2022 Green Bond Impact Report

Contents

Message from Management

Since its creation in 1994, the North American Development Bank (NADBank) has had the unique mission of investing in infrastructure that helps protect, preserve and enhance environmental conditions in the U.S.-Mexico border region for the betterment of the quality of life of its residents, including investments in climate change mitigation and adaptation.

To date, NADBank has issued three green bonds totaling US$478 million that have been fully allocated to 16 eligible projects in compliance with our Green Bond Framework. These projects fall into the categories of renewable energy and energy efficiency, sustainable water and wastewater management, and pollution prevention and control. Collectively, they will displace 2 million tons of carbon dioxide (CO_2) emissions per year and benefit over 800,000 people with improved water and wastewater services.

We have leveraged the expertise gained from the issuance and management of these green bonds to launch our Green Loan Program, which will extend our impact and reach to a greater number of small projects though financial intermediaries. In addition, we are supporting Mexican states in the development of sustainability bond frameworks to finance their public infrastructure.

Since our first green bond issuance in 2018, we have been committed to measuring and reporting on the impact of our investments. This fourth report aligns with both the Green Bond Principles and NADBank's internal standards for transparency and disclosure. The report provides an overview of the projects funded with the bond proceeds, including their anticipated environmental impact, their alignment with the United Nations Sustainable Development Goals and their contribution to the United States and Mexico's Nationally Determined Contributions under the Paris Agreement.

NADBank recognizes that important challenges remain in the border region in terms of access to basic infrastructure, increased resilience to climate change and the need for decarbonization. These challenges also create opportunities for mobilizing green finance, particularly considering nearshoring trends in the region and the growing demand for sustainable water sources and clean energy.

We look forward to continuing to work with our multiple stakeholders to mobilize investments to help the region transition to a greener economy and be better prepared to adapt to the effects of climate change.

Calixto Mateos Hanel
Managing Director

John Beckham
Deputy Managing Director

Salvador López Córdova
Chief Environmental Officer

NADBank Green Bond Program

In July 2018 NADBank issued its first green bond, raising CHF 125 million (equivalent to US$126 million) and maturing in 2026. The net proceeds from this issuance were fully allocated to six renewable energy projects.

In 2020 the Bank issued two more 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 2022, all the proceeds from those two issuances had been allocated to 15 projects.

PROGRAM MILESTONES

2018

NADBank develops its Green Bond Framework

1st Green bond issued

- CHF 125 million Matures in 2026
- Fully allocated to six renewable energy projects

2019

NADBank publishes its first Green Bond Impact Report

2020

Green Bond Framework updated

2nd and 3rd Green bonds issued

- CHF 180 million Matures in 2028
- CHF 160 million Matures in 2033
- Allocations to a more diversified portfolio of eligible projects

2021

NADBank publishes its second Green Bond Impact Report

- Aggregated impacts from three bonds

2022

NADBank publishes its third Green Bond Impact Report

- Eligible projects aligned with SDGs & NDCs

In December 2022, the Bank entered into a private borrowing with another financial institution for MXN $1,978 million (US$100 million) maturing in 2027. Net proceeds from this borrowing will be allocated to green projects. As of December 31, 2022, no allocation of the proceeds had been made.

NADBank's Green Bond Framework, which was first developed in 2018 and was updated in 2020, ensures that all proceeds of the green bonds are managed and allocated to eligible infrastructure projects. The framework is consistent with the Green Bond Principles established by the International Capital Market Association (ICMA) 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.

