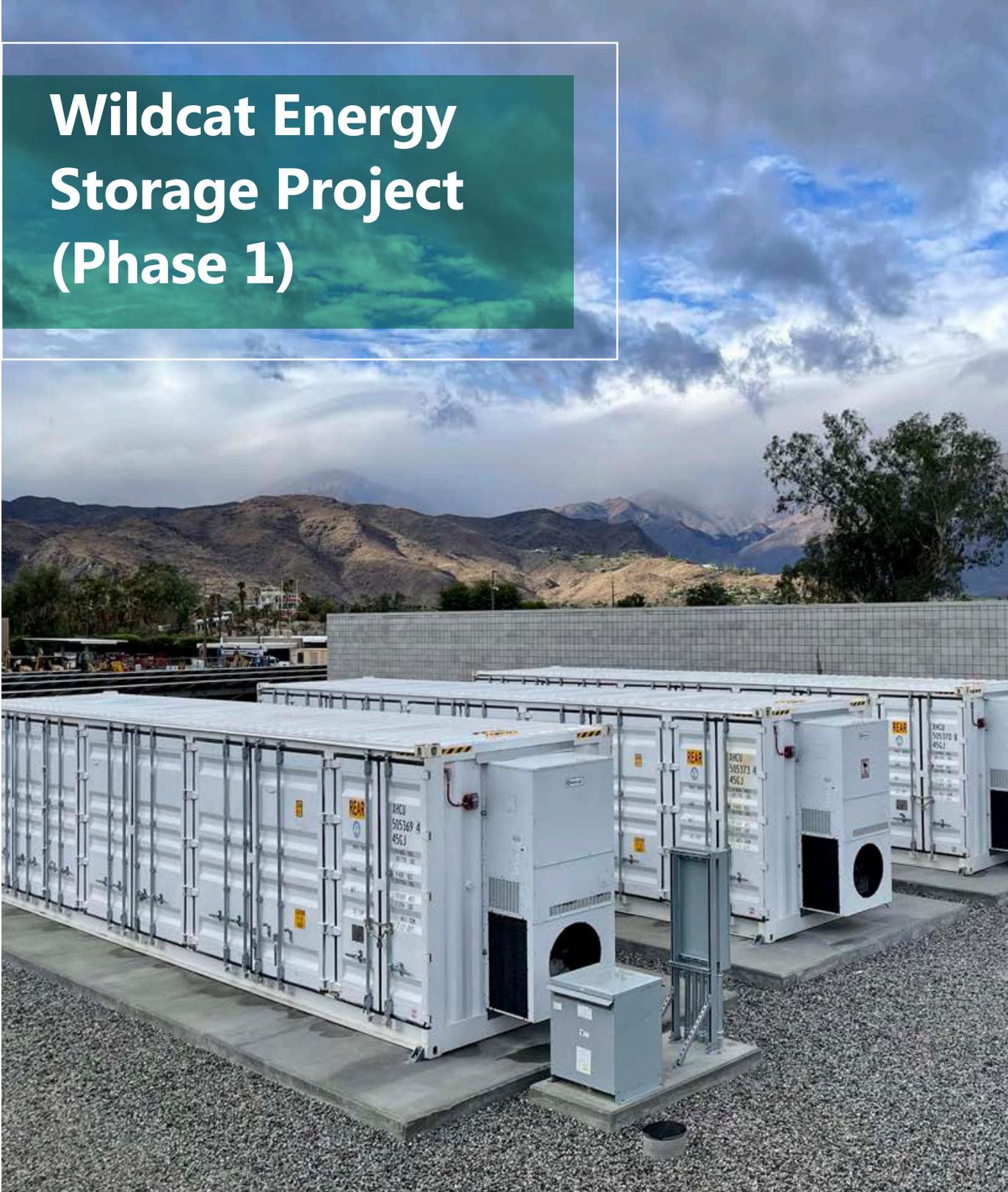
³ Impact of entire project based on corresponding closeout report.

