

# CARBON FOOTPRINT REPORT 2022

# ABOUT THE BANK

## ARAB INVESTMENT BANK

Established in 1974 under the supervision of the Central Bank of Egypt, aiBank began its operations in 1978 with an initial capital of USD 40 million, subsequently growing to EGP 1,987 million in 2020. Following an acquisition deal and decisions made during the October 10, 2021 general assembly, the bank received approval to increase its paid-up capital to EGP 5.3 billion. The new ownership structure accommodates both new and existing investors; EFG Holding S.A.E: 51%; Egypt's Financial Services and Digital Transformation Sub-Fund: 25%; and National Investment Bank: 24%

aiBank provides a full spectrum of services, including corporate and retail banking, investment, treasury services, and Sharia-compliant Islamic banking overseen by a Sharia-compliant body. The bank is actively involved in loan syndication services for significant national projects, contributing to economic growth. Recognizing the importance of small and medium enterprises (SMEs) in Egypt's development, aiBank actively supports their growth.

With a national presence through 33 branches, aiBank is committed to expansion, opening new branches and ATMs strategically. Emphasizing customer satisfaction, the bank strives to deliver unique and competitive services. Continuous investments in technology systems and human capital reflect aiBank's dedication to enhancing overall banking services.



# ABOUT THIS REPORT

This report details the carbon footprint generated by aiBank's headquarters in 2022 and covers Scope 1, 2 and relevant activities in Scope 3. This is aiBank's second assessment of greenhouse gas (GHG) emissions, making 2021 the base year to which all the activities in forthcoming years are compared to and referenced. All the data collected and analyzed within this report follow the World Resources Institute Greenhouse Gas Protocol principles of relevance, completeness, consistency, transparency, and accuracy.

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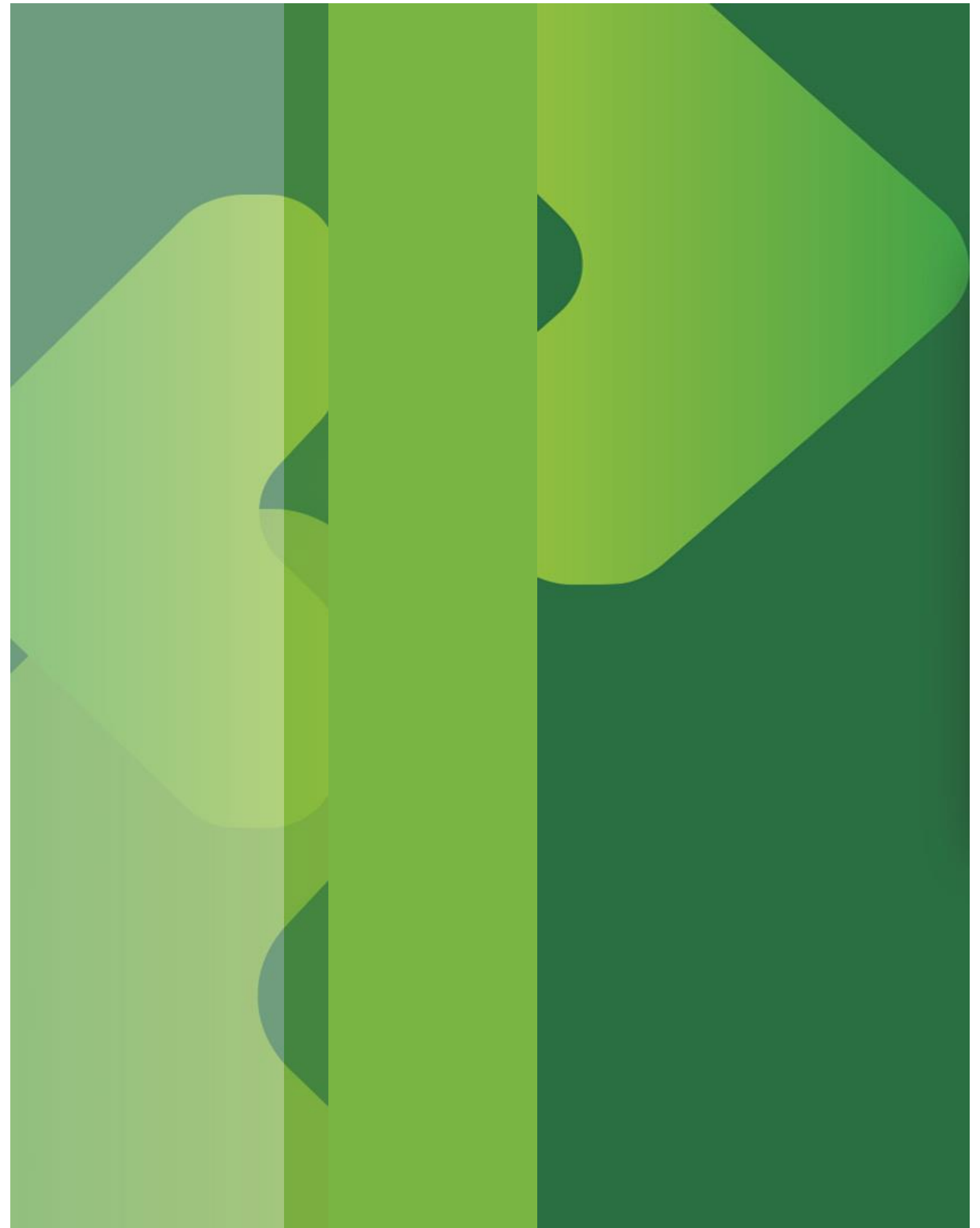
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ANNEX