TABLE 1:
ELIGIBLE PROJECT CATEGORIES

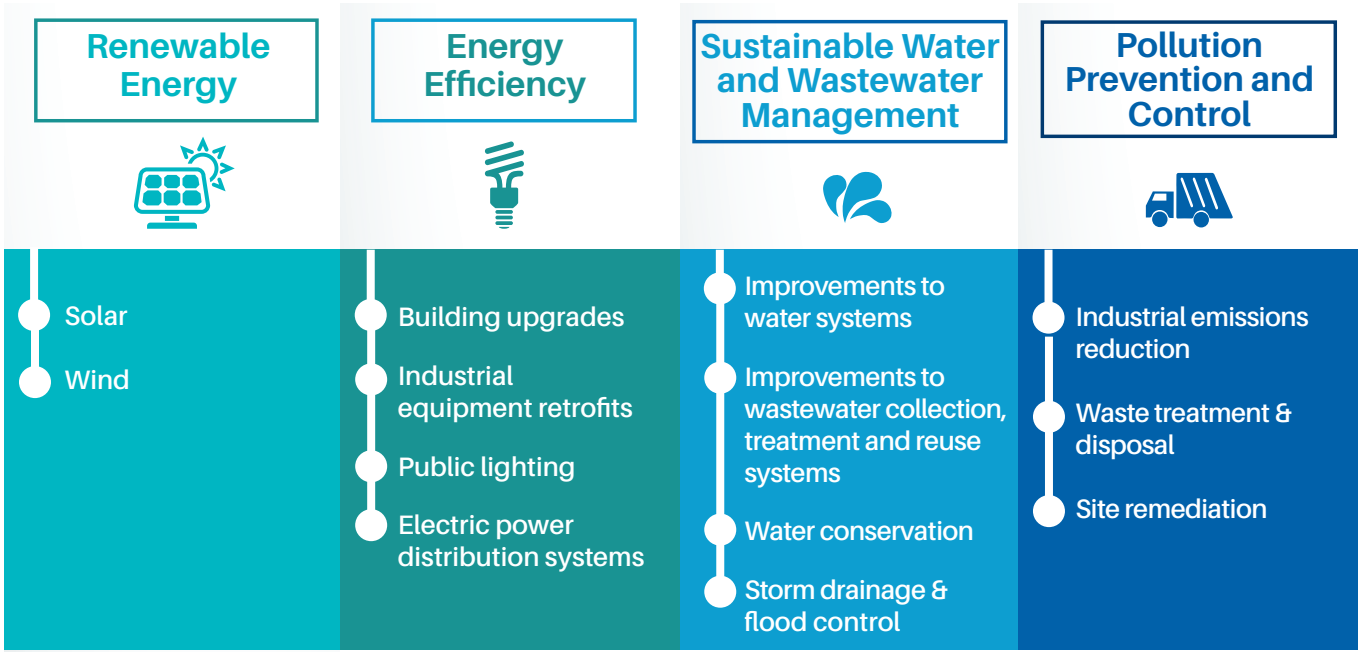

TABLE 2:
NADBANK GREEN BOND ALLOCATION SUMMARY

Green Bond Issue	% Allocated	No. of Projects Supported[1]	Project Impacts		
			Greenhouse Gas Emissions Avoided (CO_2, tons/year)	Population Benefitted by Water or Wastewater Service	New Solid Waste Management Capacity (tons/day)
CHF 125M maturing 2026	100	6	1,580,609	–	–
CHF 180M maturing 2028	100	8	1,391,889	809,232	–
CHF 160M maturing 2033	100	8	303,935	17,558	130

[1] Six of the projects received allocations from more than one bond, resulting in a total of 16 projects supported.

As of December 31, 2022, renewable energy and energy efficiency made up 91% of the proceeds allocated with US$435 million in total allocations across all three issuances. The remaining 9% was allocated to water-related projects (8%), a solid waste management project (1%), which came from the issuances maturing in 2028 and 2033. Table 3 shows the allocation by sector for each bond issue.

