



Carbon Footprint Report 2024



بنك بيت التمويل الكويتي

KFH
E G Y P T



About This Report

Important disclaimer

This report presents the initial GHG inventory assessment of KFH-Egypt operations, encompassing all branches for the calendar year 2024. It is important to note that during the reporting period addressed by this report, KFH-Egypt local operations was still operating under the AUB Brand, This was a transitional period that ended in January 2025, following the acquisition of AUB Egypt by KFH-Egypt, which had been concluded in 2022.

KFH-Egypt Contact person

This report and the relevant data within is managed by the Projects & Properties department in KFH-Egypt for any inquiries please reach out to

Name: Eng. Ehab El Sheemy

Title: Head of Projects & Properties

Email: ehab.elsheemy@KFH-Egypt.com

Any errors and typographical mistakes present in the published report are not intentional and the bank commits to correcting them on its website.

By adhering to the World Resources Institute (WRI) Greenhouse Gas Protocol principles, this report ensures the relevance, completeness, consistency, transparency, and accuracy of all data collected and analyzed. This foundational assessment marks a significant step towards a more sustainable future for KFH-Egypt, aligning with the growing global movement towards decarbonization and responsible banking practices.

Table of Contents

About This Report & Important Disclaimer	2
KFH-Egypt Contact Person	2
CEO's Message	5
Executive Summary	6
Limited Assurance Statement	7
About The Bank	8
Introduction	11
Scope of the Report	14
Regulatory Context (Central Bank of Egypt Guidelines)	15
Report Audience and Use Cases	15
Alignment with Global Standards & National Strategies	15
Organisational & Operational Boundaries	16
• Definition of Organisational Boundaries	16
• Identification of Operational Boundaries (Scopes 1-3)	16
• Treatment of Subsidiaries, Branches & Leased Assets	16
GHG Emissions Covered in the Report	18
Geographic Coverage	18
GHG Calculation Methodology	19
• Activity-Data Collection Process	19
• Emission Factors Applied	19
GHG Emission Sources Identified	20
• Calculation Tools / Software Used	20
• Assumptions and Limitations	20
Scope 1 Emissions	21
• Description of Scope 1 Sources	21
• Data Collection and Calculation Methodologies	21
• Scope 1 Emission Totals for CY 2024	22
• Key insights	22
• Next Steps to Reduce Scope 1 Emissions	22
• Stationary combustion	23
• Fugitive emissions	25
• Scope 1 emissions summary	27

Scope 2 Emissions	29
• Indirect Emission from Purchased Electricity	29
• Organisational and Operational Boundaries	29
• Emission Calculation Methodology	29
• Emission Factor	30
• Purchased Heating and Cooling	30
• Scope 2 Total Emissions	30
• Analysis assumptions and considerations	30
Electricity Usage Analysis and Insights	32
Emissions Reduction Strategies	37
Data Quality and Uncertainty Management	39
Appendices	42
Glossary of Key Terms	43
Annex A Generator Inventory.....	45
Annex B Scope 2 Activity-Data Table	45
Annex C Branch-level EUI Dataset	45
Annex D Detailed Assurance Findings & Management Response	45

CEO's Message

Dear Valued Stakeholders,

It is a great pleasure to present to you **Kuwait Finance House Bank - Egypt's 2024 Carbon Footprint Report**. This report demonstrates our dedication to sustainability, transparency and generating lasting value for our stakeholders, communities and the environment. Strategically, our focus for 2024 was establishing a solid infrastructure for environmental management, prioritizing data accuracy, refining internal processes and laying the groundwork for advanced sustainability practices across our operations.



Our projection within the next 3 years is **a 15% reduction in our operational emissions in parallel with introducing Scope 3 emissions assessment for our financed activities**, in alignment with global climate objectives.

Recognizing our broader impact, we are proud to highlight the milestones that reflect our commitment to excellence and responsible growth. These include **"Best Sustainable Bank"** and **"Best Bank in Corporate Services"**, granted by Global Business & Finance Magazine; **"Most Reputable Bank in Treasury and Investment Services"**, awarded by International Business Magazine; and **"Best Treasury Services Bank"**, conferred by Global Business Magazine. These recognitions, awarded by reputable international industry bodies, underscore KFH Egypt's leadership in ethical banking, community impact, and operational excellence.

Rooted in Islamic finance principles, we firmly believe that financial success and effective environmental management go hand in hand, our efforts to make a mark by leaving none are destined to foster a more resilient economy and a resourceful future for everyone. Such advancements could only be achieved through the commitment of our employees, strong trust of our customers, and the unwavering support of our partners, all of which contributed to a legacy of responsibility, innovation, and positive transformation.

We look forward to continuing this journey together as we accelerate our commitment to a low-carbon future, striving to create true tangible value for our people, clients, communities and the environment.

Sincerely,

Hala Sadek

Hala Sadek

Chief Executive Officer and Board Member

Kuwait Finance House Bank - Egypt

Why this report

For Calendar Year (CY) 2024, KFH-Egypt presents its updated and consolidated full-fleet Greenhouse Gas (GHG) inventory. By measuring operational emissions, the Bank reinforces its foundation for setting science-based reduction targets, improving environmental risk management, and maintaining compliance with the Central Bank of Egypt’s sustainable finance requirements as well as international reporting standards. The assessment methodology strictly follows globally accepted guidelines, including the Greenhouse Gas Protocol, the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (with 2019 updates), and the ISO 14064-1:2018 standard.



Coverage

The 2024 inventory follows the GHG Protocol Corporate Standard using an operational-control boundary. It captures 100% of Scope 1 direct emissions and Scope 2 purchased electricity across 44 branches, 5 archives, 2 warehouses, 1 office building and the head office.

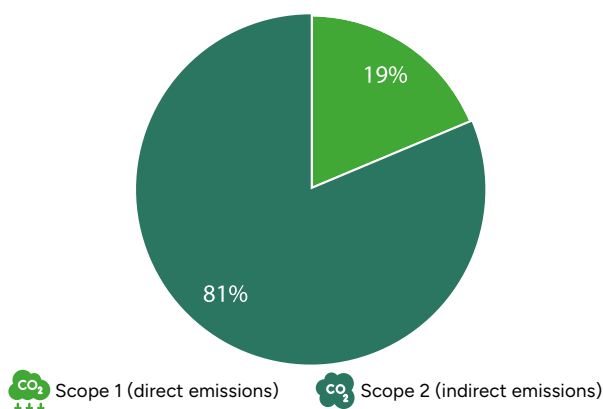
Key numbers, CY 2024

- Scope 1: 738.53 t CO₂e (40 % fleet fuel, 57% refrigerants, 3% diesel generators)
- Scope 2: (location-based) 3,213 t CO₂e from 8.45 GWh grid electricity
- Combined operational footprint 3,951.53 t CO₂e
- Electricity-use intensity median 229 KWh/m²

Major Findings

1. Electricity usage is the biggest source of emissions representing around 81% of total emissions, creating an excellent opportunity for decarbonization
2. Refrigerant leakage, though <0.1 % of total bank purchases, accounts for >57% of Scope 1 CO₂e—rapid payback for leak-detection upgrades.
3. In 2024, KFH Egypt’s operational carbon intensity amounted to 2.96 tCO₂e/FTE, calculated based on total Scope 1 and Scope 2 emissions per full-time employee (FTE).

Figure 1: Total Emissions



LIMITED ASSURANCE STATEMENT

The **Regional Center for Renewable Energy and Energy Efficiency (RCREEE)** is a leading regional organization specialized in sustainable energy and climate change, supporting both public and private entities in achieving low-carbon development across the Arab region. Established as an independent organization, RCREEE works with governments, financial institutions, private sector players, and civil society to provide technical assistance, policy support, research, capacity building, and reporting services in line with international best practices.

RCREEE was commissioned by **Kuwait Finance House Bank– Egypt (KFH-Egypt)** to conduct an independent assessment of its organizational greenhouse gas (GHG) emissions inventory for the year **2024**, covering **Scopes 1, and 2** in accordance with internationally recognized standards. The objective was to quantify emissions associated with KFH-Egypt operational activities from **January 1st to December 31st**, across its national footprint.

RCREEE's role involved providing technical assistance in calculating KFH-Egypt GHG emissions based on the **World Resources Institute (WRI) / World Business Council for Sustainable Development (WBCSD) GHG Protocol Corporate Accounting and Reporting Standard**, covering Scopes 1 and 2, and aligned with the **ISO 14064-1:2018 standard**: "Greenhouse Gases – Specification with guidance at the organization level for quantification and reporting of GHG emissions and removals."

The assurance process followed these key steps:

- Defining the reporting period, organizational boundaries, and operational boundaries.
- Identifying relevant emission sources across Scopes 1 (direct emissions), and 2 (indirect emissions from purchased electricity)
- Developing and distributing tailored data collection templates to KFH-Egypt's departments and collecting relevant data.
- Applying appropriate emission factors and calculation methodologies to estimate GHG emissions.
- Disclosing all assumptions, exclusions, and data gaps in a transparent manner.
- Conducting data quality checks and validation through iterative communications with KFH-Egypt sustainability and operational teams.