WWTPs – Wastewater treatment plants

Wildcat Energy Storage Project (Phase 1)

Riverside County, California
Benefitting 283 residents
NADBank Loan: US\$4.4 million

The first phase of this energy storage facility achieved substantial completion in November 2021 and began commercial operations with 6 megawatts of storage capacity and an anticipated output of 1,796 megawatt-hours of electricity a year, which is equivalent to the consumption of 283 people. The project is helping increase the efficiency and reliability of the power grid, while displacing greenhouse gas emissions estimated at 819 tons/year of CO₂ and other harmful emissions from fossil-fuel powered generation plants.



Eligible Projects and Impact

NADBank estimates the anticipated impact of the projects to be financed prior to approval and routinely verifies actual project impact after the initiation of operations.

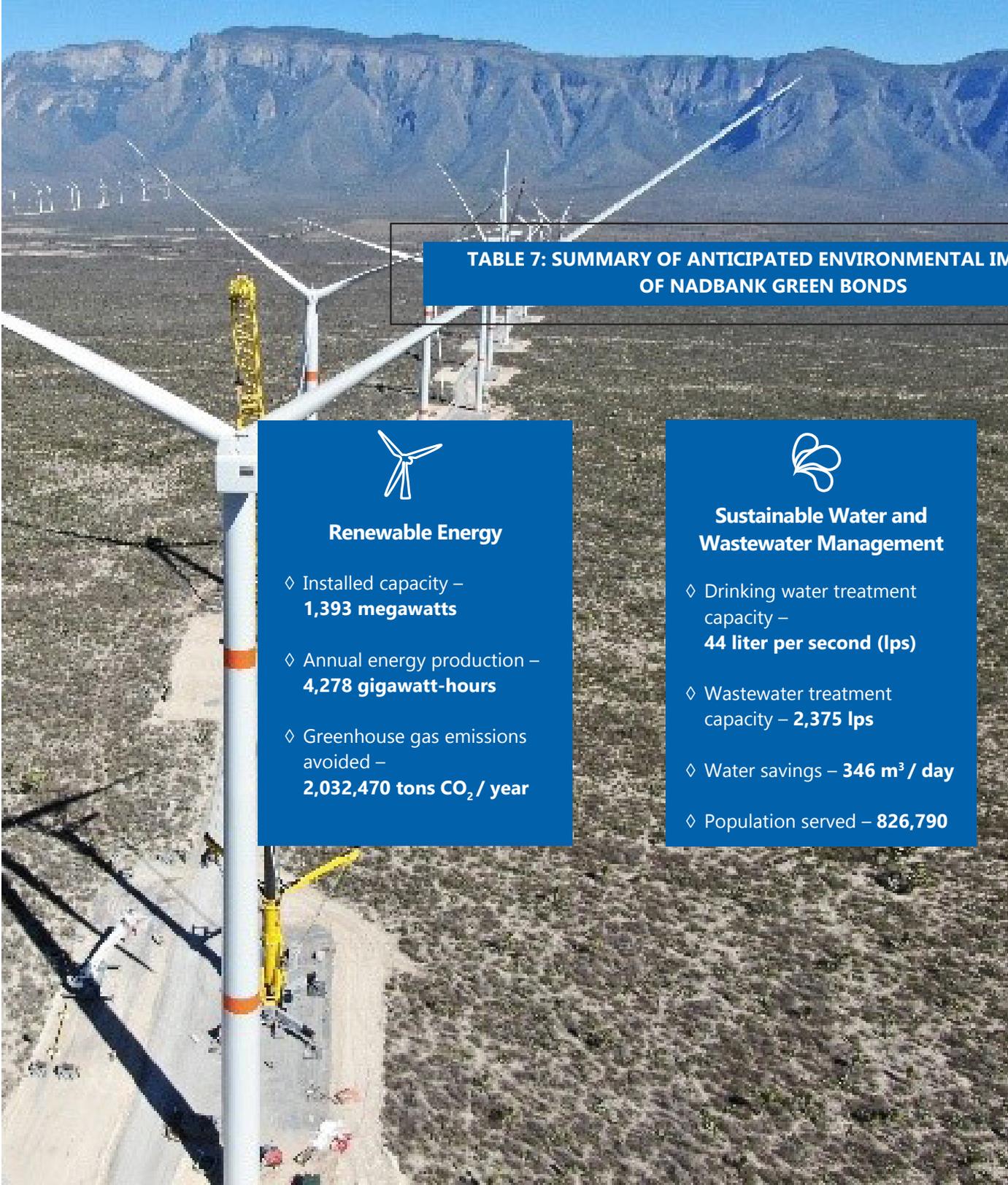
Key indicators are selected and quantified for each project type. Anticipated impacts are based on many well-researched assumptions (such as production rates, state energy matrices and emission factors) and expected project scope. Through its Results Measurement System, NADBank tracks and evaluates actual project performance and impact with respect to the targets set for environmental results during the approval process. Because of the level of due diligence performed by NADBank during that process, the actual results of most projects are reasonably close to those anticipated at approval.