TABLE 3:
ALLOCATION BY SECTOR
(MILLION USD, AS OF DECEMBER 31, 2022)

Green Bond Issue	Renewable Energy	Energy Efficiency	Sustainable Water & Wastewater Management	Pollution Prevention & Control	Total Allocation
CHF 125M maturing 2026	$ 126	$ -	$ -	$ -	$ 126
CHF 180M maturing 2028	175	-	11	-	186
CHF 160M maturing 2033	100	34	29	3	166
Total	**$ 401**	**$ 34**	**$ 40**	**$ 3**	**$ 478**

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 in 2018 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)	Million USD	%	%
SEPV Imperial Solar Park	Renewable energy	CA, USA	4,319	$ 3	2	18
EDPR Wind Farm	Renewable energy	Coah., Mexico	381,424	53	42	15
Puerto Libertad Solar Park	Renewable energy	Son., Mexico	440,390	34	27	9
El Mezquite Wind Farm	Renewable energy	N.L., Mexico	428,787	17	14	5
Orejana Solar Park	Renewable energy	Son., Mexico	163,808	8	7	7
Santa María Solar Park	Renewable energy	Chih., Mexico	161,881	10	8	7
Total			**1,580,609**	**$ 126**	**100**	

[1] Estimated impact of entire project at time of approval, based on corresponding project certification document.

The **Santa Maria Solar Park**, with a generation capacity of 148 MW_{AC}, began operations in September 2017 in Chihuahua, Mexico. The electricity produced by the solar park can power approximately 38,074 homes annually. By leveraging renewable energy sources, the project plays a vital role in displacing the emission of an estimated 161,881 metric tons of CO_2 and other harmful pollutants that would have otherwise been released through power generation from fossil fuels.

2. Green Bond Maturing in 2028

CHF 180 million, equivalent to US$186 million

All the proceeds of this bond were allocated to seven renewable energy projects and one project related to wastewater treatment. The allocation of this issuance spans two years 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	Share of Bond	Bond Share of Project Costs
			CO_2 Emissions Avoided (tons/year)	Population Benefitted by Water/ Wastewater Service	Million USD	%	%
2020 Allocations							
Don Diego Solar Park	Renewable energy	Son., Mexico	169,443		$ 100	54	77
El Mezquite Wind Farm	Renewable energy	N.L., Mexico	428,787		21	11	7
Santa María Solar Park	Renewable energy	Chih., Mexico	161,881		17	9	12
Orejana Solar Park	Renewable energy	Son., Mexico	163,808		16	8	13
Chihuahua WWTPs	Water	Chih., Mexico	9,583	809,232	11	6	76
SEPV Imperial Solar Park	Renewable energy	CA, USA	4,319		5	3	31
Puerto Libertad Solar Park	Renewable energy	Son., Mexico	440,390		1	1	0
2021 Allocations							
El Centro Solar Park	Renewable energy	CA, USA	13,678		14	8	15
Total			**1,391,889**	**809,232**	**$ 186**	**100**	

[1] Estimated impact of entire project at time of approval, based on corresponding project certification document.
WWTPs – Wastewater treatment plants

3. Green Bond Maturing in 2033

CHF 160 million, equivalent to US$166 million

Allocation of this issuance was more diverse in terms of project types, including energy efficiency, water and solid waste (pollution prevention and control). By the end of 2020, US$13 million from this issue was allocated to four projects. An additional US$123 million was allocated to three projects during 2021, and US$30 million was designated for one project in 2022, for a total of eight projects funded from this issue. One of those projects also received allocations from the 2028 bond.

TABLE 6: GREEN BOND MATURING IN 2033
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	%	%
2020 Allocations								
Wildcat energy storage	Energy efficiency	CA, USA	819			$ 4	3	100
Jim Hogg water project	Water	TX, USA		4,558		4	2	94
Maverick landfill	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
El Centro Solar Park	Renewable energy	CA, USA	13,678			37	22	39
Lower Valley Water District project	Water	TX, USA		9,000		23	14	100
2022 Allocations								
EnerSmart energy storage	Energy efficiency	CA, USA	31,100			30	18	25
Total			**303,935**	**17,558**	**130**	**$ 166**	**100**	

[1] Estimated impact of entire project at time of approval, based on corresponding project certification document.