Our technical team carried out **quality assurance and quality control** procedures to ensure data reliability and transparency. These procedures included:

- Reviewing and validating data provided by KFH-Egypt's team.
- Flagging and resolving discrepancies through follow-up calls and clarification emails.
- Addressing missing data through reasonable assumptions or justifications based on historical or benchmark data.

The GHG inventory and assurance were carried out by an experienced and multidisciplinary team of Sustainable Finance and Sustainability experts committed to the principles of independence, objectivity, and professional integrity:

- **Ahmed Abderasoul**, Senior Environmental Expert, RCREEE
- **Mohamed Ali Youssef**, Senior Environmental and Energy Specialist, RCREEE
- **Alshimaa Shafey**, Senior Renewable Energy/Energy Efficiency Specialist, RCREEE

In conclusion, based on the procedures and methodologies applied, **we found no evidence** to suggest that the information presented in KFH-Egypt 2024 Carbon Footprint Report is not materially correct, not a fair representation of its emissions performance, or not in conformance with the WRI/WBCSD GHG Protocol and ISO 14064-1:2018.

It is our opinion that **KFH-Egypt** has established a sound framework for the collection, aggregation, and reporting of GHG data, and the emissions presented for the year 2024 provide a reliable and transparent account of its environmental impact.

Dr. Ahmed Khalil



ESG Director
Regional Center for Renewable Energy and Energy Efficiency (RCREEE)

RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة

About The Bank

KFH-Egypt is a Shari'a-compliant financial institution that offers a comprehensive portfolio of retail, corporate, SME, and investment banking products tailored to the needs of a diverse range of individuals and businesses across Egypt. The Bank is committed to the delivery of ethical, inclusive, and innovative financial solutions grounded in the principles of Islamic finance with a focus on customer-centric service, digital transformation, and financial inclusion.

KFH-Egypt is a subsidiary of the Kuwait Finance House Group, one of the world's leading Islamic banking institutions. The Bank formally entered the Egyptian market in August 2006 following the acquisition of an 89.3% stake in Delta International Bank by a consortium of investors led by the KFH Group. This marked the beginning of a strategic transformation, culminating in the rebranding from Ahli United Bank to KFH-Egypt to reflect its alignment with the KFH Group's regional and global vision.

Since then, KFH-Egypt transferred about EGP 3 billion from retained earnings to paid up capital throughout 2024 to strengthen its financial position, modernize its infrastructure, and enhance its banking offerings. As of 2024, the Bank operates 44 branches and 98 ATMs across Egypt and, supported by a team of 1,334 employees, continues to expand its footprint in the country through a sustainability-oriented growth strategy.

Despite benefiting from the global expertise and infrastructure of the KFH Group, KFH-Egypt operates independently under the regulatory oversight of the Central Bank of Egypt (CBE) and in full compliance with local banking laws and Islamic finance standards. The Bank is committed to supporting Egypt's overarching economic and sustainability goals through ongoing investment in technology, talent, and service innovation.

Awards & Recognitions

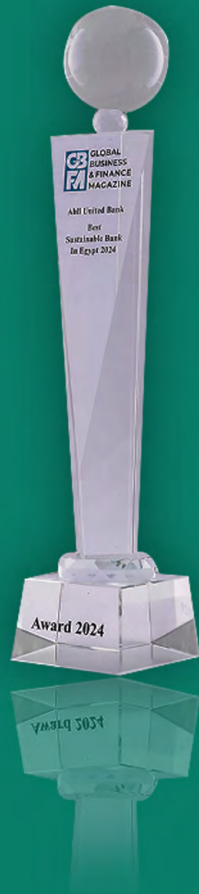
KFH-Egypt's long-standing commitment to sustainable development, corporate social responsibility, and strong governance standards has been recognized through several prestigious industry awards, including:

- Best Sustainable Bank – Global Business & Finance Magazine
- Best Bank in Corporate Services – Global Business & Finance Magazine
- Most Reputable Bank in Treasury and Investment Services – International Business Magazine
- Best Treasury Services Bank – Global Business Magazine

These recognitions, conferred by reputable international industry bodies, underscore KFH-Egypt's leadership in ethical banking, positive community impact, and operational excellence.

Best Sustainable Bank

Granted by GLOBAL BUSINESS & FINANCE MAGAZINE



Best Bank in Corporate Services

Granted by GLOBAL BUSINESS & FINANCE MAGAZINE



Most Reputable Bank in Treasury and Investment Services

Granted by INTERNATIONAL BUSINESS MAGAZINE



Best Treasury Services Bank

Granted by GLOBAL BUSINESS MAGAZINE



Introduction

Climate change remains one of the most significant global challenges, with far-reaching implications for societies, economies, and financial systems. As the world accelerates its shift toward more sustainable and resilient development pathways, financial institutions play an essential role in enabling, guiding, and financing this transition.

This Greenhouse Gas (GHG) Inventory Report represents a key step in KFH-Egypt ongoing efforts to understand, quantify, and manage its environmental impact. For the 2024 reporting year, the Bank has assessed and disclosed its operational emissions, including Scope 1 (direct emissions from owned or controlled sources) and Scope 2 (indirect emissions from purchased electricity). This analysis establishes a clear starting point for internal climate-action planning and reflects our commitment to embedding sustainability considerations into core business operations.

While this updated report does not yet include Scope 3 emissions, we recognize the critical importance of these categories in capturing the full climate impact of financial institutions. Measuring and reporting Scope 3 emissions remains a high priority for KFH-Egypt. We are actively developing the systems, data processes, and methodological frameworks required to incorporate these emission sources in future reporting cycles.

As this is still an early stage in our emissions-accounting journey, no official baseline year has been designated. The 2024 inventory serves as a foundational assessment aimed at identifying data gaps and strengthening the Bank's GHG reporting infrastructure. This groundwork is essential for establishing a robust and credible baseline year in the near future.

Our GHG inventory aligns with internationally recognized frameworks, particularly the GHG Protocol, and serves as the foundation for setting emission reduction targets, improving operational efficiency, and identifying further opportunities for emission reduction. It also represents a meaningful step toward greater accountability, preparing KFH-Egypt for evolving regulatory expectations and stakeholder demands.

Consistent with the Central Bank of Egypt's sustainable-finance directives, which call on banks to enhance climate-related disclosures and integrate environmental risks into their governance and risk-management frameworks, KFH-Egypt is committed to progressively aligning with both national development priorities and global sustainability norms. These expectations reinforce the growing responsibility of financial institutions to assess and disclose climate-related risks as part of comprehensive risk-management practices.

As part of our commitment, we are building a robust reporting infrastructure to track emissions more accurately, enhance transparency, and develop credible, science-informed emission reduction targets. This foundation is essential for aligning our operations with global climate goals and positioning KFH-Egypt as a responsible and forward-looking financial institution.

This report reflects our broader, long-term commitment to sustainable finance. As we progress, we aim to embed climate risks considerations deeper into our strategy, operations, and organizational culture—recognizing that what we measure today will shape what we manage tomorrow.

We look forward to engaging with stakeholders—including customers, employees, investors, regulators, industry peers, and local communities—to learn, collaborate, and build momentum toward a more climate-resilient financial system.

This report aims to transparently measure and disclose KFH-Egypt greenhouse gas emissions. Through this assessment, KFH-Egypt seeks to identify critical areas for improvement, enhance future reporting, and implement effective strategies to reduce its environmental impact. This initiative aligns with global and national sustainability goals, demonstrating KFH-Egypt commitment to responsible environmental stewardship.

The specific objectives of the report include:



Measuring and publicly disclosing KFH-Egypt GHG emissions.



Identifying significant sources of emissions within the bank's operations to pinpoint key areas for improvement.



Aligning the bank's sustainability strategy with global and national sustainability goals.



Demonstrating environmental leadership through proactive and responsible climate action.



Enhancing stakeholder engagement and building trust through transparent disclosure of environmental performance.



Driving continuous improvement by establishing robust reporting practices, enabling the tracking of emissions trends over time, and setting a baseline for future sustainability initiatives.

Scope of the Report

This GHG Inventory Report includes an assessment of KFH-Egypt greenhouse gas emissions, covering all operations within Egypt and focusing specifically on:

- **Scope 1:** Direct emissions from KFH-Egypt-owned or operated assets, such as emissions from fuel combustion and fugitive emissions (e.g., refrigerants).
- **Scope 2:** Indirect emissions from purchased electricity, heating, and cooling consumed by KFH-Egypt operations.

The Strategic Importance of GHG Reporting for KFH-Egypt

Accurate GHG reporting, represented as a carbon footprint, holds substantial significance for KFH-Egypt, including:

- **Enhanced Environmental Performance:** By quantifying GHG emissions, the bank can identify and implement targeted strategies to reduce its environmental impact, reinforcing its commitment to sustainability.
- **Enhanced Stakeholder Trust and Credibility:** Transparent reporting fosters stronger relationships with stakeholders—customers, investors, regulators—by demonstrating accountability and environmental responsibility.
- **Improved Resilience to Climate Risks:** Understanding its carbon footprint allows KFH-Egypt to manage physical and transition-related climate risks, ensuring long-term operational sustainability.
- **Better Decision-making for Green Financing:** Clear insights into its own environmental impact enable KFH-Egypt to effectively channel capital toward sustainable projects, positioning itself as a leader in sustainable finance.



