بنك مصر
BANQUE MISR
نعمل معاً لخير بلدنا

CARBON FOOTPRINT REPORT

Bank Headquarters

BASE YEAR REPORT
2021


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CONTENT

SECTION 1

SECTION 1

List of Abbreviations

AC	Air Conditioning
AR5	Assessment Report number 5 of IPCC
CFP	Carbon Footprint
CH_4	Methane
CO_2	Carbon Dioxide
COP	Conference of the Parties
EF	Emission Factor
EPA	Environmental Protection Agency
FC	Fuel Consumed
g	Gram
GHG	Greenhouse Gas
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
Kg	Kilograms
L	Liter
m^3	Cubic Meter
MENA	Middle East/North Africa
MT CO_2e	Metric Tonnes of Carbon Dioxide Equivalent
N_2O	Nitrous Oxide
NF_3	Nitrogen Trifluoride
PFCs	Perfluorocarbons
SF_6	Sulfur Hexafluoride
SDGs	Sustainable Development Goals
SI units	International System of Units
UNFCCC	United Nations Framework Convention on Climate Change

List of Terms and Definitions

Activity Data	Quantitative measure of a company activity that results in a GHG emission or removal.
Assumed Parameter	A parameter that is not site-specific but based on best practices, global averages, etc. that is more or less representative to the actual value
Base Year	A historical year used to compare preceding year's emissions. It can be a calendar year or averaged from several years (Time Series).
Climate Change	Long-term shifts in temperatures and weather patterns. These shifts may be natural or human driven activities.
Carbon dioxide Equivalent	Standardization of all greenhouse gases to reflect the global warming potential relative to carbon dioxide.
Direct Emissions	Greenhouse gas emissions from facilities/sources owned or controlled by a reporting company.
Emission Factor	A factor allowing GHG emissions to be estimated from a unit of available activity data (e.g. tonnes of fuel consumed, tonnes of product produced) and absolute GHG emissions).
Fugitive Emissions	Emissions that are not physically controlled but result from the intentional or unintentional releases of GHGs.
Greenhouse Gas (GHG)	A gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect.
GHG Emission / Removal Factors	Specific value used to convert activity data into greenhouse gas emission / reduction values.
GHG Inventory	List of emission sources and the associated emissions quantified using standardized methods.
Greenhouse Gas Emission	Total mass of a GHG released to the atmosphere over a specified period of time.

Greenhouse Gas Project	Activity(ies) that alter the conditions identified in the baseline scenario which cause GHG emission reductions or GHG removal enhancements.
Greenhouse Gas Report	Stand-alone document intended to communicate an organization's or project's GHG-related information to its intended users.
Greenhouse Gas Source	Physical unit or process that releases a GHG into the atmosphere.
Indirect Emissions	Greenhouse gas emissions from facilities/sources that are not owned or controlled by the reporting company, but for which the activities of the reporting company are responsible (electricity purchase).
Inventory Boundary	Imaginary line that encompasses the direct and indirect emissions that are included in the inventory. It results from the chosen organizational and operational boundaries.
IPCC	The Intergovernmental Panel on Climate Change is an intergovernmental body of the United Nations responsible for advancing knowledge on human-induced climate change.
Mobile Combustion	Burning of fuels by transportation devices such as cars, trucks, trains, airplanes, ships etc.
Operational Boundaries	The operational boundary determines the emissions associated with operations, classification of emissions as direct or indirect and categorizing the different scopes of GHG emissions.
Organizational Boundaries	Organizational boundaries determine which operations to include or exclude from the carbon footprint calculations of the organization.

Other Indirect Greenhouse Gas emissions	GHG emissions, other than energy indirect GHG emissions, which is a consequence of an organization's activities, but arises from greenhouse gas sources that are owned or controlled by other organizations
Scope 3 Inventory	A reporting organization's indirect emissions other than those covered in scope 2.
Stationary Combustion	Burning of fuels to generate electricity, steam, heat, or power in stationary equipment such as boilers, furnaces etc.
Refrigerant	A refrigerant is a substance or mixture, usually a fluid, used in a heat pump and refrigeration cycle.

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CHAIRMAN MESSAGE

Banque Misr has been always playing a vital role in supporting the Egyptian economy, aligning its strategy with the UN's 17 SDGs and Egypt's vision 2030.
The bank is always coordinating its activities and business with the initiatives of the CBE and decisions of the Egyptian government to imply sustainability and sustainable finance, with a great focus on Climate Management, especially with Egypt hosting COP27 in the green city of Sharm el Sheikh in November 2022.

Banque Misr has taken a significant step in the Egyptian financial sector by measuring its Carbon Footprint during the reporting year 2021 for its Headquarters. Measuring its Carbon Footprint has provided the bank the opportunity to address the GHG emissions generated within its activities. Great progress has been achieved by Banque Misr and its team in measuring GHG emissions of the Headquarters, located at Mohamed Farid, Downtown, Cairo.

Banque Misr is highly conscious that banks have a significant impact when considering their Carbon Footprint. Consequently, Banque Misr realizes its major responsibility toward combatting climate change, a major challenge not only for the financial sector but for all sectors. Maintaining a low Carbon Footprint is a key strategic priority and requires us to look afresh at how we run our operations and the extent to which we consider our GHG emissions.

Banque Misr is making efforts to drive the shift toward a reduced Carbon Footprint in the financial sector. We take actions to measure, report, and reduce our Carbon to have a positive impact on the environment and climate through actions taken aiming to control, compare, and reduce our Carbon Footprint.

We strive to reach the minimum Carbon Footprint to minimize its negative impacts bringing together an ambitious global vision with meaningful local impact.

Banque Misr is looking forward to reporting its carbon footprint on all over its branches in Egypt while maintaining a low Carbon Footprint by prudently monitoring, measuring, and reporting its emissions.

Looking beyond the present moment, Banque Misr is eager to maintain exemplary financial performance, year after year, forging an environmental conscious path toward a prosperous future. This report aims to transparently, completely, and accurately disclose the Bank's GHG emissions for 2021 in an accessible and useful manner. For the future, Banque Misr is looking to reduce its carbon emissions and transition toward environmental and friendly solutions.

Throughout our first Carbon Footprint report, we share our GHG emissions for 2021, and a selection of our recommendations for moving forward into a climate conscious and environmental restorative future. The coming years will be challenging, but we believe that with the help of our team, customers, and supporters, we will thrive.

Mohamed Mahmoud Eletreby
CEO and Chairman of Banque Misr

Tribute to our People

Banque Misr staff are the core of its success. Banque Misr's employees, consistently, display their commitment and appreciation to values by working in unity to ensure comprehensive and practical actions. Our employees' dedication is exemplified through their commitment and expertise against all challenges encountered.

Supporting our customers has always been a priority. This is achieved by ensuring that customers have continuous access to cash and smooth business operations. Banque Misr teams heavily invest time and effort in sustaining and enhancing business operations and handling the roles and responsibilities of various functions for the bank's ongoing success.

Remarkable efforts were observed from multiple departments. For any changes in the workflow, the staff adapts the bank's business operations and guidelines, accordingly. Those primary efforts have set the foundation for further changes that will be implemented.

Our team has always shown persistence and consistency during difficult times. For instance, during COVID-19, employees increased their cleaning and sanitation practices to eliminate the spread of viruses throughout the premises. Moreover, employees were hired to organize customer interactions with strict social distancing measures. The bank's employees perform a multitude of iterative and routine tasks to ensure the implementation of the necessary guidelines and procedures.

Furthermore, available to all employees whenever possible, working from home during the pandemic aided in maintaining a healthy office and homes for our team. Notably, the efforts of the ICT team ensured that staff members had all the necessary tools to work from home, including unique technologies.

Banque Misr would like to express deep respect, admiration, and gratitude to everyone who has invested his/her time and efforts in the bank's journey to success. Together the bank and its people will continue spreading the wealth, supporting financial inclusion, and creating shared value for all.

EXECUTIVE SUMMARY

Commercial banks play a key role in implementing environmental and climate protection initiatives undertaken by international organizations; in fact, they are placed at the heart of tackling climate change. Realizing the urgency, Banque Misr has taken the first step to learn about its contribution to climate change through its Carbon Footprint report.

