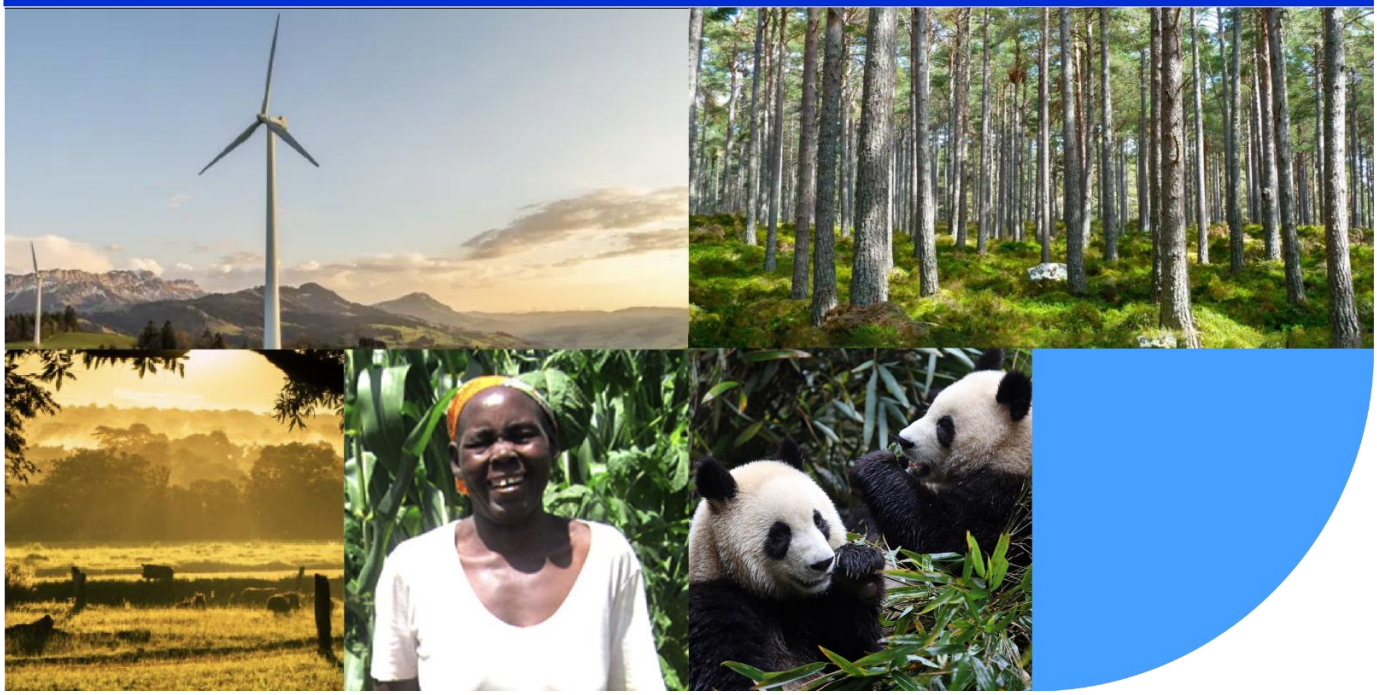
South Pole **Climate Advisory**

Final

Qatar National Bank Green Bond Impact Report 2025

(For Green Bond ISIN: XS2233188353)

August 2025



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The Climate Company

Details

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Introduction

Qatar National Bank (QNB) has commissioned South Pole to calculate the environmental impact of QNB's green bond, which was issued in September 2020 and matures in September 2025. This analysis is based on data provided by QNB.

The report assessed a diversified portfolio of assets/ projects financed under green bonds. The assessment covers three eligible green project categories: (1) Green buildings, (2) Renewable energy and (3) Sustainable water and wastewater management. The report discloses the environmental impact associated with the green bond portfolio, based on a combination of reported annual data and, where necessary, estimated cumulative impacts over the bond's financing period. All calculations follow a transparent attribution approach, using either actual or assumed project operation periods, and are supported by documented methodologies and data sources.

