

NR-310 - Reduction of CO2 Emissions in Building Commercial Bank

Dominican Republic

NAMA for Recognition

A Overview

A.1 Party

Dominican Republic

A.2 Title of Mitigation Action 

Reduction of CO2 Emissions in Building Commercial Bank

A.3 Description of mitigation action

REDUCTION OF CO2 EMISSIONS

THROUGH THE PRODUCTION OF CLEAN ENERGY, INSTALLING SYSTEMS OF PHOTOVOLTAIC SOLAR PANELS, AS A SOLUTION FOR THE ENERGY SAVING OF ENVIRONMENTALLY FRIENDLY FORM.

Banco Popular Dominicano has 54 offices and 26 parking areas roofed with solar panels, which allow it to produce 4.7 million kilowatts per hour (kWh) of clean energy, consolidating the financial organization as the first institution in the country with the largest capacity of solar energy generation.

Currently there are 11,255 solar photovoltaic panels installed in this office's network , which are distributed in 22 cities and are equivalent to 42% of the total number of Banco Popular offices.

These eco-efficient facilities are equivalent to an installed capacity of 3.2 MW (Mega Watts), which make it possible to supply the majority of the consumption of this network of bank branches and supply sustainable energy into the national grid .

Banco Popular's photovoltaic system is bidirectional, which means that the bank consumes a portion of its clean energy production and injects to the system the surplus of electricity , for the benefit of Dominican households and companies, in accordance with the net energy metering regulation, of the National Energy Commission.

Reduction of the Environmental Footprint

The solar energy production of these facilities is similar to the average monthly consumption of 9,445 households. In terms of decreasing the environmental footprint, the project means reducing 2.6 million kilograms of CO₂ per year of polluting emissions.

This photovoltaic energy program began in 2011 as part of the environmentally responsible actions of the financial institution and it was honored last year with the Award for Excellence in Cleaner Production of Renewable Energy, awarded by the Ministry of Environment and Natural Resources.

In addition to the environmental benefits, there are also improvements in efficiency, since this initiative of green offices currently allows Banco Popular to save around US\$737,000.00 annually from the electric bill, strengthening the sustainability of the business model of the financial institution.

As an addition to this photovoltaic production plan, Banco Popular reinforces its policy of reducing energy consumption through the following projects:

▪ **Building Management System (BMS) project:**

- A total of 114 Automated Offices integrated into a BMS (Building Management System) that allows us to control and manage the hours of use of our indoor and outdoor lighting systems, air conditioning systems, sensors of temperature, humidity and air quality, the monitoring of our electric generators, fuel tanks and UPS monitoring, all remotely through the institution's internal network.
- Automating the ignition of electromechanical equipment.
- Control of air conditioning and lighting conditions of different locations.
- Managing alarms by subsystems.
- Reducing the consumption of energy.
- Raising levels of efficiency in the use of electromechanical equipment.
- Monitoring and analysis of photovoltaic energy production.

▪ **Metering and Monitoring Energy project**

- We have more than 155 electric meters installed nationwide, allowing us to monitor all the electrical variables of each of our branches and buildings.

- **Monitoring quality of energy.**
- **Electric Bill Auditing.**
- **Analyzing our distribution network of energy.**
- **Monitoring Real-time electricity consumption.**

These projects have allowed us to significantly increase the levels of management and energy efficiency in all of our branches, buildings and locations that have such implementation.

Historical data from the Project kWp 2011-2018:

2011	34.88 kWp
2012	174.59 kWp
2013	522.78 kWp
2014	1,140.62 kWp
2015	661.61 kWp
2016	32.76 kWp
2017	321.13 kWp
2018	284.75 kWp

Historical data from the Project kWh 2011-2018:

2011	We started with one (1) Branch – 90,352.00 kWh/year
2012	Three (3) Branches – 266,602.58 kWh/year
2013	Ten (10) Branches – 759,195.18 kWh/year
2014	Twenty-five (25) Branches – 1,709,498.69 kWh/year
2015	Thirteen (13) Branches – 979,059.26 kWh/year
2016	One (1) Branch – 50,154.00 kWh/year
2017	Sixteen (16) Parking areas– 479,652.68 kWh/year
2018	One (1) Branch and Ten (10) Parking areas– 447,991.35 kWh/year

Historical Annual CO₂ Tons Reduction:

2011	49,097.28 Tons CO₂
2012	144,871.84 Tons CO₂
2013	412,546.66 Tons CO₂
2014	928,941.59 Tons CO₂
2015	532,020.80 Tons CO₂
2016	27,253.68 Tons CO₂
2017	260,643.27 Tons CO₂
2018	243,438.50 Tons CO₂