# ABBREVIATIONS & ACRONYMS

aiB	Arab Investment Bank
ATM	Automated teller machine
BY	Base year
CFP	Carbon Footprint
CO <sub>2e</sub>	Carbon Dioxide equivalent
DEFRA	Department for Environment, Food & Rural Affairs
EF	Emission Factor
Egp	Egyptian pound
ERA	Egyptian Electric Utility and Consumer Protection Regulatory Agency
FTE	Full-time Equivalent
GHG	Greenhouse Gases
GWP	Global Warming Potential
HVAC	Heating, ventilating, and air conditioning;
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standard Organization
kg	Kilograms
kWh	Kilowatt hour
L	Litre
LED	Light-emitting diode
m <sup>2</sup>	Square meter
m <sup>3</sup>	Cubic meter
t	tons
mtCO <sub>2e</sub>	Metric tons Carbon Dioxide equivalent
MWh	Megawatt hour
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute
WTT	Well-to-Tank



# EXECUTIVE SUMMARY

The banking sector stands at the forefront of combating climate change, wielding substantial influence over financial resources and investment decisions. Banks, as key players, possess the power to mobilize capital and allocate funds towards initiatives that champion environmental conservation, renewable energy, and sustainable development.

In recognizing its role, aiBank acknowledges the responsibility to assess and mitigate its environmental impact, as evident in the carbon footprint report. This demonstrates aiBank's commitment to environmental stewardship, transparency, and accountability, recognizing that sustainability in banking extends beyond financial activities to include environmental considerations in daily operations.

By adopting a proactive stance, aiBank aligns itself with the global movement towards a low-carbon economy, positioning itself as a responsible institution within the financial sector. It's important to note that this report specifically covers the headquarters; however, aiBank aims to broaden the scope of its reporting in the coming years, incorporating more branches for a more comprehensive assessment. This report serves as a foundational step in aiBank's ongoing commitment to advancing sustainability practices across its operations.

In this context, aiBank presents its second carbon footprint report, with the previous year, 2021, serving as the baseline for assessment. The development of this report follows established protocols and standards, including the Greenhouse Gas Protocol Guidelines, the 2006 IPCC Guidelines for Greenhouse Gas Inventories (with 2019 Refinements), and the ISO 14064-1:2018 Standards. This commitment to recognized methodologies ensures the accuracy, reliability, and transparency of our carbon footprint assessment, underscoring our dedication to robust environmental reporting practices.