There are four sections in this report, including

- Section 1 – Bond information
- Section 2 – Impact assessment
- Annex 1 – Acronyms and abbreviations
- Annex 2 – Basis of preparation

Section 1 - Bond Information

Table 1: Bond information

SIN	Issuance date	Maturity date	Principal	Coupon rate
XS2233188353	September 2020	September 2025	USD 600 Mn	1.625%

For more information relating to the green bond, please visit the Sustainable Finance section on QNB corporate website.

Section 2 – Impact reporting

Environmental impact is based on analysis of the assets/ projects covered by QNB's eligible green bond over 12 months - the period 30 June 2024 to 31 May 2025. The selection of impact metrics in this report aligns with the ICMA Harmonised Framework for Impact Reporting (June 2024) and relevant sector-specific best practices.

Our impact methodology focuses on the environmental impact created during the operational phase of in-scope assets/ projects. The environmental impact associated with the construction phases is excluded unless explicitly stated. Please refer to Annex II for more information.

This report presents QNB's attributed environmental impact across two distinct timeframes:

1. Annualised impact (i.e. ex-ante estimates) of total assets/projects and QNB's attribution
2. Cumulative impact over the bond financing period, starting from its issuance (i.e. September 2020) to the month of assessment (i.e. July 2025).

Here is a summary of the impact associated with the green bond for the most recent reporting year:

Table 2: Summary of total assets/ projects annualised impact and QNB's annualised impact contribution

Project category	Total assets/ projects impact (annualised)	QNB's impact contribution (annualised)
Green buildings	• 134,270 tCO_2e emissions avoided	• 26,717 tCO_2e emissions avoided
Renewable energy	• 3,074,675 tCO_2e emissions avoided	• 307,540 tCO_2e emissions avoided
Water and wastewater management	• 274 million m^3 wastewater treated • 216 million m^3 water recycled	• 39 million m^3 wastewater treated • 31 million m^3 water recycled

For the cumulative impact attained by QNB financing over the bond period, we multiply the annual impact by the project's total number of financing years and QNB's share of total financing through the bond.

$$\text{Cumulative Impact}_{QNB} = \text{Annual Impact}_{Project} \times \text{QNB Share of Total Financing}_{Project} \times \text{Years Financed}$$

Note: This is a simplified formula that assumes a steady annual impact during the QNB supported operational period. Further adjustments may be optionally made where project commissioning occurs mid-period or where annual performance data varies.

Here is a summary of the impact associated with the green bond:

Table 3: Summary of QNB's impact contribution over the bond period

Project category	QNB's impact contribution over the bond period
Green buildings	• 89,087 tCO_2e emissions avoided (ex-ante estimate)[1] • 62,763 tCO_2e emissions avoided (ex-post estimate)[2]
Renewable energy	• 878,878 tCO_2e emissions avoided
Water and wastewater management	• 196 million m^3 wastewater treated • 155 million m^3 water recycled

For the detailed environmental impact associated with different project categories, please refer to the individual section of our impact assessment (i.e. Section 2.1 green building, 2.2 renewable energy and 2.3 wastewater treatment).

2.1 – Green buildings

The scope of the impact assessment for the QNB bond proceeds covers project financing for a portfolio of green building projects, with a total gross floor area of 1,233,318 square meters (m^2). The portfolio encompasses green building projects spanning diverse geographical locations, including France, Germany, Qatar, and the United Kingdom. The building portfolio contains projects currently under construction, hence their expected annual impact is evaluated.

The portfolio's green buildings hold various international and local certifications, including LEED, BREEAM, Haute Qualité Environnementale (HQE) in France, and the Global Sustainability Assessment System (GSAS) in Qatar, as well as Green PUE (Power Usage Effectiveness) Validation in Germany. Below is a detailed breakdown of the portfolio's green building certifications by country.

Table 4: Breakdown of QNB green building assets/ projects by region and type of building

Region	Types of building	Level of certifications	Total gross floor area (m^2)
Europe Middle East	Industrial Hospitality Mixed Use Commercial Residential Data Warehouse	LEED – Gold LEED – Platinum BREEAM – Very Good BREEAM – Outstanding BREEAM – Excellent HQE – Exceptional HQE- Très Performant (Very Good) GSAS – 4 Star GSAS – 5 Star Green PUE Validation	1,233,318

[1] The ex-ante avoided emissions estimate assumes each project was fully operational throughout the period covered by QNB's financing. It does not account for construction timelines or actual commissioning dates.