This report presents the carbon footprint estimation results for Banque Misr, Headquarters. The Greenhouse gases emitted from key emissions source categories between 1/1/2021 and 31/12/2021 are reported.

The Scope 1 and Scope 2 Inventory results presented here are calculated using the standards and guidelines of the GHG Protocol Corporate Accounting and Reporting Standard, the Intergovernmental Panel on Climate Change (IPCC), and comply with ISO 14064-1:2018 requirements.

The main GHGs used in calculating the GHG Inventory of Banque Misr operations are Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), and Hydrofluorocarbons (HFCs). Emissions of each GHG are reported in Metric tonnes of CO_2 equivalent emissions (MT CO_2e). This approach normalizes the emissions of the various GHGs to reflect each compound's Global Warming Potential (GWP) with CO_2 as a baseline.

Summary of Carbon Footprint Emissions

The overall carbon footprint emissions between 1/1/2021 and 31/12/2021 for Banque Misr came to be 1,011.40 MT CO_2e, with Scope 1 direct emissions being 472.86 MT CO_2e representing 46.75% of the total GHG Emissions and Scope 2 with 538.54 MT CO_2e representing 53.25%. A summary of Banque Misr's GHG Inventory is presented in Table 1 and Figure 1.

Table 1 Summary of GHG emission sources

EMISSION SOURCES	EMISSIONS QUANTITY	UNIT	SHARE IN TOTAL GHG EMISSIONS
SCOPE 1 - DIRECT EMISSIONS			
Stationary Fuel Combustion	1.77	MT CO_2e	0.17%
Mobile Fuel Combustion	162.77	MT CO_2e	16.09%
Fugitive Emissions	308.32	MT CO_2e	30.48%
SCOPE 2 – INDIRECT EMISSIONS			
Electricity Consumption	538.54	MT CO_2e	53.25%
EMISSIONS SUMMARY			
Scope 1 – Direct Emissions	472.86	MT CO_2e	46.75%
Scope 2 – Indirect Emissions	538.54	MT CO_2e	53.25%
Total Emissions	1,011.40	MT CO_2e	100%

Following the executive summary, the report details the methodology for estimating the carbon footprint, the breakdown of the carbon footprint sources, assessment of the data quality, recommendations for data collection improvement, and possible solutions to emission reduction.

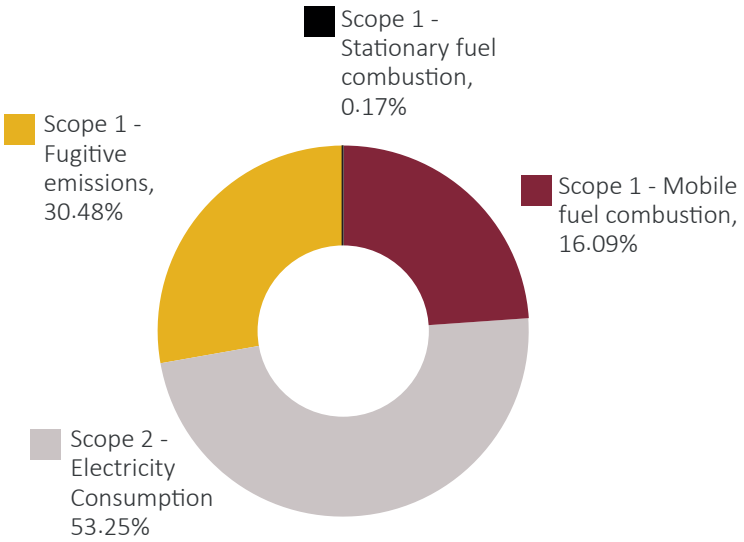


Figure 1 Breakdown of GHG emission sources

Banque Misr's Key Performance Indicators

1.2980	0.0654
MT CO_2e/employee/year	MT CO_2e/m^2/year

ABOUT BANQUE MISR

Banque Misr was established in 1920 by the pioneer economist and financial expert Mohamed Talaat Harb Pasha. He spearheaded the concept of investing in national savings and directing them towards economic and social development. Thus, Banque Misr was established as the first wholly Egyptian - owned bank.

Banque Misr has funded many businesses spanning multiple domestic sectors, such as: textiles, insurance, transportation, aviation, entertainment, and filmmaking. Currently, the bank owns shares in 157 companies across different fields including finance, tourism, housing, agriculture and food, and communication and information technology.

Banque Misr has also established major investment funds in Egypt as part of a diversified portfolio. Banque Misr was granted an award by the Global Finance as the Best Provider of Money Market Funds in Africa and the Middle East for 2009 and 2010, and Best Provider of Money Market Funds in the Middle East for 2008, 2012, 2013, 2014, and 2015, and Best Provider of Short-Term Investments/Money Market Funds in the Middle East for the years 2015, 2016, 2017, 2018, 2020 and 2021 and in Africa and middle east for 2019.

According to Bloomberg, Banque Misr was also recognized as the Best Mandated Lead Arranger in the Egyptian Banking sector, an acclaimed global organization specializing in Banking and finance for the year 2019.

Banque Misr has achieved first place in the Egyptian Banking market for arranging and promoting syndicated loans, fifth place in the list of syndicated loans as the best financing promoter, and sixth as a principal arranger of syndicated loans in Africa. The bank also achieved fifteenth place in the list of best financing promoters in the Middle East and North Africa.

A true pioneer in the region, Banque Misr became the first bank in Egypt and North Africa to comply with PCI data security standards upon obtaining the latest version of the global Payment Card Industry Data Security Standard (PCI DSS 3.2.1) certification services.

Utilizing the latest technology in the Banking sector, Banque Misr is constantly looking to expand customer access to Banking.

Today, Banque Misr is proud to offer one of Egypt's largest ATM networks, located across all areas of Egypt. Banque Misr's role is visible in all economic fields due to its geographic outreach. It has over 20,000 employees, serving a large base of more than 13 million clients in Egypt, with a total paid-up capital amounting to EGP 15 billion.

The bank has more than 800 electronically integrated local branches nationwide to provide customers with the best and most accessible services. Banque Misr also values its regional and international presence, which includes its five branches in the United Arab Emirates and one in France. In addition, the bank's international presence includes subsidiaries in Lebanon and Germany, representative offices in China, Russia, South Korea, and Italy, and a global network of correspondents.

Egypt's Efforts towards Sustainability

At the global level, Egypt has always been at the forefront of tackling climate change in Africa and the MENA region. In 1994, Egypt ratified the UNFCCC as a member of the non-Annex I Parties. Egypt also signed the Paris Agreement in April 2015, ratified by the Egyptian Parliament in June 2017.

The Sustainable Development Goals and Paris Agreement affirm that growth and development cannot continue without all countries tackling climate change and boosting environmental sustainability. Transitioning from the current development pathway to a low-carbon, climate-resilient one requires significant investment and innovation and, more importantly, a shift in the way governments and the private sector make decisions.

Over the past eight years, Egypt brought the risks of climate change up-front-and center, in addition to playing an essential role in supporting Africa in the areas of energy and water that are related to climate change. Furthermore, assuming the responsibility of defending the interests of the African continent in the issue of climate change, Egypt participated in the High-Level Meeting for the Climate Change Coalition chairing partnership with Britain in the 2019 Climate Action Summit. During the Summit, the need for private sectors to address their contributions in fulfilling their responsibilities towards the planet, the civil society, and the governments was highlighted. Hence, the establishing of Carbon Footprint is the steppingstone to raising the bar in the field of mitigation of climate change risks.

On the national level, the year 2014 witnessed the launch of Egypt's Sustainable Development Agenda 2030 "Egypt Vision 2030", that came in line with the United Nations 2030 Agenda for Sustainable Development. The Vision accommodates the three bottom lines of sustainability; the economic, social, and environmental dimensions of development, to guide the national development plans in Egypt.

Moreover, Egypt presented its first National Determined Contribution (NDC), declaring its intended efforts toward combating climate change. The NDC was updated in 2022 stating quantitative measures toward mitigation and adaptation efforts across many sectors.