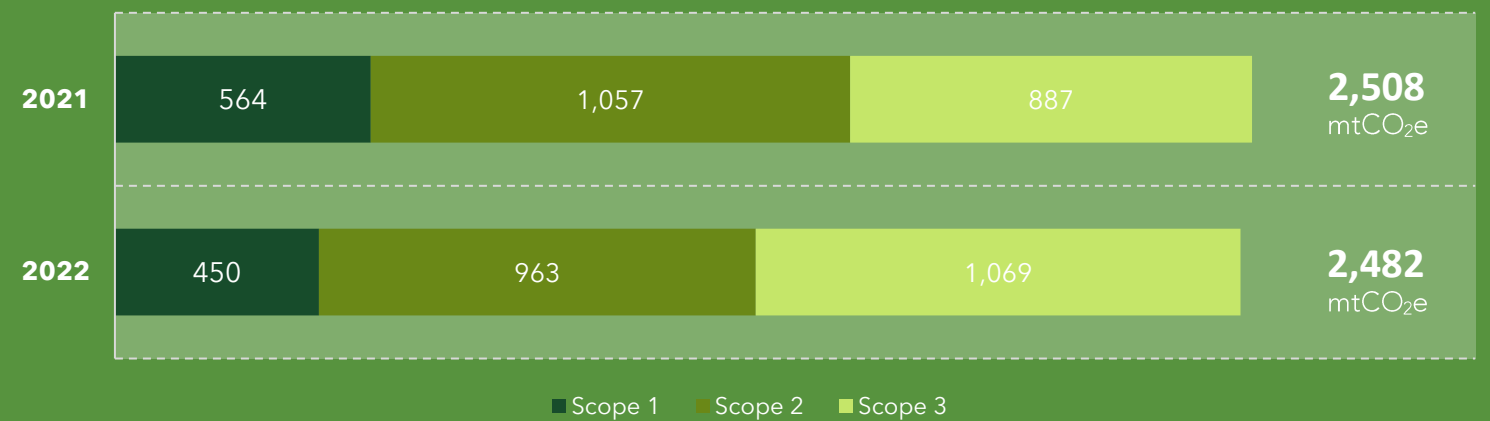
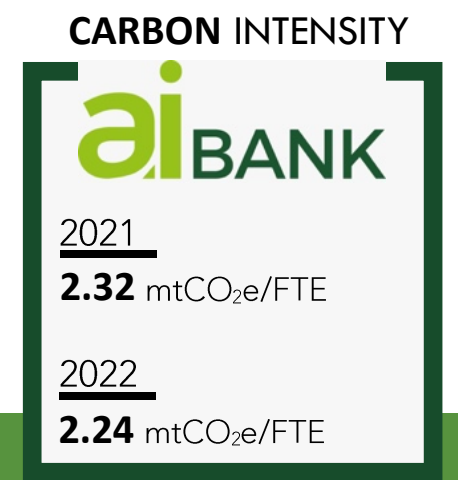
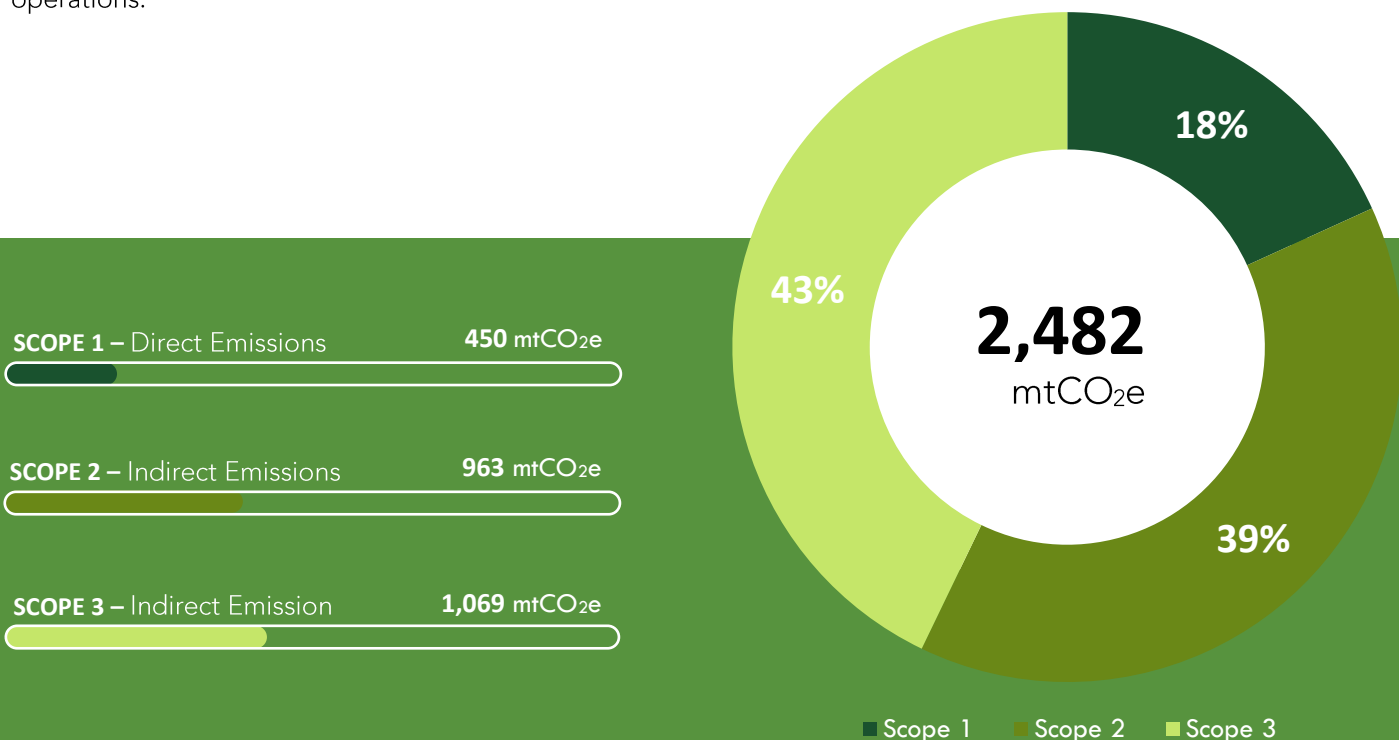
The reporting period spans from **January 1<sup>st</sup>, 2022**, to **December 31<sup>st</sup>, 2022**, encompassing Scope 1, 2, and fundamental activities contributing to Scope 3 emissions.