[2] The ex-post avoided emissions figures reflect QNB's share of project emissions reductions realised during the bond period, adjusted for actual or estimated operational timelines. Projects that were under construction or not yet operational during the bond period were excluded.

Financing for green building certified assets/ projects can help achieve better efficiency in energy use, water management, and/or waste management in the building operations. Aligned with the eligible activities outlined in the QNB Group Sustainable Finance and Product Framework 2023[3], the use of bond proceeds contributed to the following UNSDGs:

SDG 1 - Sustainable Cities and Communities

SDG 12 - Climate Action

Table 5: Green buildings impact disclosure[4]

Building type	QNB's share of total financing (%)[5]	Area (m^2)	Total assets/ projects impact				QNB's attributed impact contribution[6]		
			Annualised Energy consumption intensity (kWh/m^2/ yr)	Annualised Water consumption intensity ($L/m^2/yr$)	Construction waste diversion rate	Annualised Avoided emissions (tCO_2e/yr)	Annualised Avoided emissions (tCO_2e/yr)	Avoided emissions over the bond period (tCO_2e, ex-ante estimate)[7]	Avoided emissions over the bond period (tCO_2e, ex-post estimate)[8]
Industrial	7-21%	379,026	3,862	101	93%	99,523	9,535	13,834	1,720
Hospitality	16-59%	193,665	336	1,844	78%	6,325	3,064	14,494	7,689
Mixed Use	11-100%	111,683	415	2,718	93%	4,345	1,507	7,274	5,783
Commercial	13-100%	452,297	120	939	66%	22,905	11,823	50,001	44,174
Residential	25-100%	96,647	121	887	94%	1,172	787	3,485	3,398
Total	**7-100%**	**1,233,318**	**1,331**	**486**	**81%**	**134,270**	**26,717**	**89,087**	**62,763**

[3] Source: https://www.qnb.com/sites/qnb/qnbqatar/document/en/SustainableFinanceandProductFramework2022

[4] The impact disclosure table is prepared in accordance with green building core metrics from the ICMA Harmonised Framework for Impact Reporting (June 2024).

[5] The share of total financing of different projects varies, depending on individual project arrangement.

[6] Project-by-project results are aggregated based on QNB's pro-rated share (as a percentage of the issuer's share of the total financing) of the total projects' results, in alignment with ICMA Harmonised Framework for Impact Reporting (June 2024) core principles.

[7] The ex-ante avoided emissions estimate assumes each project was fully operational throughout the period covered by QNB's financing. It does not account for construction timelines or actual commissioning dates.

[8] The ex-post avoided emissions figures reflect QNB's share of project emissions reductions realised during the bond period, adjusted for actual or estimated operational timelines. Projects that were under construction or not yet operational during the bond period were excluded.

2.2 – Renewable energy

The scope of the impact assessment for the QNB bond proceeds covers loan instruments for equity investments in pure-play renewable companies and direct project financing of solar projects in Asia.

The financing helps to increase renewable energy generation and facilitate renewable energy adoption in emerging countries. Aligned with the eligible activities outlined in the QNB Group Sustainable Finance and Product Framework 2023[9], the use of bond proceeds contributed to the following UNSDGs:

SDG 7 - Affordable and Clean Energy

SDG 13 - Climate Action

Table 6: Renewable energy impact disclosure[10]

Region	QNB's share of total financing (%)	Project lifetime (years)[11]	Total assets / projects impact			QNB's attributed impact contribution	
			Installed capacity (MW)[12]	Annualised Electricity generation (MWh/year)	Annualised avoided emissions (tCO_2e/year)	Annualised avoided emissions (tCO_2e/year)	Annualised Avoided emissions over the bond period (tCO_2e)[13]
Asia	10-13%[14]	Wind:20 Solar:25	5,194,661	3,489	3,074,675	307,540	878,878

[9] Source: https://www.qnb.com/sites/qnb/qnbqatar/document/en/SustainableFinanceandProductFramework2022

[10] The impact disclosure table is prepared in accordance with renewable energy core metrics from the ICMA Harmonised Framework for Impact Reporting (June 2024). Renewable energy capacity rehabilitated is omitted since it is not relevant to the project or company's operations.