The project sponsored by **Lower Valley Water District in El Paso County, Texas**, will provide first-time access to essential water services by connecting 810 homes to sewer systems and 175 homes to water distribution systems, as well as ensure reliable service for 3,000 existing water connections. By increasing wastewater collection and treatment capacity, the project will eliminate approximately 0.17 million gallons per day of untreated wastewater, benefitting several small, unincorporated communities. Additionally, the project will support water resource management and conservation efforts.

Project Selection and Allocation Process

At NADBank, all projects undergo 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.

Projects are approved by the NADBank Board of Directors, which includes representatives from the Mexican Ministry of Environment and Natural Resources (SEMARNAT) and the U.S. Environmental Protection Agency (EPA).

Throughout the approval process, NADBank solicits public feedback to identify potential issues that may need to be addressed. Projects funded by green bonds must also comply with the NADBank Green Bond Framework. Bank specialists review the projects to determine eligibility under the framework. External consultants and risk advisors are brought in as needed.

GREEN BOND FRAMEWORK

NADBank follows a rigorous selection process for projects that can be financed with the proceeds of its green bonds, using its Green Bond Framework. This framework has three key requirements:

a

The project must contribute to one or more of the high-level objectives of the 2020 Green Bond Principles, which include climate change adaptation and mitigation of its impacts, natural resource and biodiversity conservation, and pollution prevention and control.

b

The project must fall into one of four sectors: sustainable water and wastewater management, pollution prevention and control, renewable energy or energy efficiency

c

The project must have had a disbursement within 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.

Expected Project Impacts

NADBank estimates the expected 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. The methodologies, sources and references for estimating impacts are detailed in the Appendix of this report.

Table 7 summarizes the expected environmental outcomes and impacts resulting from all the projects funded with the proceeds of the three NADBank green bonds. The table also shows the alignment of NADBank's green bonds to the UN Sustainable Development Goals (SDGs) and how the bonds support the two countries in meeting their nationally determined contributions (NDCs) under the Paris Agreement.

Tables 8 and 9 provide the details of each eligible project financed by the green bonds. The projects are organized by project category and the data provided includes the expected project impacts, the green bond allocations and the share of the total project that these allocations represent.

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: NADBANK GREEN BONDS SUMMARY OF ENVIRONMENTAL OUTCOMES AND IMPACTS, ALIGNMENT WITH SDGs AND SUPPORT FOR NDCs

Environmental Outcomes		Environmental Benefits	SDG Alignment[1]	Support for NDCs	
				U.S.[2]	Mexico[3]
Renewable Energy & Energy Efficiency	Installed capacity – 1,525 megawatts Annual energy production – 4,278 gigawatt-hours Energy storage – 133.5 megawatts Greenhouse gas emissions avoided – 2,063,570 tons CO_2/year	Climate change mitigation Provision of low-carbon infrastructure Affordable and clean energy		Projects contribute to U.S. target of pollution-free electricity by 2035	Projects contribute to Mexican target of 35% renewable energy by 2024
Sustainable Water & Wastewater Management	Drinking water treatment capacity – 44 liter per second (lps) Wastewater treatment capacity – 2,381 lps Water savings – 346 m^3/day Population served – 826,790	Climate change adaptation and resilience Access to basic water and wastewater services Conservation of water resources		U.S. commitments include adaptation without specific targets; projects contribute to adaptation	Project contributes to Mexican adaptation target to increase wastewater treatment (strategic line D3)
Pollution Prevention & Control	New solid waste management capacity – 130 tons/day	Climate change mitigation Solid waste pollution control Air quality improvement		Project contributes to U.S. target of 30% reduction in methane emissions by 2030	N.A. No project finance activity

[1] UN General Assembly (2015), Transforming our world: the 2030 Agenda for Sustainable Development,https://www.unfpa.org/resources/transforming-our-world-2030-agenda-sustainable-development
[2] United States of America (2021), Nationally Determined Contribution under the Paris Agreement, https://unfccc.int/sites/default/files/NDC/2022-06/United%20States%20NDC%20April%2021%202021%20Final.pdf
[3] Mexico (2022), Nationally Determined Contribution under the Paris Agreement, https://unfccc.int/sites/default/files/NDC/2022-11/Mexico_NDC_UNFCCC_update2022_FINAL.pdf

The **Enersmart Energy Storage Portfolio** in San Diego, California consists of the construction of 44 energy storage facilities, with a combined charging capacity of 132 megawatts in alternating current that is projected to reduce CO_2 emissions by approximately 31,100 metric tons per year. Storing excess energy for use during periods of peak demand will improve grid reliability and optimize energy efficiency, as well as maximize the use of renewable energy sources, thus helping California achieve its goal of a carbon-free electric grid by 2045.