The total emissions for aiBank's HQ for the year 2022 are **2,482 mtCO<sub>2</sub>e**. Total Scope 1 direct emissions amount to **450 mtCO<sub>2</sub>e**, representing **18%** of total GHG emissions. Total Scope 2 indirect emissions which include only purchased electricity, amount to **963 mtCO<sub>2</sub>e**, representing **39%** of total GHG emissions. Total Scope 3 indirect emissions amount to **1,069 mtCO<sub>2</sub>e**, which constitutes **43%** of total GHG emissions.

In the current reporting period, aiBank has attained a carbon intensity of **2.24 mtCO<sub>2</sub>e per Full-Time Equivalent (FTE)** for Scope 1 + 2 emissions. This reflects a notable **3.4% decrease** when compared to the carbon intensity in the base year. Additionally, in terms of carbon intensity per square meter (m<sup>2</sup>) for Scope 1 + 2 emissions, it stands at **0.14 mtCO<sub>2</sub>e/m<sup>2</sup>**, reflecting a **12.5% decrease** from the base year. This shows the bank's commitment to reduce its GHG emissions.

Electricity intensity is one of the frequently employed metrics for international performance assessment. aiBank's electricity intensity has improved, with a current value of **201.9 kWh/m<sup>2</sup>** compared to last year's **215.6 kWh/m<sup>2</sup>**. Although it still falls within the D scoring, the decrease indicates enhanced efficiency and lower electricity intensity compared to the preceding year.

Leveraging the insights gained from the carbon footprint report, aiBank has strategically formulated a comprehensive decarbonization plan. This plan goes beyond mere data analysis; it serves as a proactive roadmap aimed at effectively mitigating the bank's overall carbon footprint and substantially reducing greenhouse gas (GHG) emissions. By embracing industry best practices, aiBank positions itself as a forward-thinking leader actively contributing to the transition toward a low-carbon economy. This commitment extends beyond meeting regulatory requirements, signaling the bank's dedication to environmental stewardship and aligning with global sustainability objectives. The decarbonization plan embodies aiBank's pledge to continuously evolve its practices, ensuring a sustainable and resilient future.