In 2019 Egypt presented its LOW Carbon Emission Strategy and prepared its first Biennial Updated Report (BUR), setting a baseline for its national GHG inventory. In 2021, Egypt presented its Green Recovery Strategic Framework that came in line with its Environmental Sustainability Standard Guide, prepared by the Ministry of Planning and Economic Development and the Ministry of Environment.

As a result of these efforts, Egypt earned the global trust of hosting the COP27 in 2022. On the road to COP27, Egypt has unveiled its updated National Strategy for Climate Change 2050, in May 2022, based on five main goals to improve the citizens' quality of life and sustainable economic growth, and preserve its natural resources amid a number of environmental challenges. The strategy put forward several goals covering a nation-wide scope topic, such as achieving economic growth while reducing greenhouse emissions in various sectors, improving the governance and management of work in the field of climate change, as well as promoting innovative financing mechanisms that prioritize adaptation actions, like green bonds.

At the sectoral level, the financial System role is pivotal. Aligning with the National Strategy, the Central Bank of Egypt (CBE) has directed its support to the concept of sustainable development, by taking steps to promote and apply sustainable international financing standards in the Banking sector in Egypt. Accordingly, the CBE has joined the Green Banks Network which is a publicly capitalized entity established specifically to facilitate private investment into green sectors. Moreover, CBE has developed a framework to define sustainable financing and its relevant objectives and the requirements to apply the framework in the Egyptian context.

The framework is released in two parts:

1. Discussion on sustainable financing.
2. Guiding principles for sustainable finance.

In the light of this framework, CBE has mandated all Banks in Egypt to disclose its carbon footprint emissions prior to the COP27 in November 2022. In addition, The Financial Regulatory Authority (FRA) issued Decrees number 107 and 108 in 2021 mandating all registered companies at the Egyptian Stock Exchange to declare it ESG performance, and its efforts toward mitigating GHG emission and incorporating the climate change related risks into their decision-making process.

To conclude, the previous demonstration shows Egypt's perpetual efforts to become the leader in the landscape of sustainability and combating climate change related risks in Africa and MENA region.

Role of financial institutions in climate change

Climate Change poses major risks to the global economy. It affects the availability of resources, influencing the price of energy and the value of companies. Climate change affects the financial system through two main channels: Physical Risks and Transition Risks.

The first involves risks arising from damage to property, infrastructure, and land. The second results from changes in climate policy, technology, and consumer and market sentiment during the adjustment to a lower-carbon economy.

To mitigate these risks, the Paris Agreement (COP21), signed in December 2015, represents a milestone: countries representing 97% of global greenhouse emissions agreed to respond to global warming by keeping global warming below 2°C. COP21 represents the first comprehensive climate deal that explicitly recognizes the need to "make finance flows compatible with a pathway toward low greenhouse gas emissions and climate-resilient development." As a major provider of credit, the Banking sector is a key player in these efforts. The momentum established by COP21 enlarges the set of available investment opportunities to finance green projects and renewable energy.

Financial institutions play a crucial role in achieving the 2015 Paris Climate Agreement. They can manage capital flows for financing the required transformation towards a decarbonized industry. Currently established policy programs and regulations at International and national level increasingly address financial institutions to make their climate warming impact measurable and transparent.

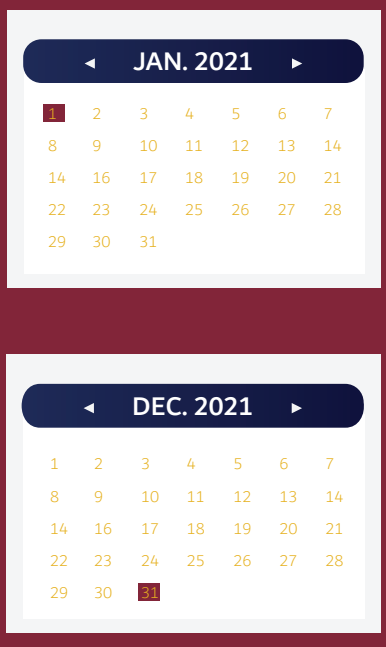
Moreover, the Egyptian National Strategy 2050 discussed the promotion of innovative financing mechanisms that prioritize adaptation actions, such as green bonds through bank financing of climate change projects. However, aligning with the national goal requires understanding the importance of carbon footprint implication and the need to mitigate.

Therefore, Banque Misr's commitment to measure and manage its carbon footprint is consistent with the bank's environmental and social policies, principles, and standards for the projects it finances. Through a thorough understanding of its carbon footprint, Banque Misr identifies and implements measures to reduce its emissions and tracks performance against targets.

SCOPE OF THE INVENTORY

REPORTING PERIOD

Base year is considered the start point of assessing the change in emissions, if any, along the years. Since this is the first Carbon Footprint created by Banque Misr Headquarters, the year 2021 is considered Banque Misr base year. Hence, the data used in calculating the Carbon Footprint reporting was collected between 1/1/2021 and 31/12/2021



Organizational Boundary

The term boundaries refer to the parameters accounted for in the Carbon Footprint of Banque Misr. Organizational boundaries determine which operations to include or exclude from the Carbon Footprint calculations of the bank. Several organizational structures to define the degree of ownership or control they exert over different activities.

The GHG emissions inventories are constructed to reflect three different views of an organizational boundary: operational control, financial control, or equity share. Once these boundaries have been defined, the GHG arising from the bank's Headquarters operations will be identified and assigned to two different scopes.

In this assessment, the boundaries are set to cover the bank's facilities and staff related emissions in the Headquarters of Banque Misr. As all operations in the main building lay under the control of Banque Misr, the operation control approach is followed in this report. In other words, Banque Misr is accountable for 100% of the GHG emission produced during the reporting period.

Operational Boundary

The operational boundary determines the operations, classification of emissions as direct or indirect and categorizing the different scopes of GHG emissions. Although Banque Misr should be reporting overall owned buildings/branches, the operational boundaries considered in this report are bounded by the Headquarters of Banque Misr, only. The operational boundary for Banque Misr Carbon Footprint encompasses the following:

- Scope 1: This includes all direct emission sources from Banque Misr main building. This includes the diesel generators used as a back-up in case of power cut-off, transport fuel used to run Banque Misr owned or leased vehicles, and fugitive emissions from air conditioning and refrigeration equipment.

- Scope 2: Purchased electricity from the National Grid of Electricity.

Report Objectives

The GHG report will work as a comprehensive guide for managing and mitigating GHG emissions within Banque Misr. The Carbon Footprint objectives of the report:

- Identifying the energy consumption and the main GHG emission sources of Banque Misr
- Allowing Banque Misr to take actions to control and reduce emissions based on informative data
- Providing a detailed analysis of the GHG emission inventory and the Key Performance Indicators
- Providing recommendations on Carbon Footprint calculations' improvements.

METHODOLOGY

The development of a thorough Carbon Footprint methodology was made during the initial phases of the project. The following process flow, Figure 2, demonstrates the project implementation phases that have been undertaken to estimate the Carbon Footprint emissions for Banque Misr.