TABLE 8:
RENEWABLE ENERGY & ENERGY EFFICIENCY

Project	Country	Description	Impacts*			Allocations			Total GB share of project (%)
			Installed capacity (MW)	Energy production (GWh)	CO_2 emissions avoided (ton/yr)	2026 GB MUSD	2028 GB MUSD	2033 GB MUSD	
EDPR Wind Farm	MX	Design, construction and operation of a 199.5-MW wind farm in General Cepeda, Coahuila	200	699	381,424	53			15
Puerto Libertad Solar Park	MX	Design, construction and operation of a 317.5-MW solar park in Pitiquito, Sonora	318	962	440,390	34	1		9
El Mezquite Wind Farm	MX	Design, construction and operation of a 250-MW wind farm in Mina, Nuevo León	250	890	428,787	17	21		12
Santa Maria Solar Park	MX	Design, construction and operation of a 148-MW solar park in Galeana, Chihuahua	148	394	161,881	10	17		20
Orejana Solar Park	MX	Design, construction and operation of a 125-MW solar park in Hermosillo, Sonora	125	354	163,808	8	16		20
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) in California	5	15	4,319	3	5		49
Don Diego Solar Park	MX	Design, construction and operation of a 125-MW solar park in Benjamín Hill, Sonora	125	369	169,443		100		77
El Centro Solar Park	US	Construction, rehabilitation and operation of a 20-MW solar park in El Centro, CA. Replacement of all inverters and upgrade to SCADA system	20	50	13,678		14	37	54
Baywa Corazon Solar Park	US	Design, construction and operation of a 200-MW solar park in Webb County, TX	200	537	258,338			63	23
Wildcat Energy Storage	US	Design, construction and operation of the first phase of an energy storage system (1.5 MW charging capacity) in Riverside, California	1.5		819			4	100
Enersmart Energy Storage	US	Design, construction and operation of 44 energy storage systems (132 MW of charging capacity) in San Diego County, California	132		31,100			30	25

* Estimated impact of entire project at time of approval, based on the corresponding project certification document.
GB = Green bond; MUSD = Million U.S. dollars

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

Project	Country	Description	Impacts*								Allocations			Total GB share of project (%)
			Installed capacity (MW)	Energy production (GWh)	CO_2 Emissions avoided (tons/year)	New potable water treatment capacity (lps)	New wastewater treatment capacity (lps)	Water savings (m3/day)	Population benefitted by water or wastewater service	New solid waste management capacity (ton/day)	2026 GB MUSD	2028 GB MUSD	2033 GB MUSD	
Potable water improvements in Jim Hogg County, TX	US	Water infrastructure to address natural arsenic and water meters					44	43	4,558				4	94
Potable water improvements in Presidio, TX	US	Basic infrastructure services for Las Pampas Colonia						303	4,000				2	33
Lower Valley Water District, water and wastewater improvements in El Paso County, TX	US	Improvement and expansion of the water distribution and wastewater collection systems and increased treatment capacity for several small communities				6			9,000				23	100
Wastewater treatment plants + cogeneration in Chihuahua, Chih.	MX	Rehabilitation and upgrade of two wastewater treatment plants, with combined capacity of 2,375 lps, and cogeneration facility	1.3	8.5	9,583	2,375			809,232			11		76
Landfill expansion in Maverick County, TX	US	Expansion of landfill to provide capacity for current solid waste generation								130			3	73

* Estimated impact of entire project at time of approval, based on the corresponding project certification document.