# INTRODUCTION

In the midst of the escalating climate crisis, the banking sector assumes a pivotal role in the global pursuit of sustainable and climate-resilient economies. As stewards of financial resources and decision-makers in capital allocation, banks wield transformative influence over the trajectory of climate change. This introduction delves into the multifaceted role of the banking sector in addressing climate change and spearheading initiatives to curtail greenhouse gas (GHG) emissions.

At the heart of the banking sector's role lies the power to channel financial resources strategically. Banks have the capacity to become key drivers of sustainability by directing capital toward initiatives that champion environmental conservation, renewable energy, and low-carbon technologies. Through responsible financing, banks can act as catalysts for the transition to a greener and more resilient future.

Climate change presents a spectrum of risks to businesses and economies. Banks, as risk managers, are increasingly integrating climate risk assessments into their operations. By identifying, assessing, and mitigating climate-related risks, banks contribute not only to the safeguarding of their investments but also to the overall resilience of the global financial system.

Banks possess a unique platform for advocacy and collaborative leadership. Engaging with industry peers, policymakers, and stakeholders, they can advocate for policies that promote sustainability. Active participation in global initiatives and forums dedicated to climate action positions banks as leaders in the collective effort to combat climate change.

Beyond external influence, banks are instigators of change within their own operations. Embracing sustainable practices internally—such as reducing energy consumption, adopting green technologies, and fostering a culture of environmental responsibility—banks set the standard for holistic sustainability that extends beyond financial portfolios.

Emerging collaborative frameworks, such as the Principles for Responsible Banking and the Task Force on Climate-related Financial Disclosures (TCFD), have become instrumental in steering and championing sustainable practices within the banking sector.

Furthermore, the recent inclusion of the Central Bank of Egypt (CBE) into the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) signifies a significant global stride. This international alliance not only resonates with Egypt's climate strategy but also underscores its dedication to embracing optimal approaches within the realm of the green economy. The banking sector in Egypt is well-positioned to exert considerable influence in advancing these initiatives and ensuring their triumphant fruition.

Notwithstanding the commendable strides made, there remains a substantial body of work ahead. Banks grapple with the intricate task of accurately gauging and disclosing their carbon footprints, a critical element in fostering transparency regarding their sustainability endeavors. The following are the most common challenges:

**Resource Constraints:** Smaller banks or those with fewer resources may face challenges in allocating the necessary resources, both in terms of expertise and technology, to establish robust carbon reporting systems.

**Diverse Operations and Portfolios:** Banks typically have diverse operations, including retail and commercial banking, investment activities, and asset management. Each of these areas has unique challenges in terms of data collection and measurement. Harmonizing methodologies across different business lines can be complex.

**Data Accuracy and Availability:** Ensuring the accuracy of data related to energy consumption, travel, and other relevant activities within the bank's operations can be challenging. Banks may face difficulties in obtaining precise data, especially when dealing with decentralized or multinational operations.

**Scope 3 Emissions:** Banks often encounter challenges in assessing and reporting Scope 3 emissions, which encompass indirect emissions from sources not owned or controlled by the bank. This includes emissions from client activities, investments, and financing. Gathering accurate data on these indirect emissions can be complex and requires collaboration with clients and partners.

**International Operations:** Banks with a global presence may operate in regions with varying regulations, reporting standards, and emission factors. Harmonizing data from international operations to comply with global reporting standards can be a significant challenge.

**Regulatory Compliance:** Keeping up with evolving regulatory requirements and disclosure standards related to carbon reporting poses a challenge. Banks must navigate a complex landscape of regional and international regulations, each with its own set of reporting expectations.

Effectively navigating these challenges demands a comprehensive strategy. This entails substantial investments in advanced data management systems, collaborative efforts with industry counterparts to formulate unified methodologies and reporting standards, active engagement with suppliers and stakeholders, and the seamless integration of climate risk considerations into prevailing risk management frameworks. The successful overcoming of these hurdles not only fortifies banks' capabilities in managing their carbon footprints but also positions them as active contributors to forging a more sustainable future.

# INVENTORY BOUNDARIES

In line with the Greenhouse (GHG) Protocol to accurately report on GHG emissions, an organization must first define its organizational and operational boundaries.