Regulatory Context (Central Bank of Egypt Guidelines)

The Central Bank of Egypt (CBE) has taken a proactive stance in promoting sustainable finance and responsible environmental stewardship across the banking sector. Through its guidance on climate risk management and environmental disclosures, the CBE encourages banks to incorporate environmental, social, and governance (ESG) considerations into their risk management frameworks, enhance transparency through sustainability reporting, and support the country's broader climate goals. KFH-Egypt reporting efforts are aligned with these national directives and are intended to contribute to Egypt's Vision 2030 and commitments under international climate agreements.

Report Audience and Use Cases

This report is intended for a wide range of stakeholders, including internal decision-makers, regulators, investors, employees, customers, and sustainability professionals. It serves several key purposes:

- Inform internal strategy development and operational improvements related to environmental performance.
- Support compliance with national regulatory requirements and alignment with international best practices.
- Enhance transparency and accountability with external stakeholders.
- Serve as a communication tool to engage clients and partners on the importance of climate action.
- Lay the foundation for future target setting, Scope 3 expansion, and climate risk integration into the bank's broader ESG strategy.

Alignment with Global Standards and National Strategies

KFH-Egypt GHG inventory calculations adhere to internationally recognized standards, ensuring consistency and comparability with other organizations:

- Greenhouse Gas Protocol: The most widely adopted international standard for GHG accounting in both government and business sectors.
- Intergovernmental Panel on Climate Change (IPCC) Guidelines: Internationally accepted methodologies for conducting greenhouse gas inventories.
- ISO 14064-1:2018: This specification, accompanied by guidance, pertains to the quantification and reporting of greenhouse gas emissions and removals at the organizational level.

Adhering to these frameworks supports alignment with best practices and advances Egypt's Vision 2030, emphasizing sustainable development and environmental protection.



Organisational and Operational Boundaries

Definition of the Bank's Organisational Boundaries

In line with the GHG Protocol's guidance, KFH-Egypt has adopted the **operational control approach** for defining its organisational boundaries. Under this approach, KFH-Egypt accounts for 100% of the emissions from operations over which it has full authority to introduce and implement operating policies. This includes facilities and assets where KFH-Egypt has the ability to direct financial and environmental performance, regardless of ownership structure.

Identification of Operational Boundaries (Scope 1, 2, and 3)

This report covers the following GHG emissions scopes:

- **Scope 1:** Direct GHG emissions from sources owned or controlled by KFH-Egypt. These include emissions from fuel combustion (e.g., generators, company vehicles) and fugitive emissions (e.g., refrigerants from air conditioning systems).
- **Scope 2:** Indirect GHG emissions resulting from the generation of purchased electricity, heating, and cooling consumed by KFH-Egypt facilities.
- **Scope 3:** Not included in this report. However, Scope 3 emissions are recognised as a material component of the bank's total footprint and are prioritised for future inclusion as data quality and internal systems improve.

Treatment of Subsidiaries, Branches, and Leased Assets

- KFH-Egypt operational structure includes 44 branches, 5 archives, 2 warehouses, 1 office building and the head office. geographically distributed across seven regions within Egypt. All operations within Egypt are covered under the inventory.
- Total building area under control is 37,076 m²
- Branches and offices where KFH-Egypt has operational control are fully included in Scope 1 and Scope 2 emissions. For leased properties where operational control is not held—i.e., where KFH-Egypt does not manage energy use or maintenance—these locations are excluded from the inventory, consistent with the GHG Protocol's Consolidation based on operational control approach.

KFH-Egypt has a comprehensive operational structure across Egypt:



1 Head Office



1 Office Building



44 Branches



7 Storage & Archiving Facilities



These facilities are strategically distributed across 7 regions within Egypt.



Inventory Coverage

All operations within Egypt are covered under the inventory.

Total building area under control is 37,076 m².

- No subsidiaries currently fall within the boundary of this GHG inventory.

GHG Emissions Covered in the Report

This inventory includes emissions from the following categories:



Fuel combustion for backup generators and KFH-Egypt owned vehicles (Scope 1).



Fugitive emissions from refrigerants used in air conditioning systems (Scope 1).



Chemical Process related emissions is not relevant to the KFH-Egypt operations (Scope 1).



Electricity purchased for operations with operational control (Scope 2).



District Cooling/Heating purchased for operations with operational control (Scope 2).



Scope 3 emissions such as business travel, employee commuting, use of sold products, and financed Emissions are currently not included in the inventory but are identified as priorities for future reporting.

Geographic Coverage



The boundary for this inventory is geographically covering all KFH-Egypt operations.



GHG Calculation Methodology

Description of Methodologies Used

KFH-Egypt GHG inventory has been developed in accordance with the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard. This methodology categorizes emissions into three scopes (Scope 1, Scope 2, and Scope 3) and provides structured guidance on calculating emissions from various sources based on activity data and appropriate emission factors.

The operational control approach was used to define boundaries, and emissions were calculated by multiplying the activity data by relevant emission factors for each source category. Where available, institution-specific data was used; in other cases, internationally recognized defaults were applied.

Activity Data Collection Process

The GHG inventory relied on actual operational data collected from various departments across the bank:

- **Electricity Consumption:** Monthly utility bills were reviewed. Where only payment amounts were available, electricity consumption in kilowatt-hours was estimated using the average commercial electricity tariff rate published by the Egyptian government.
- **Fuel Consumption:** Total expenditure on fuel was obtained from fuel invoices. These figures were divided by the prevailing fuel price to estimate total liters consumed.
- **Refrigerants:** Fugitive emissions were estimated based on refrigerant logs maintained by the maintenance department, which detailed quantities of each type of refrigerant added due to leaks or servicing.

Due to limited access to equipment-level specifications (e.g., generator efficiency or fuel conversion factors), assumptions based on typical usage patterns were applied where necessary.

Emission Factors Applied

Emission factors were selected based on accuracy, transparency, and alignment with recognized standards:

- For **electricity-related emissions (Scope 2)**, the emission factor published by **EEHC** was applied, offering a more localized and accurate representation of the Egyptian grid's emission intensity.
- For **fuel combustion and fugitive refrigerant emissions**, the latest **IPCC default emission factors** were used, in accordance with the 2006 IPCC Guidelines with the 2019 refinement for National Greenhouse Gas Inventories.

This approach ensures consistency with global practices while reflecting local grid characteristics where appropriate.

GHG Emission Sources Identified

The following emission sources were included in the GHG inventory:

- **Scope 1:**
 - Fuel combustion from generators and vehicles over which KFH-Egypt has operational control.
 - Fugitive emissions from refrigerant leakage in HVAC systems
- **Scope 2:**
 - Purchased electricity for buildings and operations where KFH-Egypt has operational control
 - Purchased Central cooling and heating in malls and buildings with similar HVAC cooling infrastructure as for example: malls
- **Scope 3:** emissions—such as employee commuting, business travel, use of third-party logistics, and financed emissions—were not included in this report but are recognized as priorities for future development.

Calculation Tools/Software Used

Excel-based data collection and calculation templates were developed internally and distributed to the relevant departments. These templates were designed to standardize data entry and include built-in emission factors and formulas to calculate emissions per activity type. Departmental focal points were responsible for completing and validating data entries.

The results were consolidated and reviewed centrally by the sustainability team to ensure consistency and identify any outliers or data gaps.

Assumptions and Limitations

Several assumptions and limitations were identified during the reporting process:

- Generator specifications (e.g., efficiency or load factors) were not available, and default assumptions were used in line with GHG Protocol guidance.
- Minor data gaps or inconsistencies may exist due to varying data quality across branches. Which could be seen clearly in branches with prepaid electricity meters as a fixed amount was always paid regardless of the actual consumption of electricity to make sure no power cuts takes place.
- Monthly Grid Emission factor published by Egypt ERA was official stopped on may 2024 leading to the use of the annual emission factor published by the EEHC in its annual report.
- These limitations will be addressed in future reporting cycles where possible as data collection and reporting systems are enhanced.

Baseline Year Selection and Rationale

At this stage, no formal baseline year has been established. The 2024 GHG Inventory represents KFH-Egypt second year of emissions reporting and continues to serve as a foundational exercise for strengthening our data systems, expanding our coverage, and enhancing reporting accuracy.

While this report covers Scope 1 and Scope 2 emissions, KFH-Egypt does not intend to designate 2024 as its baseline year, as the Bank is actively working to incorporate Scope 3 emissions in future reporting cycles. Establishing a baseline before fully integrating Scope 3 would not accurately reflect the institution's total climate impact and could limit the credibility of long-term targets.

The insights gained from the 2024 assessment will support the development of a more comprehensive and reliable reporting infrastructure. Once Scope 3 categories are measured and consistently integrated, KFH-Egypt will select a robust, representative, and fully inclusive baseline year that aligns with international best practices and supports future target-setting efforts.