Total Accumulated in Ton CO₂ Reductions during the 8 Years of the Project (2011 - 2018):

2011 – 2018 (49,097.28 x 8 years)	= 392,778.21 Tons CO₂
2012 – 2018 (144,871.84 x 7 years)	= 1,014,102.89 Tons CO₂
2013 – 2018 (412,546.66 x 6 years)	= 2,475,279.96 Tons CO₂
2014 – 2018 (928,941.59 x 5 years)	= 4,644,707.95 Tons CO₂
2015 – 2018 (532,020.80 x 4 years)	= 2,128,083.21 Tons CO₂
2016 – 2018 (27,253.68 x 3 years)	= 81,761.05 Tons CO₂
2017 – 2018 (260,643.27 x 2 years)	= 521,286.53 Tons CO₂
2018 – 2018 (243,438.50 x 1 year)	= 243,438.50 Tons CO₂

TOTAL REDUCTION (2011 – 2018):

11,501,438.30 Tons CO₂

A.4 Sector

- ☐ Energy supply
- ☐ Residential and Commercial buildings
- ☐ Agriculture
- ☐ Waste management
- ☒ Other
- Building Commercial Bank
- ☐ Transport and its Infrastructure
- ☐ Industry
- ☐ Forestry

A.5 Technology

- ☐ Bioenergy
- ☐ Energy Efficiency
- ☐ Hydropower
- ☐ Wind Energy
- ☐ Carbon Capture and Storage
- ☐ Land fill gas collection
- ☐ Other
- Cleaner fuels
- Geothermal
- ☒ Solar Energy
- Ocean Energy
- Low till / No till

A.6 Type of action

- ☐ National/ Sectoral goal
- ☐ Strategy
- ☐ National/Sectoral policy or program
- ☒ Other
- Photovoltaic Project
- Project: Investment in machinery
- Project: Investment in infrastructure
- ☒ Project : other

A.7 Greenhouse gases covered by the action

- ☒ CO₂
- ☐ N₂O
- ☐ PFCs
- ☐ Other
- CH₄
- HFCs
- SF₆

B National Implementing Entity

B.1.0

Name

Banco Popular Dominicano, S. A., Banco Multiple

B.1.1

Contact Person 1

Carlos de los Santos

B.1.2	Address	Av. John F. Kennedy, No. 18 Miraflores
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B.1.5	Contact Person 2	Jose Hernandez Caamaño
B.1.6	Address	Av. John F. Kennedy, No. 18 Miraflores
B.1.7	Phone	809.544.6951
B.1.8	Email	gestionyeficienciaenergetica@bpd.com.do
B.1.9	Contact Person 3	
B.1.10	Address	
B.1.11	Phone	
B.1.12	Email	
B.1.13	Comments	

[Add Additional Entity](#)

C Expected timeframe for the implementaion of the mitigation action

C.1	Number of years for completion	8
C.2	Expected start year of implementation	2011

D Currency

D.1	Used Currency	USD ▼
	Conversion to USD:	1

E Cost

E.1.1	Estimated full cost of preparation	6,506,984	Conversion to USD: 6,506,984
E.1.2	Comments on estimated full cost of preparation		
E.2.1	Estimated full cost of implementation		Conversion to USD: 0
E.2.2	Comments on estimated full cost of implementation		
E.3.1	Estimated incremental cost of implementation		Conversion to USD: 0

E.3.2		Comments on estimated incremental cost of implementation					
F Estimated emission reductions							
F.1	Amount	11,501					
F.2	Unit	MtCO2e					
F.3	Additional information (e.g. if available, information on the methodological approach followed)	This is a project of continuous growth, we expect to continue increasing our installed capacity panels.					
G Other indicators							
G.1	Other indicators of implementation						
H Other relevant information							
H.1	Other relevant information including co-benefits for local sustainable development						
I Relevant National Policies strategies, plans and programmes and/or other mitigation action							
I.1	Relevant National Policies	http://www.cne.gob.do/wp-content/uploads/2015/05/REGLAMENTO-LEY-57-07.pdf					
I.2	Link to other NAMAs	(none) Sustainable Housing Programme High Integration Program of Wind Energy Implementation of a National Forestry and Climate Change Strategy, including the development and implementation of a Platform for the Generation and Trading of Forest Carbon Credits.					
J Attachments							
J	Attachments	<table><thead><tr><th>Title</th><th>Description</th></tr></thead><tbody><tr><td colspan="2">No records to display.</td></tr></tbody></table>	Title	Description	No records to display.		
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J.2	File	Choose File No file chosen					
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