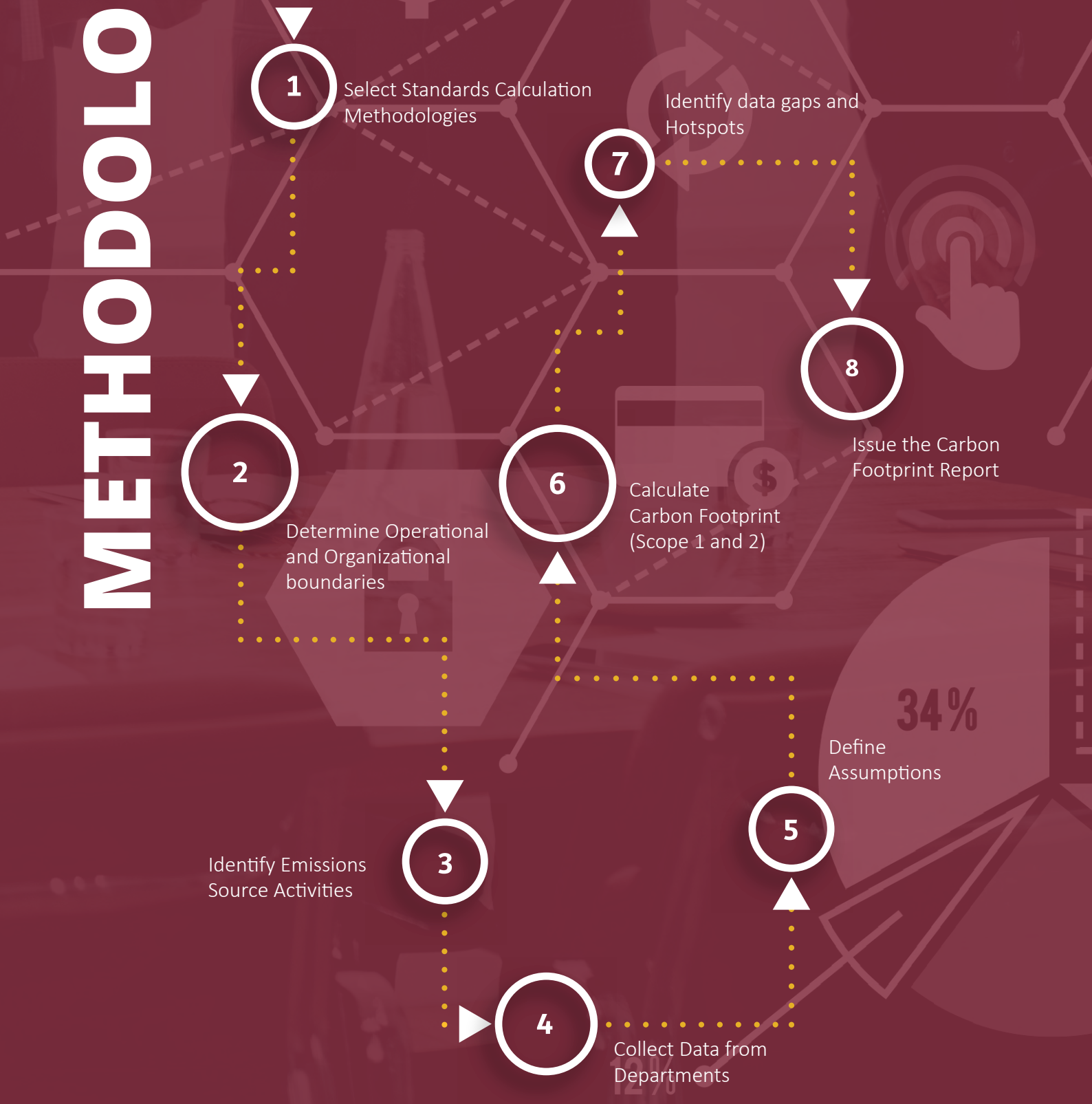


Figure 2 Methodology of developing Carbon Footprint Report


XX01
XX02
XX03

Selection of Standards Calculation Methodologies

Currently there are several internationally recognized methodologies and standards for the calculation of carbon footprint according to their approach, scope and orientation. Banque Misr Carbon Footprint analysis and calculations were based on:

- Inter-Governmental Panel on Climate Change (IPCC) guidelines;
- The GHG Protocol: Corporate Accounting and Reporting Standard;
- ISO 14064-1:2018 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Scope 1 and Scope 2 Emissions (Direct and Indirect Emissions)

The GHG Protocol defines the Scope 1 emissions, calculated here, as the direct emissions from sources that are owned or controlled by Banque Misr, and scope 2 emissions are indirect emissions from energy sources that are not owned or controlled by Banque Misr e.g., electricity. Hence, based on Banque Misr, the identified Scope 1 direct emissions are subdivided into the following main category emissions:

1. Stationary Combustion Sources

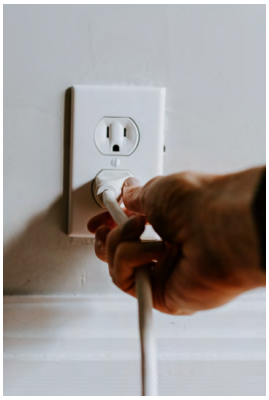
Emissions due to fuel combustion to produce energy. This is from the diesel generators used in Banque Misr.

2. Mobile Sources

Emissions due to vehicles owned/conrolled by Banque Misr. This includes mission cars that serve the bank, and cars used for managers or board members transportation. All of these vehicles are owned by Banque Misr.

3. Fugitive Emissions

Emissions due to leaks and other irregular releases of gases or vapors. For Banque Misr, this only includes the refrigerant leaks from the air conditioning and refrigeration equipment used in the main building.



Data Collection

During the site visits, the employees assessed in the identification of emission sources and the type of data available. Accordingly, customized data collection spreadsheets were designed for each emission source considered in the GHG inventory. Data collection sheets were communicated and reviewed simultaneously with the focal points at the departments to ensure transparency and completeness in data collection procedure. Data collected was categorized under Scope 1 indirect emissions and Scope 2 indirect emissions. An example of data collection sheet for stationary combustion can be seen in Table 2.

Table 2 Examples of data collection sheets for stationary combustion

Source	Number of Equipment	Fuel Type	Consumption (L/hr)	Annual Operating hours (Hours/yr)	Total consumption (L/yr)
XXXX	X	XXX	XXX	XX	XXX

X = representing values

GHG EMISSION CALCULATION

To calculate the GHG emissions, the main formula used to calculate GHG emissions is:

GHG Emissions (MT CO_2e) = Activity Data (unit of activity) × Emission Factor × GWP

WHERE

ACTIVITY DATA

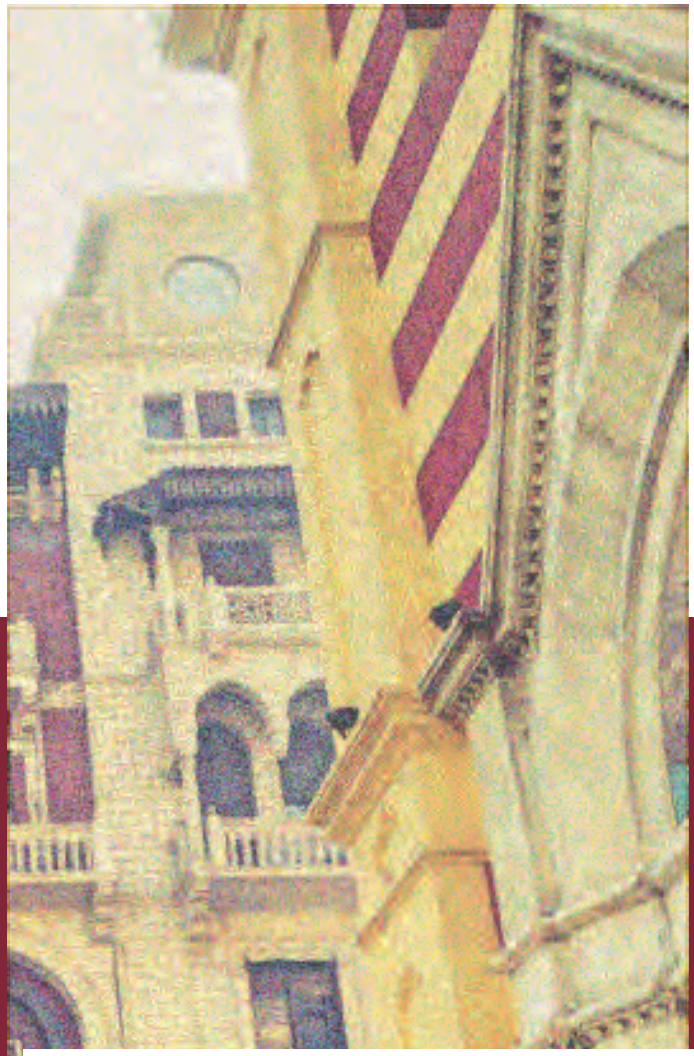
are those associated with the consumption of energy, electricity or consumables of the organization and were obtained via customized data collection sheets.