Scope 1 Emissions

Description of Scope 1 Sources

Source Category	Activity	Fuel / Gas	Control Status	Comment
Stationary combustion	Backup electricity during grid outages	Diesel	Owned & operated	12 small-scale generators located across branches
Mobile combustion	Business travel & logistics	Gasoline (92 octane)	Owned fleet (55 passenger cars)	Vehicles < 10 years old, distributed nationwide
Fugitive emissions	HVAC servicing & maintenance	R-22, R-410A, R-134a	Owned & operated	Top-ups recorded in maintenance logs at 11 sites

No industrial or process emissions occur within KFH-Egypt administrative operations.

Data Collection and Calculation Methodologies

Step	Approach	Key References
Activity data	<ul style="list-style-type: none"> Diesel & gasoline: total annual spend from finance records → converted to litres using average 2024 government prices. Generator catalogue & branch logs verify fuel type and use. Refrigerants: quantities taken from maintenance re-charge logs. 	Internal finance & facilities data; maintenance records
Emission factors	<ul style="list-style-type: none"> Combustion: IPCC 2006 Guidelines (Tier 1) factors, adjusted with 2019 Refinement (density = 0.84 kg/L for diesel, 0.74 kg/L for Gasoline). Refrigerants: IPCC AR6 100-year GWP values. 	IPCC 2006 & 2019; AR6
Equation	Emissions = Activity Data × Emission Factor; GHG-specific emissions multiplied by GWP to obtain CO₂e .	GHG Protocol Corporate Standard
Validation	Three-layer review (responsible department → Sustainability Dept. → external consultant) to reconcile invoices, logbooks, and equipment lists.	KFH-Egypt QA protocol

Scope 1 Emission Totals for CY 2024

Source	Activity Data	CO ₂ e (t)	% of Scope 1
Stationary combustion (diesel generators)	7,702 L diesel	20.65 t	3 %
Mobile combustion (vehicle fleet)	128,760 L gasoline	298.25 t	40 %
Fugitive refrigerants (HVAC)	117 kg R-22, 41 kg R-410A, 67 kg R-134a	417.63 t	57 %
Total Scope 1	—	736.53 t CO ₂ e	100 %

Key insights

- Mobile combustion is the second dominant Scope 1 source, driven by fleet size and fuel type.
- Fugitive refrigerant losses, though small in mass, have a high climate impact (57% of total CO₂e) because of elevated GWPs.
- Diesel generator use is limited but will grow in importance if grid reliability issues persist.

Next Steps to Reduce Scope 1 Emissions

- Fleet optimisation: phase-in hybrid/EV vehicles and introduce eco-driving training.
- Generator management: explore branch-level solar plus battery backup to displace diesel runtime.
- Refrigerant stewardship: adopt lower-GWP refrigerants and strengthen leak-detection / recovery protocols.

These initiatives integrate with the broader Emissions Reduction Strategy and will inform quantitative targets in forthcoming reporting cycles.

Stationary combustion

The bank operates a fleet of small-scale backup generators that kicks in when there is power outage. A full description of these assets can be found in the Table 1.

Table 1 Add generator pics in the relevant cells

No.	Code	Branch	Branch Name	Equipment Description	Generator Type	Brand Name	Power	Diesel Consumption/liter
1	GN-006	10R-	10th Of Ramadan City	Generator 3 Cylinder		PERKINS	30KVA	240
2	GN-010	SHL-	Alexandria Shallalat	Generator 6 Cylinder	TA2810M5	VOLVO - LEROY-SOMER	200KVA	1,600
3	GN-003	DOK-	Dokki	Generator 3 Cylinder		PERKINS - Stanly	30KVA	240
4	GN-001	HRM-	Haram	Generator 3 Cylinder	R250	PERKINS -	150KVA	1,200
5	GN-005	HLP-	Heliopolis	Generator 3 Cylinder		Cummins - AUSUNIA	30KVA	240
6	GN-008	MNS-	Mansoura	Generator 3 Cylinder	CS80-5	Cummins	30KVA	240
7	GN-007	PSG-	Port Said El Gom-horya	Generator 3 Cylinder		PERKINS - STAMFORD	30KVA	240
8	GN-004	SLH-	Salah Sa-lem	Generator 3 Cylinder		PERKINS - STAMFORD	30KVA	240
9	GN-002	SHC-	Shooting Club	Generator 4 Cylinder	PT100	DHADDAR	60KVA	480
10	GN-009	TNT-	Tanta	Generator 6 Cylinder	LSA44L5	VOLVO -	175KVA	1,392
11	GN-011	NEW	New Cairo	Generator 6 Cylinder	PT1000	PERKINS	1000 KVA	1,365
12	GN-012	NEW	New Cairo	Generator 6 Cylinder	C150D5	Cummins-EIM	150 KVA	225

To calculate the Emissions from these generators we will follow the tier 1 approach use the following equation

GHG Emissions, fuel = Fuel Consumption x Emission Factor (Fuel, GHG)

Where:

GHG Emissions, fuel = Emissions of a given GHG by type of fuel (kg GHG)

Fuel Consumption = Amount of fuel combusted (TJ)

Emission Factor (Fuel, GHG) = Default emission factor of a given GHG by type of fuel (kg gas/TJ).

- For CO₂, it includes the carbon oxidation factor, assumed to be 1.

Since all the KFH-Egypt generators use diesel as a fuel the following will apply.

The default IPCC Tier 1 emission factors per litre of diesel fuel (assuming density of 0.84 kg/litre) are as follows, based on the 2006 IPCC Guidelines and 2019 Refinement:

- **CO₂: 2.68 kg CO₂/litre**
- **CH₄: 0.005 g CH₄/litre**
- **N₂O: 0.005 g N₂O/litre**

KFH-Egypt has used a total of 7,702 liter of diesel in the reporting period this will result in the following GHG emissions

- **CO₂: 20,641 kg**
- **CH₄: 0.03851 kg**
- **N₂O: 0.03851 kg**

Applying the GWP

Greenhouse Gas	GWP (AR6, 100-yr)
CO ₂	1
CH ₄ (fossil)	29.8
N ₂ O	273

This will result in a total emissions of

$$\text{CO}_2 (20,641 \times 1) + \text{CH}_4 (0.03851 \times 29.8) + \text{N}_2\text{O} (0.03851 \times 273) = \mathbf{20.65 \text{ Tons CO}_2\text{e}}$$

Mobile combustion

KFH-Egypt has a fleet of cars serving its operations across Egypt as shown in full details in annex 2. The fleet consists of 55 passenger cars that are varies between are less than 10 years old. All of them uses Gasoline 92 octane as fuel

Over the reporting period the fleet has consumed a total of 128,760 liters of fuel

Emission Factors:

- CO₂ emission factor = 2.31 kg CO₂ per litre
- CH₄ emission factor = 0.03 g CH₄ per litre = 0.00003 kg CH₄ per litre
- N₂O emission factor = 0.02 g N₂O per litre = 0.00002 kg N₂O per litre

Activity Data:

- Total fuel consumption = 128,760 litres

Emissions per Gas:

- CO₂ = 128,760 × 2.31 = 297,435.6 kg CO₂
- CH₄ = 128,760 × 0.00003 = 3.8628 kg CH₄
- N₂O = 128,760 × 0.00002 = 2.5752 kg N₂O

Global Warming Potentials (AR6, 100-year):

- GWP for CH₄ = 29.8
- GWP for N₂O = 273
- GWP for CO₂ = 1

CO₂e Emissions:

- CH₄ CO₂e = 3.8628 × 29.8 = 115.1 kg CO₂e
- N₂O CO₂e = 2.5752 × 273 = 703.03 kg CO₂e
- CO₂ CO₂e = 297,435.6 × 1 = 297,435.6 kg CO₂e

Total CO₂e:

- Total CO₂e = 297,435.6 + 115.1 + 703.03 = 298,253.74 kg CO₂e
- ≈ 298.25 tonnes CO₂e

Fugitive emissions

Over the reporting period the KFH-Egypt had to do some maintenance work on the air conditioning systems in some of its branches, such works has resulted in the need to topping up the refrigerants according to the following data compiled from the maintenance logs shown in table 3

Table 3

Location	Item	Type	Quantity (Kg)
Alexandria	Refrigerant	R22	18.00
Shooting Club	Refrigerant	R410-A	17.00
Dokki	Refrigerant	R22	11.00
Zamalek	Refrigerant	R22	6.00
6th of October	Refrigerant	R22	5.00
Downtown	Refrigerant	R410-A	4.00
Haram	Refrigerant	R410-A	4.00
Laurent	Refrigerant	R410-A	2.00
Mohandessin	Refrigerant	R410-A	1.00
Heliopolis	Refrigerant	R22	1.00
Makram Ebeid	Refrigerant	R410-A	1.00
Head Office	Refrigerant	R134a	67.00
Head Office	Refrigerant	R22	76.00
Head Office	Refrigerant	R410-A	12.00

Refrigerants leakage from cars is not currently tracked but will added in the future

Global Warming Potentials (GWP) – IPCC AR6 (100-year):

- R22 = 1,960
- R410A = 2,256
- R134a = 1,430

Refrigerant Quantities:

- R22 total = 117.00 kg
- R410A total = 41.00 kg
- R134a total = 67.00 kg

Emissions Calculations:

- R22:

$$117.00 \text{ kg} \times 1,960 = 229,320 \text{ kg CO}_2\text{e}$$

- R410A:

$$41 \text{ kg} \times 2,256 = 92,496 \text{ kg CO}_2\text{e}$$

- R134a:

$$67.00 \text{ kg} \times 1,430 = 95,810 \text{ kg CO}_2\text{e}$$

Total Emissions:

$$229,320 + 92,496 + 95,810 = \mathbf{417,626 \text{ kg CO}_2\text{e}}$$

$$= \mathbf{417.63 \text{ tonnes CO}_2\text{e}}$$

Scope 1 emissions summary

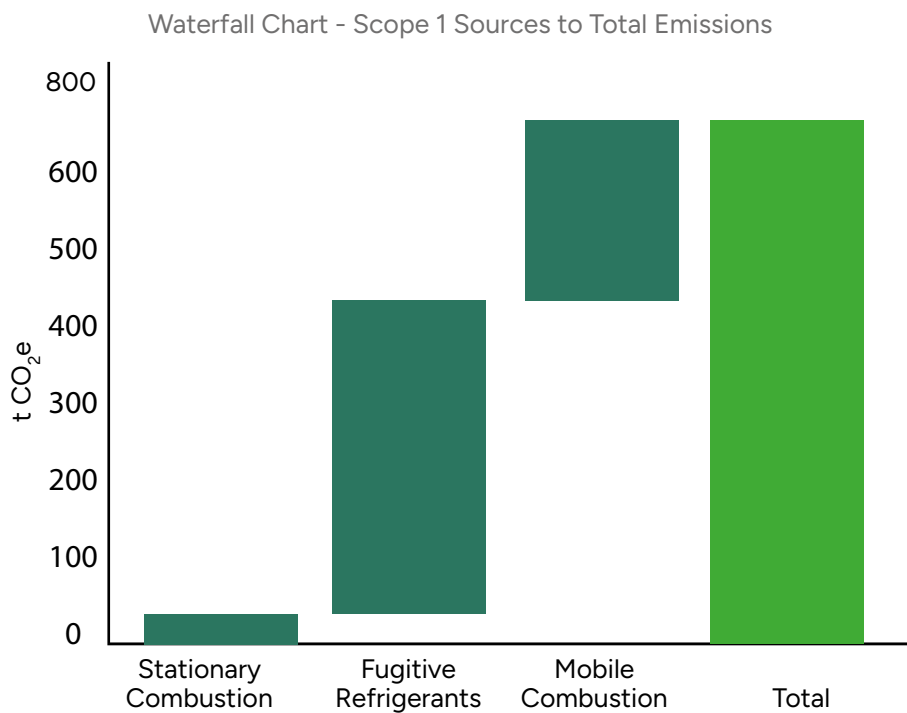
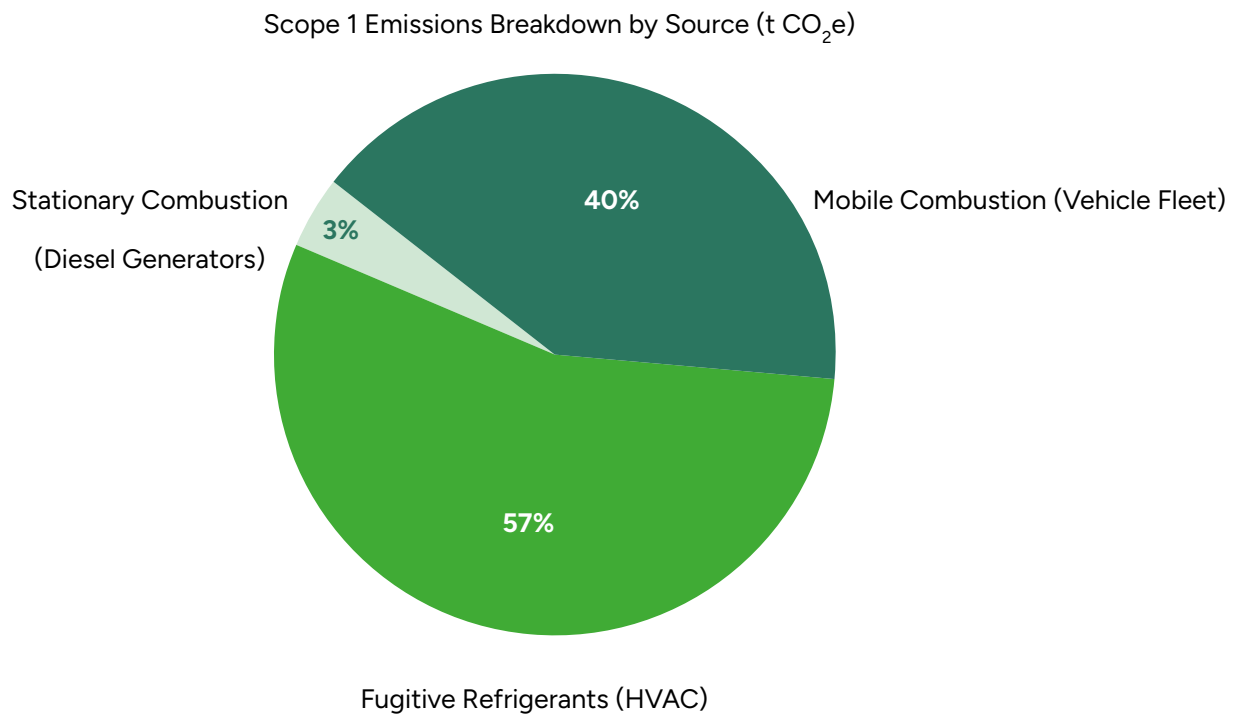
Source	GHG	Emissions (kg)	GWP (AR6)	CO ₂ e (kg)
Gasoline (128,760 L)	CO ₂	297,435.6	1	297,435.6
	CH ₄	3.8628	29.8	115.1
	N ₂ O	2.5752	273	703.03
Diesel (8,430 L)	CO ₂	20,641	1	20,641
	CH ₄	0.03851	29.8	1.15
	N ₂ O	0.03851	273	10.5
Refrigerants	R22	117	1,960	229,320
	R410A	41	2,256	92,496
	R134a	67	1,430	95,810

GHG	Quantity (kg)	CO ₂ e (kg)
CO ₂	318,076.96	318,076.96
CH ₄	3.9	116.25
N ₂ O	2.6	713.5
HFCs	225	417,626

Total Scope 1 emissions is 738.53 tonnes CO₂e

Figure 2

Pie chart showing the breakdown of emissions according to source



Scope 2

Indirect Emission from Purchased Electricity

Location-based approach will be used since KFH-Egypt had no signed PPA in place nor onsite renewable energy production activity in its branches during the reporting period of 2024.

Organisational and Operational Boundaries

The bank has operational control over electricity consumption at all branches except for four branches. Three of them are not charged separately for energy usage. However, they have a monthly service fee that includes all facilities provided by the mall (power, central cooling, etc.). These branches are City Stars, Arkan Branch, and New Damietta. On the other hand, for the Badr University branch, the bank has a share quota. The emission associated with the consumed energy of these four branches will not be part of scope 2 but will be reported under scope 3.

Emission Calculation Methodology

Total Scope 2 emissions are calculated using the following formula:

Total emissions (kgCO₂e) = Activity data (kWh) × Location-based emission factor (kgCO₂e/kWh)

Data Sources and Assumptions

KFH-Egypt relies exclusively on the national electricity grid as its sole source of power. Electricity consumption data are obtained from paid utility bills and reported in kilowatt-hours (kWh), rounded to the nearest whole kWh, with fractional values excluded.

For locations equipped with prepaid meters, detailed kWh consumption records are not available. Instead, electricity usage is estimated based on monthly prepaid top-up values, which are maintained at consistent levels to ensure uninterrupted power supply.

The Egyptian electricity tariff structure follows a tiered pricing system as published by the Egyptian Electric Utility and Consumer Protection Regulatory Agency (EgyptERA). To determine the applicable tariff tier for prepaid-meter locations, the total bill value was divided by the highest published tier price. As estimated consumption in all cases exceeded 1,000 kWh, the highest tariff tier was applied uniformly across all prepaid-meter calculations.

For 2024, the highest electricity tariff was EGP 1.80 per kWh from January to July and EGP 2.33 per kWh from August to December.

Figure 1: Electricity tariff tiers for commercial

Commercial Tariff	
Consumption Bracket (kWh/month)	Tariff (Piastres/kWh)
From 0 – 100	85.0
From 101 – 250	168.0
From 251 – 600	220.0
From 601 – 1000	227.0
More than 1000	233.0

Emission Factor

For the reported year 2024, the Grid emissions factor that was published by EEHC is 0.3803 kgCO₂/KWh.

Purchased Heating and Cooling

KFH-Egypt didn't assign any separate purchase agreements for heating or cooling during the reporting period of 2024. Its branches in commercial malls get access to the central HVAC operated by the mall's management. The HVAC consumption is part of the paid rent per agreed contracts and will be reported separately under scope 3 in the future.