[11] Please refer to Annex 2 for detailed assumptions made for project lifetime.

[12] Installed capacity figures reflect client-reported data and are understood to represent the total cumulative capacity as of 2024.

[13] QNB-attributed avoided emissions over the bond period represents the emissions avoided during the bond's financing duration (3-5 years), proportionally allocated based on QNB's share of financing (10-13%). The calculation also includes consideration of project degradation rates (please refer to Annex 2 for more details).

[14] The share of total financing of different projects ranges from 10% to 13%.

2.3 – Sustainable water and wastewater management

The scope of the impact assessment for the QNB bond proceeds covers the loan financing for a wastewater treatment plant in the Middle East. The facility employs an advanced three-stage treatment system comprising solid membrane filtration, chemical treatment, and anaerobic microbial processing. It is designed to handle up to 750,000 m^3/day of untreated sewage, equivalent to 273.75 million m^3/year, through first-level treatment (sedimentation and solid waste separation).

This makes it one of the largest wastewater treatment plants in the region[15], capable of processing approximately 60% of the domestic wastewater. Treated water exceeds WHO drinking water standards. The government purchases all the plant production of reclaimed water, which is used for agricultural irrigation, industrial processes, gardening and municipal non-potable uses, and underground aquifer recharge for strategic water storage.

The use of reclaimed water from the plant helps to reduce demand for freshwater abstraction and supports sustainable water resource management in a water-scarce region. Aligned with the eligible activities outlined in the QNB Group Sustainable Finance and Product Framework 2023[16], the use of bond proceeds contributed to the following UN SDGs:

SDG 6 - Clean Water and Sanitation

Table 7: Water and wastewater management impact disclosure[17]

Region	QNB's share of total financing (%)	Plant lifetime (years)	Total projects' impact		QNB's attributed impact contribution			
			Annualised wastewater treated (1st level) (m^3/year)	Annualised water reused (m^3/ year)[18]	Annualised wastewater treated	Annualised water reused	Wastewater treated over the bond period	Water savings over the bond period
Middle East	14	30	274 million	216 million	39 million	31 million	196 million	155 million

[15] Source: https://www.udcsulaibiya.com/about-us

[16] Source: https://www.qnb.com/sites/qnb/qnbqatar/document/en/SustainableFinanceandProductFramework2022

[17] The impact disclosure table is prepared in accordance with sustainable water and wastewater management core metrics from the ICMA Harmonised Framework for Impact Reporting (June 2024).

[18] Water reused refers to treated effluent reused after sedimentation. It is assumed that 100% of this treated volume is reused for no-potable applications such as irrigation or industry.

Annex I – Acronyms and abbreviations

ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BAU	Business as usual
BREEAM	Building Research Establishment Environmental Assessment Method
CO_2e	Carbon dioxide equivalent
DEFRA	Department for Environment, Food & Rural Affairs
DESNZ	Department for Energy Security and Net Zero
EF	Emission factor
FR	France
GBA	Gross building area
GHG	Greenhouse gases
GSAS	Global Sustainability Assessment System
HQE	Haute Qualité Environnementale (French green building certification)
ICMA	International Capital Market Association
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
IEA	International Energy Agency
kg	Kilogram
kWh	Kilowatt Hour
L	Litre
LCS	Low-Carbon Scenario
LEED	Leadership in Energy and Environmental Design
m^2	Square metre
m^3	Cubic metre
Mn	Million
MW	Megawatt
MWh	Megawatt Hour
PUE	Power Usage Effectiveness

PV	Photovoltaic
QNB	Qatar National Bank
RE	Renewable Energy
SDG	Sustainable Development Goals
t	Metric Tonne
tCO_2e	Tonne of Carbon Dioxide Equivalent
UK	United Kingdom
UNSDG	United Nations Sustainable Development Goals
WGBC	World Green Building Council
WHO	World Health Organisation

Annex II - Basis of preparation

General methodology

Two levels of environmental impact are assessed:

- **1st level - asset/ project-level impact contribution:** at the 1st level, environmental impact of an asset/ project is being assessed, reflecting the full environmental benefit they created/ would create on an annual basis. The impact metric selection is prepared in accordance with the voluntary guidance of the ICMA Harmonised Framework for Impact Reporting (June 2024).