EMISSION FACTORS

are representative values that relate a quantity of gas emitted to the atmosphere with an activity associated with the emission of said gas. Each emission factor is reported in terms of metric tonnes of a GHG per unit of activity, where the unit of activity is expressed in either the International System of Units (SI units) or U.S. customary units. Since there are no emission factors released by Egypt, except for the national grid emission factor, all other emission factors were adapted from EPA and IPCC Databases with priority given to the IPCC.

GLOBAL WARMING POTENTIAL,

or GWP, is the heat absorbed by any greenhouse gas in the atmosphere, as a multiple of the heat that would be absorbed by the same mass of carbon dioxide. GWP is 1 for CO_2. The global warming potentials of the fifth IPCC report have been used.



Excluded Sources

Based on the site visits and interviews with focal points at Banque Misr, the excluded emission source(s) are listed below along with their respective reason of exclusion. These were only excluded during the reporting period, so it is recommended to revisit these sources each year prior to deciding on their exclusion.

Excluded emission source(s)

Fire suppressants: This source was excluded as no emissions were released in the reporting year (dry year).

Excluded Greenhouse Gases

SF_6, NF_3 are PFCs not captured for all Banque Misr's sites for Scope 1 due to the nature of activities at Banque Misr.

Assumptions and Data Gaps

Part of following, the GHG Protocol Standard is to ensure the fulfillment of the five accounting principles that set an implicit standard for the faithful representation of the bank's GHG emission through its technical, accounting, and reporting efforts. These principles are transparency, accuracy, consistency, comparability and completeness. Accordingly, all activity data relevant to fuel consumption, electricity consumption, refrigerant charge, were collected from annual invoices paid by Banque Misr.

Assumptions made in this inventory:

1. The heating value of all fuels consumed in both stationary and mobile combustion sources.
2. The densities all fuels consumed in both stationary and mobile combustion sources.
3. The mileage of the fuel consumed in mobile sources, employees' transportation buses.
4. Working days were assumed to be 240 days/ year.

SECTION 4

BANQUE MISR GHG INVENTORY RESULTS

Based on the methodology section, Table 3 presents a summary of the collected data during the reporting period of 1/1/2021 and 31/12/2021.

Table 3 Summary of activity data collected

SCOPE	EMISSION SOURCE	ACTIVITY DATA	QUANTITY	UNIT
SCOPE 1	Stationary Combustion	Diesel Fuel Consumption	650	Litres
	Mobile combustion	Motor Gasoline Consumption	56,104	Litres
		Diesel Fuel Consumption	11,540	Litres
	Fugitive emissions	Refrigerants (R- 22) charge	44	Kg
		Refrigerants (R- 410a) charge	120	Kg
SCOPE 2	Electricity	Electricity Consumption	1,011	MWh

CARBON FOOTPRINT AT BANQUE MISR

According to the main categories of emission types displayed in Table 3, Table 4 shows the identified emission sources and their respective GHG emissions at Banque Misr.

Scope 1 emissions are classified into stationary combustion sources, mobile sources and fugitive emissions. Each source is discussed in detail in the following sections. Scope 2 emissions are only the electricity consumed by Banque Misr.

Table 4 Summary of Emission Sources at Banque Misr

EMISSION SOURCES TYPE	EMISSION SOURCES IN BANQUE MISR	MT CO_2E/YEAR
Stationary Combustion Sources	Generators	1.77
	Total	1.77
Mobile Sources	Microbuses	31.64
	Passenger cars	131.14
	Total	162.77
Fugitive Emissions	A/C and refrigerants	308.32
	Total	308.32
Scope 1 - Direct Emissions		**472.86**
Indirect Sources	Electricity Consumption from National Grid	538.54
Scope 2 – Indirect Emissions TOTAL		**538.54**
Total GHG Emissions		**1,011.40**

As seen in the Scope 1 direct emission represent 46.75% while Scope 2 indirect emissions represent 53.25% of the total GHG emissions.

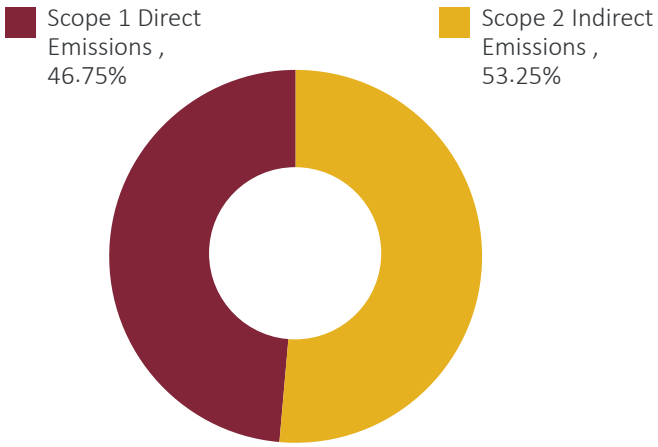


Figure 3 Scope 1 and Scope 2 GHG Contribution

Figure 4 below, demonstrates how much each of the main identified emission sources contribute to the total GHG emissions. Electricity contributes the most with 53.25% of the total GHG emissions followed by fugitive emissions with 30.48% and then mobile sources with 16.09%. The remaining source, stationary combustion, represents only 0.17% of the total emissions. Therefore, the top 2 sources must be investigated closely to understand the reason behind their high GHG emission release. The upcoming sections will breakdown the main category sources as seen in Table 4 above.

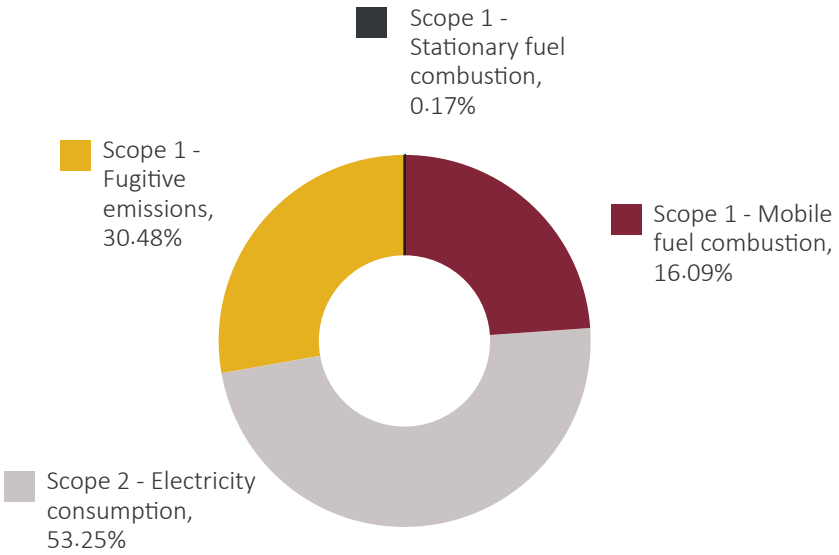


Figure 4 Breakdown of GHG emission sources at Banque Misr

KEY PERFORMANCE INDICATORS

Key performance indicators (KPIs) are used to normalize the GHG Inventory results to the important parameters of the organization's operations. The result of KPIs' is used for benchmarking Banque Misr's emissions against national and international Banks as well as tracking performance in the upcoming years.

Employees Share of Total GHG Emissions

As of 2021, Banque Misr Headquarters had 779 employees. Accordingly, the share of each employee from the total GHG emissions is 1.2980 MT CO_2e/employee/year.

Building space Share of Total GHG Emissions

With 1 building only (the main building) and hence, total area of 15,456 m^2, the share of the total GHG emissions per area is 0.0654 MT CO_2e/m^2.

Scope 1 Direct Emissions

According to GHG Protocol Standard, Scope 1 Direct emissions are those emissions resulting from activities and assets owned or controlled directly by Banque Misr. Scope 1 emissions of Banque Misr consists of diesel generators, mobile sources used for employees' transportation and fugitive emission sources which results from the refrigerant leaks of air conditioning and refrigeration equipment existing in Banque Misr's Headquarters.

Scope 1 emissions were estimated to be 575.54 MT CO_2e per year representing 46.75% of total GHG emissions by Banque Misr. Table 5 and Figure 6 represent a breakdown of the sources of emissions that make up Scope 1 Direct emissions of Banque Misr.