Scope 2 Total Emissions

KFH-Egypt had the following Electricity consumption across its branches for the reporting period of 2024, as shown in Table 1. KFH-Egypt's total Electricity consumption is 8,448,492 KWh, which will result in the following Emissions of 3,212,961 kgCO₂e (equivalent to 3,213 tons CO₂e).

Analysis assumptions and considerations

1. Storages and archives have no area data available
2. The following branches have the following monthly data flagged by the Audit team, and we are waiting for the bank's reply (Flagged readings document): Al-Obour, Shubra Archive and Nasr City Warehouse.

Table 1: Annual consumption of all branches

	Branch location	Total KWh		Branch location	Total KWh		Branch location	Total KWh
1	Head Office - New Cairo	3,252,040	18	New Zamalek	59,237	35	El Shorouk	30,174
2	Arkan Building Administrative Offices	651,741	19	El-Gish Port-Said	30,174	36	EL-Haram	121,584
3	ALEXANDRIA Shallat	246,320	20	Damietta	93,883	37	10th of Ramadan	111,060
4	Maadi	146,747	21	Sidi Bishr	142,140	38	Shooting Club Branch	105,462
5	Minya	200,200	22	6th of October	123,424	39	Makram Ebeid	73,803
6	Tanta	121,620	23	Suez	77,200	40	Nasr City	100,408
7	EL-Mansora	122,700	24	Florida Mall (Direct Sales) Administrative Office	173,712	41	Haram Warehouse	2,086
8	Heliopolis	117,620	25	Al-Mirghani	124,741	42	Sharm El-Sheikh - Naama Bay	66,004
9	Mohandessin	146,231	26	Hurghada	110,208	43	Nile City	30,174
10	Dokki	168,100	27	Shooting .1	41,634	44	TEDA Ain Sokhna	80,800
11	Downtown	144,567	28	Shooting .1	40,254	45	Zamalek	5,432
12	Shobra	156,187	29	Shooting .2	47,209	46	Lasilky	56,986
13	Port-Said ElGomhoria	123,208	30	Shooting .2	52,725	47	Al Rehab	21,475
14	WaterWay	120,696	31	Sheraton	77,938	48	Al Rehab	50,248
15	Louran	100,860	32	Madinaty	120,696	49	Haram DR Center	121,584
16	Assiut	106,885	33	Al-Mansheya	71,880	50	15th of May	870
17	Salah Salem	112,814	34	Shibin El Kom	2,937	51	Smouha	60,180

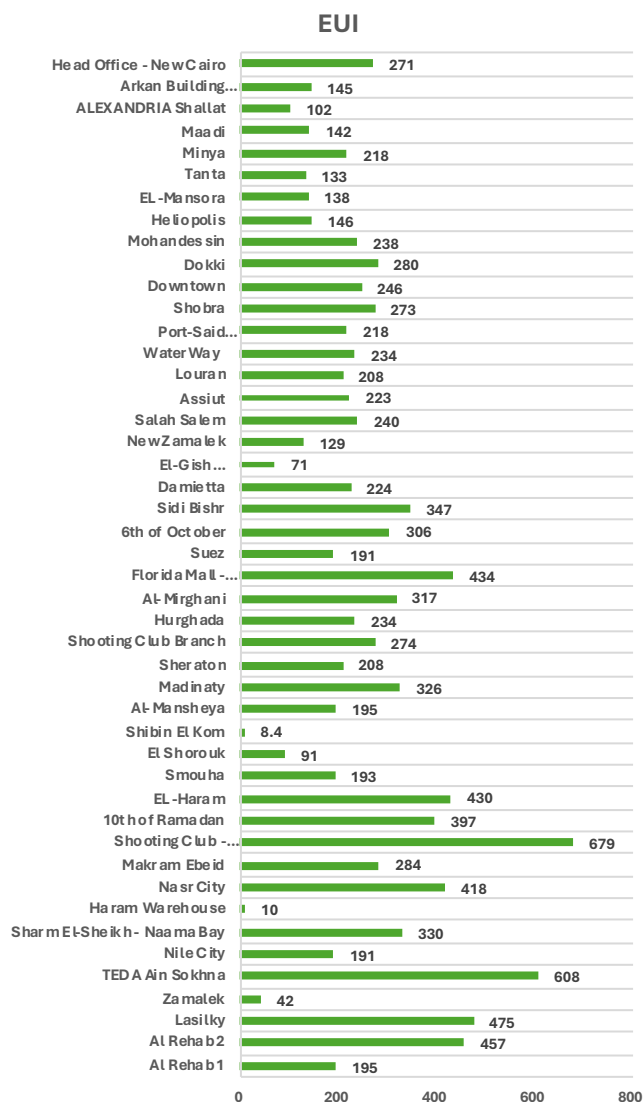


Figure 3: EUI distribution from max to min

Electricity Usage Analysis and Insights

EUI serves as the baseline for identifying data outliers on both monthly and annual scales using the Median Absolute Deviation (MAD) method. MAD is a robust statistical technique that measures the variability or dispersion within a dataset. It calculates how far individual data points typically deviate from the median. Because MAD relies on medians rather than means, it is less sensitive to outliers and non-normal distributions, making it a preferred metric in robust statistical analysis. In essence, MAD is defined as the median of the absolute deviations from the dataset’s median.

$$\text{Integrity Score}_i = \max\left(0, 1 - \frac{| \text{EUI}_i - \text{Median EUI} |}{3 \text{ MAD}}\right)$$

$$\text{MAD} = \text{median} (|x_i - \text{median} (x)|)$$

Where

- EUI = annual KWh ÷ branch area (KWh / m²)
- Median EUI across all branches with available area = 229 KWh/m²
- MAD (Median Absolute Deviation) = 84 KWh/m²

Score	Integrity Score Meaning
0.70 – 1.00	Data are reliable as consumption sits comfortably in the middle of the fleet distribution.
0.30 – 0.70	Some deviation; worth a light check (e.g., occupancy schedules, HVAC settings).
0.00 – 0.29	Outlier data; recommend investigation of metering, billing period alignment or area entry.

Table 2: Integrity metric criteria



As shown in Table 3, EUI analysis results the followings:

- Electricity Usage Intensity has an outlier value for seven branches: Nasr city, haram warehouse, Shibin El-kom, AlRehab, Lasilky, Shooting Club, and Ain Sokhna.
- Based on the reliable data the average EUI for banks is 231 KWh/m².
- According to ASHRAE Standard 100 (2018), the benchmarks for electricity consumption in banks are 154 KWh/m².
- There is a potential to decrease the electricity consumption and associated emission of scope 2 by 33%.

Branch	Area (m ²)	Consumption (KWh)	EUI (KWh/m ²)	Integrity Score	Comment
Damietta	418	93,883	224	0.981	reliable
WaterWay	515	120,696	234	0.980	reliable
Assiut	479	106,885	223	0.976	reliable
Mohandessin	614	146,231	238	0.964	reliable
Salah Salem	470	112,814	240	0.957	reliable
Minya	917	200,200	218	0.957	reliable
Port-Said ElGomhoria	565	123,208	218	0.955	reliable
Downtown	587	144,567	246	0.933	reliable
Sheraton	375	77,938	208	0.916	reliable
Louran	485	100,860	208	0.915	reliable
Al-Mansheya	368	71,880	195	0.865	reliable
Al Rehab 1	110	21,475	195	0.865	reliable
Smouha	313	60,180	193	0.854	reliable
Suez	403	77,200	191	0.850	reliable
Nile City	158	30,174	191	0.848	reliable
Head Office - New Cairo	12,000	3,252,040	271	0.835	reliable
Shobra	572	156,187	273	0.826	reliable
Shooting Club Branch	384	105,462	274	0.821	reliable
Dokki	601	168,100	280	0.801	reliable
Hurghada	392	110,208	234	0.796	reliable
Makram Ebeid	260	73,803	284	0.784	reliable

Table 3: Summary of EUI of all branches

Branch	Area (m ²)	Consumption (KWh)	EUI (KWh/m ²)	Integrity Score	Comment
6th of October	404	123,424	306	0.698	some deviation
Heliopolis	806	117,620	146	0.670	some deviation
Arkan Building Administrative Offices	4,510	651,741	145	0.664	some deviation
Maadi	1,034	146,747	142	0.654	some deviation
Al-Mirghani	394	124,741	317	0.653	some deviation
EL-Mansora	886	122,700	138	0.640	some deviation
Tanta	916	121,620	133	0.617	some deviation
Madinaty	370	120,696	326	0.616	some deviation
New Zamalek	459	59,237	129	0.603	some deviation
Sharm El-Sheikh - Naama Bay	200	66,004	330	0.601	some deviation
Sidi Bishr	410	142,140	347	0.535	some deviation
ALEXANDRIA Shallat	2,417	246,320	102	0.495	some deviation
El Shorouk	330	30,174	91	0.453	some deviation
El-Gish Port-Said	425	30,174	71	0.372	some deviation
10th of Ramadan	280	111,060	397	0.336	some deviation
Zamalek	130	5,432	42	0.256	Outlier
Nasr City	240	92,041	418	0.254	Outlier
EL-Haram	283	121,584	430	0.204	Outlier
Florida Mall - Administrative Office	400	173,712	434	0.187	Outlier
Haram Warehouse	216	2,086	10	0.129	Outlier
Shibin El Kom	350	2,937	8	0.124	Outlier
Al Rehab 2	110	50,248	457	0.098	Outlier
Lasilky	120	56,986	475	0.026	Outlier

The heat-map shows below, highlights the following:

- Row represents branches while columns represent each month of 2024.
- The graphs describe the branch electricity use compared to its average range.
- Deep red mark highest month of the year for that branch, deep blue marks as the lowest, and intermediate shades scale proportionally between those two points.
- The graphs allow to visualise and to spot the seasonal peaks, troughs, or data gaps branch-by-branch without the larger consumers overshadowing the small ones as the colour scale is recalibrated per each row.
- The KWh figures printed inside each cell provide the exact values behind the colours.