This report contains project summaries and impact indicators for the 15 projects that have been allocated funds as of December 31, 2021. A summary of the expected environmental impacts deriving from all the projects funded to date with the proceeds of the three NADBank green bonds is provided in Table 7.

Tables 8 and 9 describe the eligible projects financed by the green bonds. The projects are organized by sector and the data provided include the NADBank loan amount, the total project investment cost, the amount of green bond proceeds allocated to each project and result indicators of anticipated environmental benefits.

Detailed information for all NADBank-financed projects, including the certification documents, is available on its website.¹

¹ Web links to the projects funded by the green bonds are provided in Tables 8 and 9.



**TABLE 7: SUMMARY OF ANTICIPATED ENVIRONMENTAL IMPACTS
OF NADBANK GREEN BONDS**



Renewable Energy

- ◇ Installed capacity – **1,393 megawatts**
- ◇ Annual energy production – **4,278 gigawatt-hours**
- ◇ Greenhouse gas emissions avoided – **2,032,470 tons CO₂ / year**



Sustainable Water and Wastewater Management

- ◇ Drinking water treatment capacity – **44 liter per second (lps)**
- ◇ Wastewater treatment capacity – **2,375 lps**
- ◇ Water savings – **346 m³ / day**
- ◇ Population served – **826,790**



Pollution Prevention and Control

- ◇ New solid waste management capacity – **130 tons / day**

Water System Improvements



Presidio, Texas
Benefitting 4,000 residents
Border Environment Infrastructure
Fund Grant: US\$3.0 million and
NADBank Loan: US\$1.5 million

The sustainability and resilience of the drinking water system was improved by regulating pressure in the waterlines and preventing peak pressure incidents. This action is helping prevent an estimated 303 cubic meters a day in water losses from frequent line breaks and leaks, as well as potential contamination of the water supply. Along with these improvements, the utility was able to extend the service area and provide new water coverage for 10 households and seven business along Highway 67.