Table 5 Breakdown of Scope 1 direct emission sources

EMISSION SOURCES TYPE	EMISSION SOURCES IN BANQUE MISR	MT CO_2E/YEAR
Stationary Combustion Sources	Generator A	1.629
	Generator B	0.076
	Generator C	0.060
	Total	**1.765**
Mobile Sources	Microbuses	31.64
	Passenger cars	131.14
	Total	**162.77**
Fugitive Emissions	A/C and refrigerants	308.32
	Total	**308.32**
SCOPE 1 - DIRECT EMISSIONS TOTAL		**472.86**

The fugitive emissions represent the largest sources of GHG emissions within scope 1 with total emissions of 308.32 MT CO_2e per year which represents 65.20% of Scope 1 direct emissions.

The mobile sources are the second most contributing source of GHG emissions in Scope 1 Direct Emissions with total emissions of 162.77 MT CO_2 e per year representing 34.42% of scope 1 GHG emissions. Stationary combustion the least contributing source in Scope 1 Direct emissions with 1.77 MT CO_2e per year respectively representing 0.37% of Scope 1 Emissions.

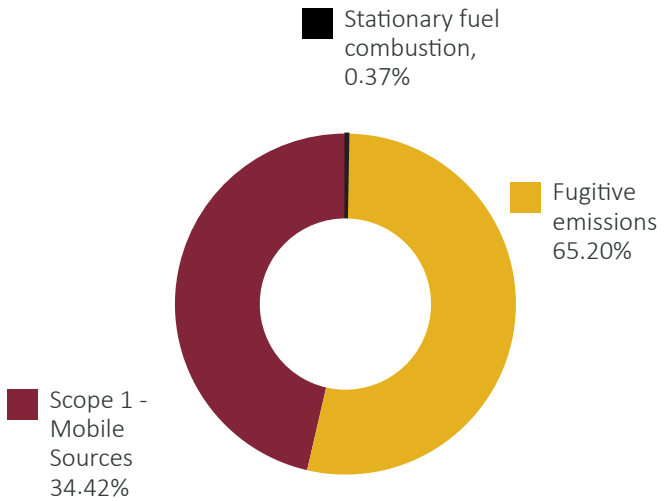


Figure 5 Breakdown of Scope 1 Direct Emission sources

Scope 1
Stationary Combustion Sources

Stationary combustion sources at Banque Misr emerge from 3 generators used as backup in case of power outage. These generators combust diesel fuel. During the reporting period, the total diesel consumed was 650 liters. The site-specific carbon content of the fuel was not available, so, the GHG emissions from Stationary Combustion sources were estimated based on the fuel consumed, fuel type and respective default emission factors for CO_2, CH_4 and N_2O of diesel from the IPCC guidelines. Table 6, highlights the contribution of each generator to GHG emissions of stationary fuel combustion.

Table 6 Stationary combustion sources at Banque Misr

EMISSION SOURCE	DIESEL FUEL CONSUMPTION (LITERS)	(MT CO_2E/YEAR)
Generator A	600	1.629
Generator B	28	0.076
Generator C	22	0.060

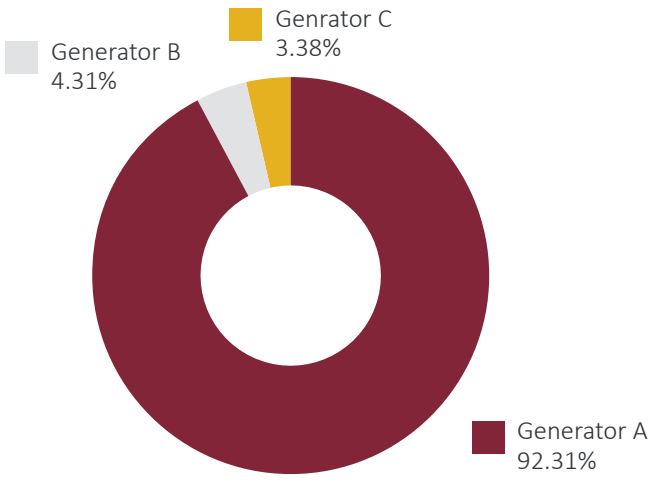


Figure 6 Share of each generator in stationary combustion GHG emission


CO_2
Industry

Scope 1
Fugitive Emissions

AC and Refrigerants

At Banque Misr, there are two kinds of AC units: Split Units and VRV systems. The split units are charged with R22 refrigerant while VRV systems are charged with R410A refrigerant. During the reporting period, a total of 44 kg of R22 was charged, and a total of 120kg of R410A was charged. Using the GWP of the refrigerants from the IPCC fifth assessment report, the following Table 7 summarizes the emissions according to each refrigerant/AC unit.

Table 7 GHG Emission Summary by Refrigerant Charges

TYPE OF GAS	TYPE OF UNITS	ANNUAL CHARGE (KG)	GWP	(MT CO_2E/YEAR)
R22	Split Unit	44	1760	77.44
R410A	VRV Systems	120	1924	230.88
TOTAL GHG EMISSIONS				**308.32**

As demonstrated in Table 7, the total GHG Emission due to AC and Refrigerants charge is 308.32 MT CO_2e/year. This contributes to 65.20% of the Scope 1 emissions. Figure 7 demonstrates the contribution of each refrigerant used. It is clear that the most contributing refrigerant is the R410A since it has much higher GWP than R22.

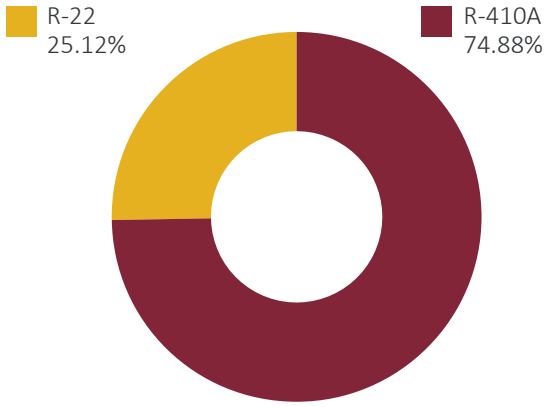


Figure 7 Contribution of each refrigerant to total fugitive emissions

Scope 1
Mobile Sources

Mobile sources are vehicles that are either owned or controlled by Banque Misr. Banque Misr owns vehicles – passenger cars and microbuses - that are used for different errands for the bank, such as document delivery, transport cash towards different ATMs, etc. Passenger cars are also used for business errands by the high board members of the bank.

Carbon footprint estimation for mobile sources is simply based on the volume of fuel combusted, vehicle categorization, default heating values, and emission factors from the IPCC Guideline since the carbon content of the fuel is not available.

The total emissions, as seen in Table 8, from mobile sources are 162.77 MT CO_2e/year representing 34.42% of the Scope-1 Direct Emissions.

The most contributing vehicles towards mobile combustion emissions, as seen in Figure 8, are the mission cars which consumed the maximum fuel quantity, gasoline – 56,104 L/yr.

Table 8 Mobile Sources Emission breakdown

TYPE OF VEHICLE	TYPE OF FUEL	ANNUAL CONSUMPTION (LITER)	(MT CO_2E/YEAR)
Microbuses	Diesel	11,540	31.64
Passenger cars	Gasoline	56,104	131.14
TOTAL GHG EMISSIONS			**162.77**