Branch	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Head Office - New Cairo	218,901	184,279	53,898	286,468	356,759	350,853	341,558	390,073	370,417	283,495	230,435	184,904
Arkan Building Administrative Offices	49,167	51,715	47,556	50,938	52,505	55,481	61,062	62,149	59,693	54,405	58,077	48,993
ALEXANDRIA Shallat	13,760	11,280	13,040	15,840	19,040	27,520	33,200	31,120	33,680	18,240	17,120	12,480
Maadi	10,722	8,714	8,982	9,851	14,007	12,884	14,561	17,712	17,676	13,571	10,484	7,583
Minya	8,450	11,700	9,150	15,650	17,250	21,000	27,400	23,550	26,950	16,700	11,400	11,000
Tanta	8,940	7,260	6,840	8,040	7,500	8,700	12,480	15,420	17,580	10,320	11,220	7,320
EL-Mansora	9,400	7,400	6,500	8,600	8,600	13,200	12,900	19,900	14,200	12,400	5,500	4,100
Heliopolis	6,520	4,560	5,300	8,840	8,920	10,840	17,520	13,860	13,000	12,000	10,220	6,040
Mohandessin	8,631	7,793	6,960	8,746	9,244	20,328	13,824	20,258	16,675	14,777	11,232	7,763
Dokki	8,210	6,653	5,516	9,276	14,932	19,047	19,630	26,917	22,047	19,706	9,504	6,662
Downtown	8,655	7,709	8,194	8,805	9,206	12,054	17,256	16,885	17,560	15,142	13,603	9,498
Shobra	80	80	1,591	10,203	15,780	19,256	20,487	24,435	19,148	17,719	14,969	12,439
Port-Said ElGomhoria	5,937	5,686	6,822	9,802	10,643	12,144	13,039	16,525	14,967	11,313	9,524	6,806
WaterWay	11,111	11,111	11,111	11,111	11,111	11,111	11,111	8,584	8,584	8,584	8,584	8,584
Louran	6,780	6,180	4,590	5,880	8,130	10,200	12,120	13,080	11,550	10,620	6,900	4,830
Assiut	4,485	5,330	4,325	5,420	7,175	11,450	16,650	17,450	12,500	8,900	8,625	4,575
Salah Salem	6,577	7,511	7,495	8,623	10,763	14,579	11,572	12,518	12,314	6,943	8,211	5,708
New Zamalek	5,556	5,000	5,556	5,000	5,556	5,556	5,556	4,292	4,292	4,292	4,292	4,292
El-Gish Port-Said	2,778	2,778	2,778	2,778	2,778	2,778	2,778	2,146	2,146	2,146	2,146	2,146
Damietta	2,246	9,902	3,135	9,900	5,150	6,200	9,800	14,272	12,735	6,955	8,964	4,624
Sidi Bishr	8,670	8,820	7,350	9,510	11,700	13,740	17,610	17,580	14,400	13,590	9,870	9,300
6th of October	5,743	5,916	6,399	9,249	13,254	11,307	15,232	14,924	14,245	12,000	8,374	6,781
Suez	3,600	4,560	4,000	4,720	5,720	7,280	8,040	10,680	11,840	9,160	3,880	3,720
Florida Mall (Direct Sales) Administrative Office	2,808	2,783	4,066	5,330	7,152	10,325	87,022	14,202	12,852	15,772	6,127	5,273
Al-Mirghani	4,318	7,774	7,628	9,158	10,467	15,445	11,302	11,257	17,117	13,228	9,739	7,308
Hurghada	7,200	6,920	6,680	8,880	8,240	9,600	11,640	12,800	9,920	9,960	9,184	9,184
Shooting Club Branch	6,002	5,652	6,302	650	9,306	15,264	12,182	14,042	13,676	9,510	7,222	5,654
Sheraton	4,488	4,215	4,474	6,377	7,731	8,266	10,049	2,889	8,956	9,122	6,305	5,066
Madīnaty	11,111	11,111	11,111	11,111	11,111	11,111	11,111	8,584	8,584	8,584	8,584	8,584
Al-Mansheya	3,720	3,240	4,710	4,650	3,990	9,990	7,380	8,610	9,270	6,150	6,090	4,080
Shibin El Kom	0	0	30	55	680	839	937	115	94	80	57	51
El Shorouk	2,778	2,778	2,778	2,778	2,778	2,778	2,778	2,146	2,146	2,146	2,146	2,146
Smouha	1,200	1,230	600	3,960	4,170	4,380	13,140	9,240	8,430	5,880	3,900	4,050
EL-Haram	7,591	8,115	6,803	8,045	9,879	12,008	17,401	9,406	13,335	11,207	8,626	9,168
10th of Ramadan	5,700	6,060	6,300	7,080	9,360	13,200	12,660	10,740	13,140	10,560	9,120	7,140
Shooting .1	3,039	3,123	3,085	3,242	3,039	3,407	3,075	3,360	3,776	3,066	3,066	6,356
Makram Ebeid	4,177	3,525	3,800	275	6,843	7,735	9,027	9,751	9,462	8,141	6,097	4,970
Nasr City	500	10,079	3,296	11,347	6,712	8,367	22,124	8,812	13,273	7,639	5,319	2,940
Haram Warehouse	153	153	153	153	153	139	219	217	219	201	170	156
Sharm El-Sheikh - Naama Bay	5,556	5,556	5,556	7,778	5,556	5,556	5,556	6,009	4,292	4,292	4,292	6,009
Nile City	2,778	2,778	2,778	2,778	2,778	2,778	2,778	2,146	2,146	2,146	2,146	2,146
TEDA Ain Sokhna	833	7,222	8,333	8,333	8,333	7,222	8,333	6,438	6,438	6,438	6,438	6,438
Zamalek	336	384	332	386	486	580	550	632	532	468	416	330
Lasilkay	3,210	3,210	5,669	2,458	5,669	5,649	9,752	5,508	5,508	3,451	3,451	3,451
Al Rehab	412	370	459	539	1,188	2,321	2,292	2,908	5,706	3,042	1,859	379
Al Rehab	5,556	5,556	3,333	5,556	3,333	5,556	3,333	4,292	2,575	4,292	2,575	4,292

Table 3: Summary of EUI of all branches

Emissions Reduction Strategies

Overview of the Bank's Carbon Management and Reduction Strategy

KFH-Egypt recognizes that addressing climate change requires not only understanding its greenhouse gas (GHG) footprint but also implementing meaningful strategies to reduce it. While the bank is still in the process of formalizing its carbon management strategy, efforts are already underway to reduce operational emissions through increased energy efficiency, clean energy adoption, and sustainable business practices.

Initially, the focus is on **enhancing operational efficiency**, a practical and impactful starting point as the bank builds the infrastructure needed for broader decarbonization efforts. In parallel, KFH-Egypt is laying the groundwork to eventually expand its climate ambition to include **decarbonizing financial products and services**, which will require a strengthened reporting system and enhanced institutional capacity.

Planned Initiatives for Emission Reduction

KFH-Egypt is currently developing a comprehensive roadmap that will guide the bank toward reducing its environmental impact across multiple operational dimensions. Planned initiatives include both short- and long-term actions:

Energy Efficiency and Renewable Energy

- Expand Renewable Energy Use
 - Increase the deployment of solar panels across branches.
 - Explore procuring Renewable Energy Certificates (RECs) to offset non-renewable electricity use.
- Optimize Energy Consumption
 - Implement Building Management Systems (BMS) for real-time energy monitoring.
 - Conduct regular energy audits to identify and correct inefficiencies.
 - Promote staff awareness campaigns on energy conservation practices.
- Upgrade Infrastructure and Equipment
 - Replace aging systems with energy-efficient lighting, HVAC, and IT equipment.

Sustainable Transportation

- Gradually transition the vehicle fleet to hybrid and electric vehicles.
- Explore installation of EV charging stations at strategic branches.
- Optimize logistics and delivery routes to reduce travel-related emissions.
- Encourage employees to adopt alternative transportation (carpooling, public transit, cycling).

Waste Management

- Implement branch-level recycling programs for paper, plastic, and electronic waste.
- Minimize the use of single-use plastics in daily operations.
- Promote paperless workflows through digital document systems and e-communications.

Employee Engagement and Culture

- Conduct internal training programs on environmental sustainability.
- Run campaigns and recognition programs to encourage sustainable behaviors across all levels of staff.