- **2nd level - QNB attributed impact contribution:** at the 2nd level, the environmental impact of a project or a portfolio is being accounted for proportionally to the level of financing provided by QNB and the total number of years. We have adopted 'the share of total project finance' from ICMA guidance as the attribution factor.

General Assessment Logic
South Pole applies a counterfactual-based approach to estimate environmental impact, building two comparative scenarios:

- **Business-as-Usual (BAU)**: scenario without the project intervention.
- **Low-Carbon Scenario (LCS)**: scenario representing the expected performance of the project.

For example, avoided emissions are calculated using the following formula:

Financed Avoided Emissions = (E_{BAU} – E_{LCS}) × Attribution factor

Where:
- E_{BAU}: Emissions from the Business-as-Usual (BAU) baseline scenario
- E_{LCS}: Emissions from the Low-Carbon Scenario (LCS)

Use of performance data and secondary data

South Pole applies a two-step approach:

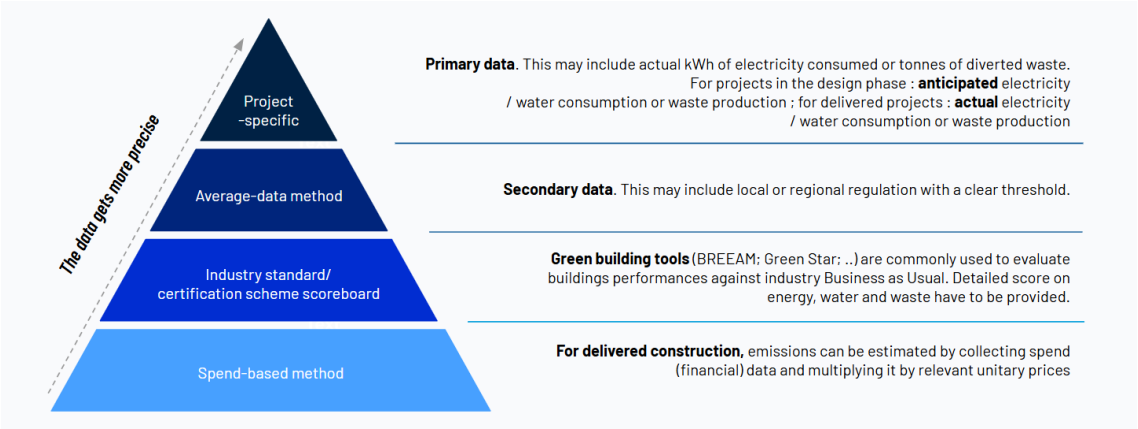
1. Primary data – performance data measured and reported by project owners or the client, where available, is used.
2. Secondary data – if primary data is unavailable, South Pole uses national statistics, industry benchmarks, or literature-based proxies.

Data quality hierarchy

South Pole prioritises data sources as follows:

- Verified project-specific data
- Government or regulator-published statistics
- Peer-reviewed academic literature or industry studies
- Proxy estimates and conservative assumptions where no other sources are available

Figure 1: Data quality hierarchy



Asset-specific methodology

Green buildings

Methodology and assumptions

Data are reported using a mix of ex-ante and ex-post approaches, depending on the availability and quality of underlying documentation received from QNB and their partners. Where the actual operational performance data (e.g. utility consumption records) were available, indicators are reported on an ex-post basis; where only design-stage documentation or modelling outputs were provided, indicators are reported on an ex-ante basis with clear disclosure of assumptions.

In accordance with the ICMA Harmonised Framework for Impact Reporting (June 2024), this report discloses the following indicators for green buildings:

- Energy consumption (kWh/m^2/yr)
- Construction waste diversion rate from landfill (%)
- Water consumption (m^3/m^2/yr)
- Avoided emissions ($kgCO_2e$)
- Certification standard

Due to the diversity of the building locations, types and data availability, multiple assessment approaches were applied, including benchmarking against local building code, certification schemes, and default assumptions where appropriate. Specific assumptions and methodologies are transparently disclosed in the following sections of the report.