TABLE 8: RENEWABLE ENERGY + ENERGY EFFICIENCY

Project	Country	Description	Impacts							Total Project Cost (Million USD)	NADBank Loan (Million USD)	Allocation to Green Bonds			
			Installed Capacity (MW _{cr})	Energy Production (GWh/yr)	GHG Emissions Avoided (tons/yr)	New Wastewater Treatment Capacity (lps)	New Drinking Water Treatment Capacity (lps)	Water Savings (m ³ /day)	Population Benefitted by Water & Wastewater Service			New Solid Waste Management Capacity (tons/day)	2026 (Million USD)	2028 (Million USD)	2033 (Million USD)
EDPR Wind Farm	MX	Design, construction and operation of a 199.5-MW wind farm in General Cepeda, Coahuila for a private purchase agreement.	200	699	381,424						\$ 350.8	\$ 89.8	\$ 53.1	\$ -	\$ -
Puerto Libertad Solar Park	MX	Design, construction and operation of a 317.5-MW solar park in Pitiquito, Sonora. The electricity, Clean Energy Certificates and generation capacity produced by a 180-MW segment of the park is being purchased by CFE and the rest by other off-takers.	318	962	440,390						388.9	66.0	34.4	0.9	-
El Mezquite Wind Farm	MX	Design, construction and operation of a 250-MW wind farm located in Mina, Nuevo León.	250	890	428,787						317.1	74.0	17.4	21.1	-
Santa Maria Solar Park	MX	Design, construction and operation of a 148-MW solar park in Galeana, Chihuahua. The electricity and Clean Energy Certificates generated by the project are being purchased by CFE.	148	394	161,881						138.4	27.3	10.0	17.3	-
Orejana Solar Park	MX	Design, construction and operation of a 125-MW solar park in Hermosillo, Sonora. The electricity and the Clean Energy Certificates generated by the project are being purchased by CFE.	125	354	163,808						124.0	26.7	8.5	15.8	-
SEPV Imperial Solar Park	US	Design, construction and operation of two solar facilities: SEPV Dixieland West (3.0 MW) and SEPV Dixieland East (2.0 MW). The electricity generated by the project is being purchased by Imperial Irrigation District.	5	15	4,097						17.2	9.6	3.1	5.2	-
Don Diego Solar Park¹	MX	Design, construction and operation of a 125-MW solar park in Benjamín Hill, Sonora.	125	369	169,443						130.0	100.0	-	100.0	-
El Centro Solar Park²	US	Construction and operation of a 20-MW solar park in El Centro, California. The electricity generated by the project is being purchased by Imperial Irrigation District.	20	50	13,678							76.5	-	14.5	37.2
Baywa Corazon Solar Park¹	US	Design, construction and operation of a 200-MW solar park in Webb County, Texas	200	537	258,338						278.5	62.9	-	-	62.9
Wildcat Energy Storage^{1,2}	US	Design, construction and operation of the first phase of an energy storage system (1.5 MW charging capacity) in Riverside County, California.	1.5		819							4.4	-	-	4.4

¹ Anticipated impacts for this project.

² Project cost information is confidential.

CFE = Mexican Federal Electricity Commission; GHG = Greenhouse gases

TABLE 9: SUSTAINABLE WATER AND WASTEWATER MANAGEMENT + POLLUTION PREVENTION AND CONTROL

Project	Country	Description	Impacts								Total Project Cost (Million USD)	NADB Loan (Million USD)	Allocation to Green Bonds		
			Installed Capacity (MW)	Energy Production (GWh)	GHG Emissions Avoided (tons/year)	New Wastewater Treatment Capacity (lps)	New Drinking Water Treatment Capacity (lps)	Water Savings (m ³ /day)	Population Benefitted by Water & Wastewater Service	New Solid Waste Management Capacity (tons/day)			2026 (Million USD)	2028 (Million USD)	2033 (Million USD)
Potable water improvements in Jim Hogg County, TX ¹	US	Water infrastructure to address natural arsenic build up and implementation of water meters in the service area of Jim Hogg County, Texas.					44	43	4,558		\$ 4.3	\$ 4.3	\$ -	\$ -	\$ 4.1
Potable water improvements in Presidio, TX ¹	US	Construction of basic infrastructure services for Las Pampas Colonia, including water supply lines, a booster station, a storage tank and a transmission line between existing storage tanks to address pressure issues.						303	4,000		4.5	1.5	-	-	1.5
Water and wastewater improvements in Lower Valley Water District, TX ¹	US	Expansion and improvements to the existing water distribution system, replacement and expansion of the wastewater collection system and increased wastewater treatment capacity for unincorporated communities in El Paso County, Texas.				6			9,000		23.0	23.0	-	-	23.0
Wastewater treatment plants + cogeneration in Chihuahua, Chih. ¹	MX	Rehabilitation and upgrade of the North and South Wastewater Treatment Plants, which together treat an average flow of 2,375 lps, including a cogeneration power facility in the South plant.	1.3	8.5	9,583	2,375			809,232		14.7	11.2	-	11.2	-
Landfill expansion in Maverick County, TX	US	Expansion of the landfill by opening a third cell to provide capacity for managing the solid waste generated in the service area.								130	3.4	2.8	-	-	2.5

¹Anticipated impacts for this project.