Continuous Improvement and Monitoring

- Conduct annual carbon footprint assessments to track progress.
- Analyze emissions data to refine reduction strategies.
- Regularly review and update the roadmap based on performance data and evolving best practices.
- Collaborate with suppliers and stakeholders to promote sustainability across the value chain.

Ongoing and Future Actions

- Current efforts include solar panel installation, LED lighting in 75% of branches, optimized HVAC systems, and flexible telecommuting policies.
- Planned for 2026: expanding electric/hybrid fleet vehicles and rolling out waste recycling programs at the branch level.

Reduction Targets and Timelines

KFH-Egypt has not yet finalized quantitative emission reduction targets. However, the insights and learnings from this first GHG inventory will inform the development of evidence-based targets in future reporting cycles. The bank is committed to establishing measurable goals aligned with international best practices and national climate priorities.

Data Quality and Uncertainty Management

Explanation of Data Sources and Quality Assurance Measures

To ensure the reliability of this GHG inventory, KFH-Egypt followed a multi-tiered data validation process. Activity data—such as electricity consumption, fuel usage, and refrigerant losses—were sourced from respective departments. These datasets were first reviewed through the bank's standard internal control systems, then validated by the Sustainability Department as a second layer of review. Finally, the data were reviewed by an external consultant as a third-party checkpoint, where any inconsistencies or gaps were investigated and resolved or flagged for future data and process improvement.

This multi-stage validation approach was designed to increase data confidence and reduce the risk of material errors.

Steps Taken to Minimize Errors in GHG Data Collection and Reporting

To enhance accuracy and consistency, the following practices were implemented:

- Use of standardized data request templates for uniformity across departments.
- Cross-verification of financial data (e.g., utility bills and fuel invoices) with average government prices to estimate physical activity (KWh, liters).
- Application of vetted and published emission factors.
- Clear documentation of assumptions, particularly in cases where direct measurement was not possible.

These steps provided a solid baseline for first-year reporting while enabling structured review and traceability.

Uncertainty and Limitations in the Inventory

Despite these measures, several limitations were identified during the data collection and calculation process:

- Electricity consumption data were divided in 2 tiers; the first one used direct energy consumption in KWh and the second tier was derived from cost data rather than direct metering, requiring conversion using the commercial electricity tariff.
- Grid emission factors were drawn from national sources, but inconsistencies exist among available data sets.
- Cars Fuel usage had allocation challenges, especially for shared fleet assets not clearly assigned to a specific branch.
- Generator specifications (e.g., fuel efficiency or rated capacity) were not consistently available, leading to potential over- or underestimation of combustion-related emissions.
- Refrigerant logs were available but not always standardized across all branches.
- Some leased branches fall outside KFH-Egypt operational control and are therefore excluded per GHG Protocol rules.

These limitations are common in inventories and are expected to be addressed progressively in future reporting cycles.

To provide transparency on the level of confidence associated with different data sources, the table below summarizes the **uncertainty classification by emission source**:

Emission Source	Scope	Data Source	Estimation Method	Uncertainty Level	Comments
Fuel Combustion (Generators, Vehicles)	Scope 1	Fuel invoices	Actual quantities reported	High	Variability in fuel pricing and incomplete vehicle-level allocation
Electricity Consumption	Scope 2	Utility bills	Estimated KWh based on commercial rates	Medium to High	KWh not directly metered; conversion introduces estimation variability
Refrigerant Leakage	Scope 1	Maintenance logs	Actual quantities reported	Medium to High	Data available but may lack detailed tracking at all branches
Company-Owned Vehicles	Scope 1	Fleet records	Actual quantities reported	Medium to High	Difficulty assigning fuel use to specific branches
Leased Branches (non-controlled operations)	Excluded	N/A	N/A	N/A	Excluded per operational control approach
Scope 3 Emissions	Excluded	N/A	N/A	N/A	Not covered in this inventory; prioritized for future inclusion

Uncertainty Classification Key:

- Low – High confidence in accuracy and completeness; directly measured or consistently reported data.
- Medium – Some estimation or data gaps; conservative assumptions applied.
- High – Significant reliance on proxies or assumptions; limited access to original data.

Approach to Managing Uncertainty

KFH-Egypt has adopted a transparent and pragmatic approach to managing uncertainty by:

- Clearly documenting all estimation methodologies and assumptions.
- Flagging estimated or proxy data where actual data were not available.
- Clearly stating data quality issues in the relevant sections of the report (e.g., Scope 2 discussion on electricity calculations).
- Applying conservative assumptions to avoid underreporting emissions.
- Highlighting uncertainty levels by emission source.
- Regularly engaging with internal stakeholders to close data gaps and validate source quality.

This approach provides a credible foundation while allowing for iterative improvements in future reporting cycles.

Planned Improvements for Future Data Quality

To enhance data quality and reduce uncertainty in future inventories, KFH-Egypt intends to:

- Automate data collection to minimize human error and standardize inputs.
- Establish a centralized database to store historical activity data for consistency and recalculations, particularly when a baseline year is established that can support recalculation of baseline years if needed.
- Utilize multiple emission factor sources (e.g., IPCC, national authorities, international energy agencies) to build resilience into the inventory methodology. and ensure continuity in case of publication changes by source agencies.
- Digitize metering infrastructure and explore branch-level dashboards for energy use.
- Train relevant staff across departments on sustainability reporting basics to build internal capacity and ensure consistency across future reports.
- Develop internal data reporting guidelines to improve consistency and reduce variation across departments.

These planned improvements reflect KFH-Egypt commitment to enhancing the robustness, transparency, and reliability of its GHG inventory over time.

Appendix

Appendix 1

Glossary of Key Terms – 2024 GHG Inventory & Assurance

Term	Definition
Activity Data	Quantitative measure of a process that results in GHG emissions (e.g., litres of diesel, KWh of electricity).
Appendix	Supplementary section containing detailed data, calculations, or evidence not included in the main body of the report.
AR6 (IPCC Sixth Assessment Report)	The latest IPCC assessment cycle providing updated global warming potentials (GWPs) for converting gases to CO ₂ equivalent.
Assurance Engagement	Independent evaluation of non financial information, conducted here under ISAE 3000 (Revised) and ISO 14064 3.
Baseline	A reference year against which future emission reductions are measured; not yet established for KFH-Egypt.
CO₂ equivalent (CO₂e)	A metric expressing the impact of different GHGs in terms of the amount of CO ₂ with the same global warming potential.
Disclaimer of Conclusion	Assurance opinion stating that no conclusion can be expressed due to pervasive scope limitations.
EEHC	Egyptian Electricity Holding Company – the state owned holding company overseeing generation, the Egyptian Electricity Transmission Company (EETC), and nine distribution companies across Egypt.
EgyptERA	Egyptian Electric Utility and Consumer Protection Regulatory Agency – the national electricity regulator; issues licences, sets tariffs, and publishes the monthly and annual grid emission factor used for Scope 2 calculations.
Emission Factor (EF)	Ratio that converts activity data into GHG emissions (e.g., t CO ₂ e per KWh).
Emphasis of Matter Paragraph	Auditor's clause drawing attention to a particular disclosure without modifying the overall conclusion.
GHG Protocol – Corporate Standard	Widely used framework for accounting and reporting organisational GHG emissions.
Grid Emission Factor	Average GHG intensity of electricity supplied by the national grid (0.377 t CO ₂ e/MWh for Egypt 2024).
Independent Limited Assurance	Moderate level of assurance that the statement is free from material mis statement, expressed as "nothing has come to our attention...".
ISAE 3000 (Revised)	International Standard on Assurance Engagements for non financial information.
ISO 14064 3 :2019	International standard specifying requirements for the verification and validation of GHG statements.

Term	Definition
Location Based Method	Scope 2 calculation approach using the average grid EF where electricity is consumed.
Materiality Threshold	Quantitative or qualitative boundary beyond which errors or omissions could influence stakeholder decisions (5 % of combined Scope 1 + 2 for this report).
Mobile Combustion	Fuel burned in company owned vehicles.
Operational Control	Boundary approach where an organisation accounts for 100 % of emissions from operations it controls.
Outlier	Data point that deviates markedly from others and may indicate error or exceptional circumstance.
Prepaid Meter	Electricity meter paid in advance, often lacking detailed monthly invoices; poses data collection challenges.
Qualified Conclusion	Assurance opinion modified because of a material, but not pervasive, mis statement or limitation.
Refrigerant Losses	Emissions from leakage of cooling gases in HVAC or refrigeration equipment.
Scope 1 Emissions	Direct GHG emissions from sources owned or controlled by the organisation (e.g., fuel combustion, refrigerant leakage).
Scope 2 Emissions	Indirect GHG emissions from the generation of purchased electricity consumed by the organisation.
Site Visit	On location inspection to verify data sources and controls.
Stationary Combustion	Fuel burned in fixed equipment such as boilers or generators.
Uncertainty	Degree of unknown deviation between a reported value and the true value.
Uncertainty Heat Map	Visual tool ranking data sources by uncertainty magnitude and confidence level.

Appendix 2

Activity Data

1. Electricity
2. Mobile combustion
3. Stationary Combustion
4. Refrigerant leaks



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