Reporting basis

In cases where the bond's financing period covers both construction and operation phases, this report discloses two types of avoided emissions: 1) estimated ex-ante avoided emissions based on expected building performance for the full bond period, and 2) ex-post avoided emissions estimates. In both cases, cumulative avoided emissions attributable to QNB over the bond period were estimated.

Additionally, the estimated avoided emissions of the asset can be disclosed on an ex-ante basis, using appropriate assumptions and modelling. This should be clearly labelled as forward-looking and not directly attributed to the bond reporting period, but may provide useful context to stakeholders regarding the asset's total impact potential.

1. Energy consumption

Certification is proof of implementing a process to reduce energy consumption in buildings. As part of QNB's investment conditions, a building must obtain green certification to be included in the green bond portfolio.

Selection of performance data, proxy data and baseline:

- **Use of performance data:** Where available, South Pole adopted consumption data supplied by QNB in kWh/yr and broken down by energy sources (Electricity, Natural gas, District heating, District cooling), after assessing its quality.
- **Proxy data development:** When data is not available, South Pole relied on various sources to establish the estimated building consumption, from government-backed building energy consumption figures to consumption based on the building's environmental certification ratings.
- **Baseline development:** To establish the reference situation, South Pole used local government data, building standards in line with the construction/retrofit delivery year, and research publications. Baselines are given in kWh/m^2/yr to allow comparison with the various assets.

Data quality and limitations

For most of the assets/ projects, the building's operational emissions were calculated from its consumption and each energy's emission factor. The emission factors were selected from a list of reputable databases to ensure methodological robustness and contextual relevance. For this calculation, South Pole used the following sources:

Table 8: Green buildings emission factor sources

Emission Factor sources	France	UK	Germany	Qatar
Electricity	IEA 2024	DESNZ *(UK's Department for Energy Security and Net Zero)*	IEA 2024	IEA 2024
Gas	Ademe's Base Carbone v. 8.10.4	Ademe's Base Carbone v. 8.10.4	Ademe's Base Carbone v. 8.10.4	Ademe's Base Carbone v. 8.10.4
District heating	Specific EF from the network's operator	DESNZ *(UK's Department for Energy Security and Net Zero)*	-	-
District cooling	-	-	-	Ecoinvent 3.11

When the previous methodology is not available, the operational emissions were derived from the baseline, according to their respective green building certification levels.

In developing the green building baseline data, South Pole prioritises different data sources from the most to the least preferred data quality: (1) National statistics, (2) National building regulation codes or certification baselines, (3) Peer-reviewed literature research or international estimates, (4) Proxy results. Desk research was conducted to identify the most reliable and context appropriate

baseline data available. The baselines were determined based on the country and type of building. The table below specifies the sources used for the baseline.

Table 9: Green buildings energy baseline sources

Region	Type of building covered	Type of data sources	Link
Europe	Commercial - office (renovation building)	National building regulation codes	Reglementation Thermique (RT) 2005
	Commercial - office	National Building Regulation Codes	Guide Reglementation Environnementale (RE) 2020
	Industrial - Data Hall	Direct from the certification scheme (SDC - alignment with EN 50600-4-2 calculation)	Internal document received from QNB
	Commercial - office & retail (restaurant) Mixed use Residential Industrial - warehouse Hospitality - Hotel	Academic research (Chartered Institution of Building Services Engineers)	CIBSE: Energy benchmarking dashboard
Middle East	Hospitality - Hotel	Academic research (Chartered Institution of Building Services Engineers)[19]	CIBSE: Energy benchmarking dashboard
	Commercial - Office	Peer-reviewed literature research	Alhorr and Elsarrag, 2015

In case space heating data were missing from other sources, national averages from IEA Energy End-uses and Efficiency Indicators were used to supplement the baseline.

[19] A proxy baseline from the United Kingdom has been adopted here since there is no relevant national baseline identified for high-end hotel category.