GB = Green bond; MUSD = Million U.S. dollars

NADBank Financial Summary

NADBank is capitalized by the Governments of the United States and Mexico. As of December 31, 2022, the Bank had US$6 billion in subscribed capital, of which US$5.1 billion is callable capital and US$496 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 2022, NADBank had US$1.0 billion in debt.

Rating agencies recognize the financial strength and stability of the institution, backed by continuous support from its shareholders and the prudent management of credit. Fitch Ratings upgraded NADBank's rating to AA+ 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 2022, NADBank had leveraged its US$496 million in paid-in capital into US$2.9 billion in financing for sustainable infrastructure projects. NADBank has also managed US$711 million in EPA grants, bringing the total number of projects funded to 295, representing a total investment of US$10.8 billion.

TABLE 10:
NADBANK TOTAL CAPITAL IN 2022

	Million USD
Total subscribed capital[1]	$ 6,000
of which	
Callable capital[2]	5,100
Qualified	2,119
Unqualified	2,981
Paid-in capital	496

[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 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.

NADBank at a Glance

Who we are

Binational financial institution established in 1994 by the Governments of the United States and Mexico.

Our mandate

To finance infrastructure projects that preserve, protect or enhance the environment in the U.S.-Mexico border region.

Key facts

First green binational development bank

- Bilateral nexus for cooperation on environmental issues in the border region
- Focus on sustainable development of environmental infrastructure
- Since 1994:
  - US$3.6 billion in loans and grants
  - 295 projects financed
  - More than 19 million people benefitted
- Sound banking principles
- Rigorous certification and approval process
- Long-time partner with EPA in administering its grant funds
- AA+/Aa1/AAA(mex) credit ratings

Our sectors

- Water, solid waste, air quality
- Sustainable energy
- Climate change adaptation and resilience
- Urban development
- Sustainable buildings and industrial parks
- Green manufacturing and products

Appendix

All projects financed by NADBank undergo an internal certification process prior to funding approval. The due-diligence review performed by NADBank as part of this process includes the environmental, technical and financial aspects of the proposed project. Through its Results Measurement System, NADBank estimates the anticipated impacts (benefits) of the project prior to approval, documents expected results as targets in the certification document and upon project completions verifies the actual results through routine monitoring, as well as a formal project closeout process. Because of the thoroughness of the due-diligence process, the actual results of most projects are reasonably close to those estimated as targets during the certification process.

Key indicators are selected and quantified based on the type and purpose of the project. Anticipated impacts are calculated based on the expected project scope and appropriate well-established assumptions, such as detailed census data, state energy matrices and emissions factors at the time of project certification. A detailed explanation of the analysis and due-diligence activities performed for each project, including calculations for setting environmental impact targets, is provided in the project certification document. NADBank maintains a webpage for every project it finances, which contains a copy of the certification document labeled as "Proposal." Tables 8 and 9 of this report include the weblink to each project funded by a green bond.

Below is the list of general references used to obtain the data to calculate environmental impact targets for projects.

REFERENCES

Census information, including population, household and socioeconomic data:

- United States Census Bureau, https://data.census.gov/
- Instituto Nacional de Estadística, Geografía e Informática (INEGI), https://www.inegi.org.mx/app/areasgeograficas/default.aspx#collapse-Resumen

State energy matrices and emissions factors:

- U.S. Energy Information Administration, https://www.eia.gov/electricity/
- Centro Nacional de Control de Energía (CENACE), Programa de Desarrollo del Sistema Eléctrico Nacional (PRODESEN), https://www.cenace.gob.mx/Paginas/SIM/Prodesen.aspx
- Sistema de Información Energética (SIE), https://sie.energia.gob.mx/

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 NADBank's Institutional Relations and Communication Unit:

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No Reliance

The material in this document is not intended to be relied upon as advice to investors or potential investors and does not take into consideration the investment objectives, financial situation or needs of any particular investor, which should be considered with professional advice when deciding if an investment is appropriate. This document does not constitute financial product advice.

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