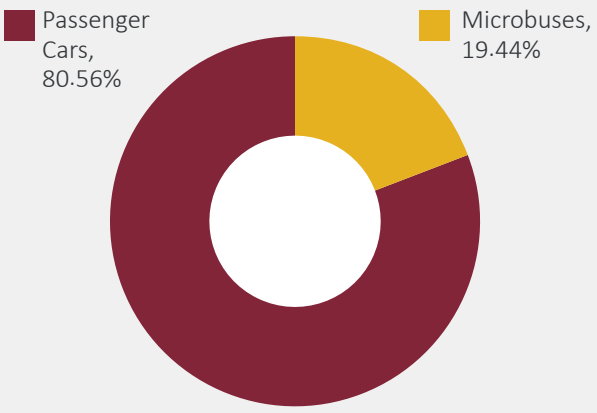
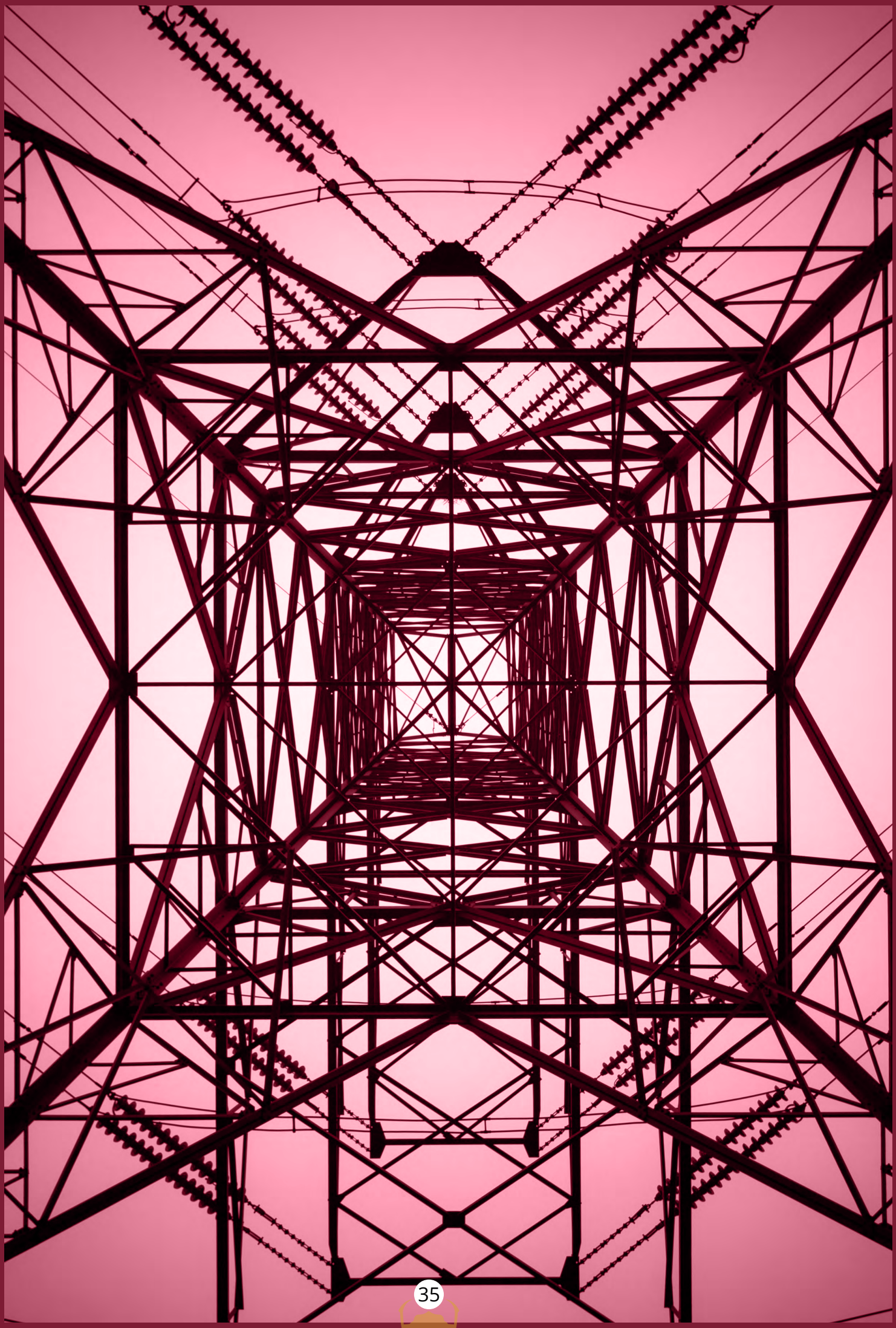


Figure 8 Mobile Sources Emission Breakdown



Scope 2
INDIRECT EMISSIONS

Banque Misr receives its electricity supply from the Egyptian Electricity Holding Co. It is the main source of energy for the Headquarters at Banque Misr. The national grid average emission factor for the Arab Republic of Egypt is 0.533 MT CO_2e/MWh based on Institute for Global Environmental Strategies, IGES, database and latest registered wind farm CDM project (IGES, 2022).

The total consumed electricity during the reporting period was 1,011 MWh. Scope 2 emissions are estimated as 538.54 MT CO_2e/year, which represents 53.25% of the total GHG emissions of Banque Misr Headquarters. The monthly consumption of the main building is shown in Figure 9.

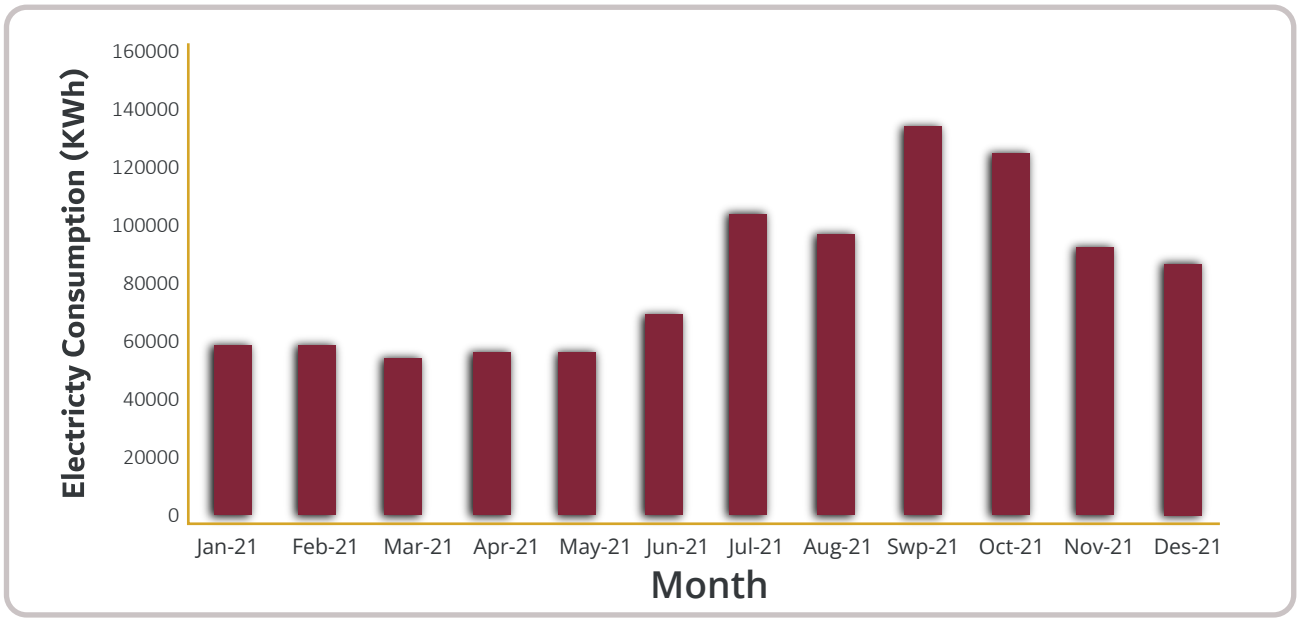


Figure 9 Monthly consumption of electricity of Banque Misr's Headquarters

DATA QUALITY AND COMPLETENESS

Assessing the data quality is a critical part of GHG reporting and accounting. The following, Table 9 details the data quality in terms of five principles of reporting according to the GHG Protocol. Electricity, the greatest GHG emission source, was reported in full transparency and completeness. Scope 1 emissions data lacked third-party invoices/statements to verify the reported data by Banque Misr.

Therefore, Banque Misr must commit to continually improving the data quality of reported data wherever possible and continue to refine their methodology to improve the coverage and transparency of our disclosure.