2. Water

Selection of performance data, proxy data and baseline:

- **Use of performance data –** Where available, South Pole adopted water consumption data provided by QNB.
- **Proxy data development –** Where not, the consumption information was extracted from the baseline using ratios from the Green Buildings studies[20] and environmental certifications, particularly BREEAM:

  BREEAM awards credits based on the percentage reduction in water use, which allowed us to estimate water savings:

  Table of credits / % water saving

- **Baseline development -** In accordance with the building's consumption, South Pole used preferably water benchmarks provided by QNB, where available. Where not, the baseline has been extracted from different sources, following the asset types and location:
  - Office: country statistics; union statistics (FR & UK); national real estate benchmarks
  - Hotels: occupancy national statistics; technical documentation from national network operators
  - Residential: national statistics

  When the baseline calculation needs a conversion into litres per square meter (L/m^2), from a value in litres per person (L/p), South Pole used an additional conversion factor: the occupancy rate references (person/m^2), specific to building type[21].

  Water consumption varies significantly by building type. For example, hotels consume substantially more water than residential buildings. We have also adjusted for occupancy frequency. For example, hotels are not occupied year-round, while residential buildings are assumed to be continuously occupied. For office buildings, we considered 220 working days per year (excluding remote work).

3. Waste

Construction waste diversion considered in this part covers the construction/ renovation work and not the waste generated by the building's operations, as suggested by the core indicators of the ICMA Harmonised Framework for Impact Reporting (June 2024).

Most of the assets/ projects are located in countries where the diverted waste rate is closely monitored and exceeds the green certification recommendations (France: 75%; UK: 95% in 2024). National value is used in this case.

Where this is not the case, academic research documents have been used to determine an average rate of diverted construction waste.

[20] WGBC, The business case for Green Building, 2013

[21] Number of occupants estimated from document titled ANSI/ASHRAE Standard 6.2.1-2013, "Ventilation for Acceptable Indoor Air Quality", 2015 : Table 6.2.2.1

Renewable energy

In accordance with the ICMA Harmonised Framework for Impact Reporting (June 2024), this report discloses the following indicators for renewable energy:

- Annual electricity generation (MWh/year)
- Installed capacity (MW)
- Annual avoided emissions (tCO_2e/year)

Selection of performance/ emission factors:

Avoided emissions were calculated based on actual electricity generation figures provided by the client for the year 2024, multiplied by location-based grid emission factors from IEA 2024, aligned with the projects' countries of operation. This approach estimates the operational GHG emissions displaced by the renewable energy generation within the reporting year.

Given that actual generation data was provided, annual avoided emissions for the latest reporting period (June 2024 – May 2025) are disclosed on an ex-post basis.

Data assumption:

Assets/ projects' lifespans were assumed to be 20 years for wind energy and 25 years for solar PV, based on internationally recognised literature.

- For wind energy, a 20-year operational life is standard practice and reflects typical design life assumptions;[22]
- For solar PV, 25 years is consistent with typical module warranties and expected technical lifespan; [23]

Solar PV degradation was assumed at 0.7% annually, representing a conservative average for crystalline silicon modules.[24] Wind energy degradation was assumed at 0.52% annually, in line with estimates observed in empirical research for modern turbines.[25] QNB's attributed share of the avoided emissions was calculated pro rata based on its share of total project financing (10-13%).

Only operational (use-phase) avoided emissions were included. Embodied emissions from the manufacturing of solar panels and wind turbines, plant construction, auxiliary materials, logistics, and maintenance were not considered, in line with ICMA Harmonised Framework guidance. ICMA and related sustainable finance frameworks prioritise use-phase impact metrics for renewable energy projects, as they reflect the core climate benefit of displacing fossil-based power generation.

Reporting basis

The annualised avoided emissions are reported on an ex-post basis, derived from actual electricity generation data for the year 2024 as provided by the client.

[22] IPCC (2011). Special Report on Renewable Energy Sources and Climate Change Mitigation (SRREN), Chapter 7: Wind Energy, Section 7.3.1.2, p.19.

[23] EA PVPS (2020). Task 12: Methodology Guidelines on Life Cycle Assessment of Photovoltaic Electricity, Section 3.1.1, p.10.