Project Selection and Allocation Process

All NADBank projects go through a certification process to ensure compliance with all applicable environmental regulations, as well as to ensure that the project will help prevent, control or reduce environmental pollutants, improve the drinking water supply or protect flora and fauna, so as to improve human health, promote sustainable development or contribute to a higher quality of life.

This process includes the evaluation of technical, financial and environmental criteria, as well as ensuring public access to information. The projects must also be approved by the NADBank Board of Directors, which includes representatives from the Mexican Ministry Environment and Natural Resources (SEMARNAT) and the U.S. Environmental Protection Agency (EPA).

As part of the environmental criteria, all projects financed by NADBank must demonstrate not only compliance with applicable environmental regulations and clearance processes but must also demonstrate a positive impact on the environment. External consultants and risk advisors are retained for project evaluation when appropriate. During the approval process, NADBank publishes the project proposal to receive feedback from the public and identify support or potential issues that may need to be addressed.

In addition to these requirements, the projects financed with the proceeds of green bonds must comply with the NADBank Green

Bond Framework. To this end, specialists at the Bank review the projects to identify those that meet the eligibility criteria established in the framework.

Green Bond Framework

NADBank uses its Green Bond Framework to select from among its projects those that may be financed with the proceeds of green bonds. The framework requires projects that:

- a. Contribute to one or more of the high-level objectives of the 2020 Green Bond Principles (climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation and pollution prevention and control).
- b. Are in one of the following four sectors: sustainable water and wastewater management, pollution prevention and control, renewable energy or energy efficiency.
- c. Have had a disbursement in the 24 months preceding the issue of the green bond or will be financed within 24 months following the issue date.

The NADBank [Green Bond Framework](#) and the [second party opinion](#) are available on the Bank's website.

NADBank Financial Summary

NADBank is capitalized by the Governments of the United States and Mexico. As of December 31, 2021, the Bank had US\$6 billion in subscribed capital, of which US\$ 5.1 billion is callable capital and US\$487 million is paid-in capital.

By issuing debt in international capital markets, NADBank is able to extend its reach and finance more environmental infrastructure projects along the U.S.-Mexico border. At the end of 2021, NADBank had US\$1.1 billion in debt.

Rating agencies recognize the financial strength and stability of the institution, backed by continuous support from its shareholders and a prudent management of credit. FitchRatings upheld NADBank's AA rating based on its strong solvency and excellent liquidity profile, while, Moody's Investor Service rates NADBank at Aa1, reflecting its high capital adequacy and strong risk management practices.

At the end of 2021, NADBank had leveraged its US\$487 million in paid-in capital into US\$2.7 billion in financing for sustainable infrastructure projects. NADBank has also managed US\$695.5 million

in EPA grants, bringing the total number of projects funded to 288, representing a total investment of US\$10.2 billion.

TABLE 10: NADBANK CAPITAL
(Million USD)

	2019	2020	2021
Total subscribed capital ¹	\$ 6,000	\$ 6,000	\$ 6,000
<i>of which</i>			
Callable capital ²	5,100	5,100	5,100
Qualified	2,493	2,238	2,173
Unqualified	2,607	2,862	2,927
Paid-in capital ³	415	475	487

¹ *Paid-in capital* consists of cash funds contributed to NADBank by the two governments. *Callable capital* is composed of funds that are pledged to be provided to NADBank from the two countries only if required to meet the Bank's guarantee obligations or obligations on borrowings of funds for inclusion in its capital resources as specified in the charter.

² *Qualified* capital shares are subject to the necessary legal requirements of each subscribing country. *Unqualified* capital shares have either been funded or authorized for purchase by the subscribing country.

³ To date, the United States has contributed US\$225.0 million in paid-in capital, of which US\$165.0 million is restricted from commitment.



Credits

If you would like to learn more about NADBank in general and our commitment to sustainability and green bonds, you will find detailed information at www.NADB.org or you can contact the Public Affairs Department:

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