Table 9 Data quality and assumptions by source

SCOPE	EMISSION SOURCES	ACTIVITY DATA	DATA QUALITY	ASSUMPTIONS MADE
SCOPE 1	Stationary Combustion	Diesel fuel consumption		Heating value of fuel
	Mobile Sources- Mission cars	Diesel fuel consumption		Heating value of fuel and vehicle categorization
	Mobile Sources – Passenger Cars	Motor gasoline fuel consumption		Heating value of fuel and vehicle categorization
	Fugitive emissions	Refrigerant Charge		
SCOPE 2	Electricity	Electricity consumption		

Good	Satisfactory	Poor
No change required	Could be improved in terms of completeness	Priority for improvement

CONCLUSION AND RECOMMENDATION

This report presents the base year emissions of Banque Misr Headquarters. The report was prepared based on the GHG Protocol Corporate Accounting and Reporting Standard and IPCC Methodologies. The total GHG emissions during the reporting period between 1/1/2021 and 31/12/2021 were estimated to be 1,011.40 MT CO_2e/year, with scope 1 direct emissions representing 46.75% of these emissions and Scope 2 representing 53.25%.

The major contributive sources of GHG emissions were electricity consumption and fugitive emission sources. Overall, the data collected was satisfactory, with weakness displayed due to the lack of third-party invoices/statements that verify the data collected.

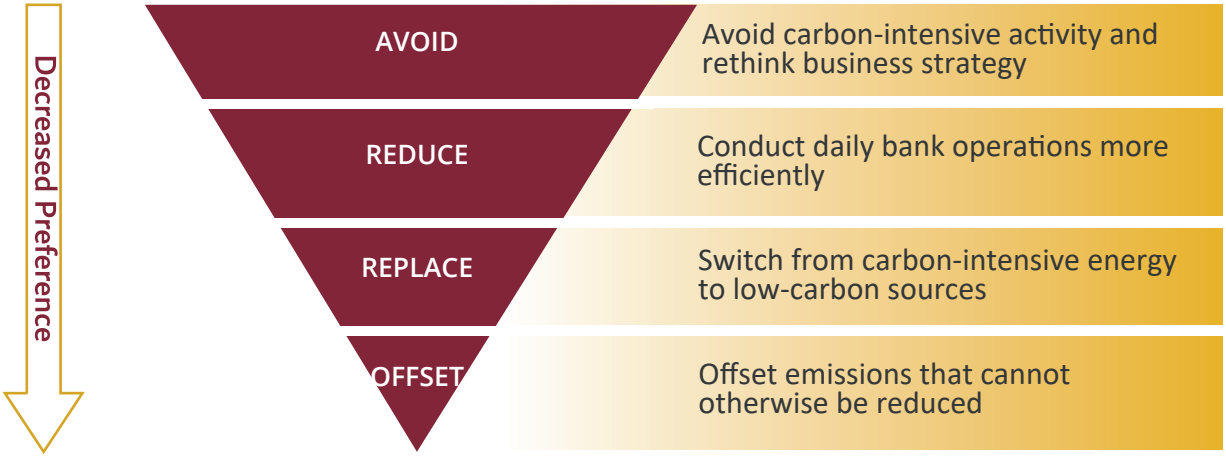
Several recommendations can be made from the results and the process of reporting Banque Misr's Carbon Footprint, such as:

- Third party invoices/statements must be present for all data delivered by Banque Misr.
- To fulfill the GHG Protocol standards, Banque Misr must report on all owned branches in Egypt.
- Including scope 3 emissions in the upcoming years to quantify the entire carbon footprint of Banque Misr organization.
- Installing submeters for each floor of the building to help identify the hotspots within the building and hence, actively reduce the carbon-intensive activities.

Carbon Footprint Reduction Plan

Following the development of the base year carbon footprint report, Banque Misr should strategize a plan to reduce its carbon footprint. This plan is referred to carbon footprint reduction plan. This plan shall detail on ways Banque Misr can reduce or offset its carbon footprints by enhancing its energy efficiency, consuming energy made from renewable origin, raise awareness, focus on environmental projects, and implementing sustainable finance practices.

Carbon reduction methods can be implemented through 4 different ways, starting with preferred approach till the least approach:



AVOID

Consider public transportation options when moving towards places nearby within the city and avoid using the bank's owned passenger cars whenever possible to reduce the consumption of fuel especially because Banque Misr is located at one of the busiest streets in Cairo.

Influence business decision and develop environmental strategies within the bank's strategy to avoid investments/tapping into GHG intensive practices across the lifecycle

REDUCE

With a relatively large space at the rooftop, Banque Misr should consider installing solar panels at the roof tops. In fact, this practice is not new in Egypt as many office buildings run on energy sourced from solar panel. Installing solar panel will clearly reduce the dependence on back-up generators and reduce the consumption of electricity consumption which is the largest source of GHG emissions at Banque Misr.

Invest towards Energy efficiency measures to reduce the amount of energy consumed while maintaining or improving the quality of services provided in the building.

Provide monitors, projectors, and equipment with energy efficiency ratings, and reduce power consumption when not used.

REPLACE

Replace traditional refrigerant charges with more environmentally friendly options.

Replace any old, energy consuming appliances with efficient ones. For example, switch to energy efficient lighting such as LEDs, that have dimmer options, and implement motion sensors in less occupied areas. This can have a significant impact on electricity consumption, particularly as lighting is a key part of the Banking sector.

Perform periodic maintenance and inspections of all company vehicles and replace any old vehicles with new, fuel-efficient ones.

OFFSET

Compensate 'unavoidable' emissions through carbon offset schemes, such as:

- Invest in renewable energy projects within the region to boost the amount of renewable energy on the grid, create jobs, and decrease reliance on fossil fuels.
- Purchase carbon credits through reforestation and conservation projects that directly capture the carbon while also protecting eco-systems, wildlife, and social heritage.

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بنك مصر

BANQUE MISR

نعمل معاً لخير بلدنا

Prepared by DCARBON Egypt

DCARBON

Driving Sustainable Transition

DCARBON
Driving Sustainable Transition

Independent Assurance Statement

DCarbon is a leading sustainability, environmental and climate change consultancy based in Egypt and registered under the Egyptian law no. 159 for the year 1981 and its executive regulation. DCarbon assists public and private organizations in understanding and addressing their economic, environmental, and social impact. DCarbon services cover a wide range of activities covering; consultations, training, and capacity building, reporting, digital solutions, communication, and assurance services, to public and private corporations, international and local organizations, governmental authorities, and civil society organizations in the MENA, GCC, EU, and the USA. DCarbon is working with numerous international partners, a GRI certified training partner in Egypt, MENA and the Arab States, TCFD, SASB and EPD supporter.

DCarbon was engaged by Banque Misr to provide limited level assurance over greenhouse gas ("GHG") emissions of Banque Misr's Headquarter operational activities during the reporting period of 1st January 2021 to 31st of December 2021.

This Assurance Statement applies to the related information included within the scope of work described below.

The scope of our work was limited to assurance over the following information included within the Report for the period 1st January to 31st December 2021 (the 'Selected Information'):

- Choose Reporting period, Operational, and Organizational boundaries;
- Identified all activities that took place during reporting periods;
- Prepared customized data collection sheet and collected relevant data from departments.
- Defined all assumptions and exclusions;
- Calculated GHG emissions under Scope 1, and Scope 2 (mtCO2e);
- Assessed the data quality and identified hotspots; and
- Provided recommendations to improve the data collection process and reduce GHG emissions.

The quality assurance and quality control activities of provided data have been looped through multiple processes to ensure its integrity and accuracy as the following:

- All provided data by Banque Misr's team was clearly reviewed, analyzed, and edited by our technical team;
- In the case of data discrepancies and outliers, direct calls and virtual meetings were convened to discuss the veracity of the data, and updated data was supplied upon request;
- Whenever the provided data was unclear, several requests were made for clarification; and
- Assumptions, data gaps and exclusions were plainly declared and justified.

In conclusion, based on the process and procedures conducted, there is no evidence that the GHG emissions statement shown above is not materially correct and is not a fair representation of the GHG emissions data and information; and has not been prepared in accordance with the WRI/WBCSD GHG Protocol Corporate Accounting and Reporting Standard (Scope 1 and 2).

Nasser Ayoub, Ph.D.
Environmental & Lifecycle Assessment Expert & Report Auditor

Ehab Shalaby, Ph.D.
Chairman &CEO

DCARBON
Driving Sustainable Transition

This verification statement, including the opinion expressed herein, is provided to Banque Misr and is solely for the benefit of Banque Misr in accordance with the terms of our agreement.