[24] EA PVPS (2020). Task 12: Methodology Guidelines on Life Cycle Assessment of Photovoltaic Electricity, Section 3.1.4, p.12.

[25] Koukoura, S., et al. (2021). Analysis of Wind Turbine Ageing through Operation Data Calibrated by LiDAR Measurement. Renewable Energy, 170, 1190–1200.

Data quality and limitations

- Emission factors reflect national averages, which may not capture local or marginal electricity generation differences.
- The exclusion of embodied emissions may result in conservative estimates in cases where manufacturing emissions are low relative to avoided operational impacts. However, this is aligned with sustainable finance best practices, which focus on demonstrating use-phase climate impact.
- Installed capacity figures were provided by the client, South Pole has interpreted the capacity values as cumulative totals as of 2024.
- South Pole observed that capacity factors for some renewable assets appear lower than standard industry benchmarks. One possible explanation is that certain assets may have been commissioned progressively or operated for only part of the reporting year. In the absence of detailed commissioning schedules or monthly generation records, no extrapolation was applied to adjust the results to a full-year equivalent basis. Accordingly, the reported avoided emissions represent a conservative estimate of operational performance for the most recent year, based on available data.

Water and wastewater management

Methodology:

The BAU scenario assumes no treatment of wastewater. The LCS reflects the plant's current operations. Data is based on site visit documentation (October 2023) and plant design specifications.

Reporting basis

All data are reported on an ex-post basis, supported by validated operational performance documentation. No energy-related or GHG-related benefits are claimed for this facility, in alignment with ICMA guidance, which recommends exclusion of such indicators unless energy efficiency measures or GHG capture technologies are in place.

According to site visit documentation dated October 2023, the facility is currently operating at an average of 593,000 m^3/day, corresponding to 216.4 million m^3/year of wastewater undergoing further treatment.

Given the end-use and government procurement commitment, this report assumes a one-to-one reuse ratio between the volume of treated effluent and the volume of freshwater saved. Based on site visit documentation dated October 2023, the plant currently operates at an average daily throughput of 593,000 m^3/day, or approximately 216.45 million m^3/year of treated wastewater.

Assumptions and Limitations

- It has been assumed that the volume of wastewater treated at the first level (273.75 million m^3/year) is calculated based on the plant's design capacity of 750,000 m^3/day and multiplied by 365 days. This represents the theoretical maximum capacity assuming full operational utilisation. While actual confirmed usage is not available for the first level treatment, October 2023 site visit documentation indicates that the post-sedimentation treatment process is operating at an average of 593,000 m^3/day out of a design capacity of 600,000 m^3/day, which represents 98.83% utilisation. This provides indirect evidence that the plant may be operating close to full capacity.

- Water saving refers to treated effluent reused after sedimentation. It is assumed that 100% of this treated volume is reused for non-potable applications such as irrigation or industry.

Disclaimer

This report has been prepared for Qatar National Bank in accordance with the terms and conditions set forth in the relevant service agreement. No part of this document may be reproduced, quoted, or distributed to any third party without the prior written consent of South Pole Carbon Asset Management Ltd or Qatar National Bank.

The impact assessment results presented herein are based on data and documentation provided by the client and/or third-party sources. South Pole has not independently verified the accuracy, completeness, or traceability of the data. Where data gaps exist, reasonable proxies, industry benchmarks, or assumptions have been applied, as disclosed in the relevant sections.

All estimates and findings are sensitive to input parameters, such as emission factors, baseline scenarios, and actual or assumed asset performance. Results should be interpreted in light of the data quality and methodological limitations described in this report.

This assessment has been conducted independently by South Pole consultants who were not involved in the structuring, approval, or execution of the financing activities. To the best of our knowledge, the consultants do not hold any conflicts of interest with respect to Qatar National Bank, the financed projects, or any affiliated third parties. South Pole has not conducted independent verification of the accuracy, completeness, or traceability of the data.

- Where data gaps exist, reasonable proxies or assumptions have been applied, as disclosed in relevant sections.
- Impact estimates are sensitive to input assumptions, emission factors, and asset performance. Results should be interpreted considering the data quality and methodological choices described above.