## ORGANIZATIONAL BOUNDARIES

When it comes to disclosing emissions, organizations often decide between two primary methods: the control approach, where emissions from operations under direct financial or operational control are reported, or the equity share approach, where emissions are reported based on the organization's equity share in these operations. In our case, we have opted for the operational control approach.

aiBank's organizational boundary is limited to the headquarters' building in Cairo, covering a gross area of 10,400 m<sup>2</sup> and accommodating 632 full-time employees.



**Area**  
10,400 m<sup>2</sup>



**Full-time Equivalent (FTE)**  
632

## REPORTING PERIOD & BASE YEAR (BY)

The reporting period for the carbon footprint assessment spans from January 1<sup>st</sup>, 2022, to December 31<sup>st</sup>, 2022. This marks the second reporting year for aiBank, with 2021 as the base year (BY). It's important to note that the base year is subject to alteration in the future should there be any changes to the organizational boundaries.

## OPERATIONAL BOUNDARIES

### MOBILE COMBUSTION

Owned vehicles



### FUGITIVE EMISSIONS

Refrigerants leakage



## SCOPE 1

Direct emissions from sources that are owned or controlled by aiBank (i.e., any owned or controlled activities that release emissions straight into the atmosphere).

### PURCHASED ENERGY

Purchased electricity



## SCOPE 2

Indirect emissions associated with the consumption of purchased electricity from a source that is not owned or controlled by aiBank.

### PURCHASED GOODS & SERVICES

Printing supplies  
Office supplies  
Water use



### FUEL AND ENERGY-RELATED ACTIVITIES

Well-to-Tank (WTT)



### WASTE GENERATED IN OPERATIONS

Solid waste disposal  
Wastewater treatment



## SCOPE 3

Emissions resulting from other activities that are not covered in Scope 1 and 2. These indirect emissions are a result of aiBank's operations but are not directly owned or controlled by it.

### BUSINESS TRAVEL

Air travel  
Hotel stays



### EMPLOYEE COMMUTING

Rented coasters  
Commuting





# OVERALL METHODOLOGY

## PROTOCOLS & STANDARDS

The carbon footprint assessment is conducted based on several international and widely applied standards, protocols, and guidelines specially developed for accounting and reporting, including but not limited to:

**The Greenhouse Gas (GHG) Protocol Guidelines:** Guidelines for the identification of emission sources and GHG that should be measured and reported. It also includes setting the boundaries for GHG emissions accountability, based on geographical, organizational, and operational limits.

- **Corporate Accounting and Reporting Standard:** provides guidance for companies to prepare their corporate-level GHG emissions.
- **Corporate Value Chain (Scope 3) Accounting and Reporting Standard**

**ISO 14064-1:2018:** Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

**2006 Intergovernmental Panel on Climate Change (IPCC):** Guidelines for Greenhouse Gas Inventories (with 2019 Refinements).



## EMISSION FACTORS

Emission factors (EF) are representing the quantity of GHGs released to the atmosphere caused by a certain activity. The emission factor is usually expressed as the carbon dioxide equivalent (CO<sub>2</sub>e) emissions generated by a unit weight, volume, distance, or duration of the activity, e.g., CO<sub>2</sub>e/liter fuel consumed, CO<sub>2</sub>e/km driven or CO<sub>2</sub>e/kWh of purchased electricity etc. The emission factors were identified based on:

- **DEFRA:** Department for Environment, Food & Rural Affairs, UK 2022
- **IPCC:** Intergovernmental Panel on Climate Change
- **Country Specific Emission Factors:** Emission factor calculated specifically for Egypt

With regards to the country specific emission factor, the electricity emission factor is derived based on the Egyptian Electric Utility and Consumer Protection Regulatory Agency (Egypt ERA) published reports of monthly data of the grid electricity, where the emission factor is based on Egypt's actual fuel mix and fuel generation. The EF used for water supply and wastewater treatment have been retrieved from DEFRA 2022 where the emission factors have been adjusted to account for Egypt's electricity EF.

## CALCULATION APPROACH

Each activity falls under a certain Scope according to the GHG Protocol Guidelines; Scope 1 (Direct emissions), Scope 2 (Indirect emissions associated with the consumption of purchased electricity) and Scope 3 (Indirect emissions) that are a consequence of the operations of the organization but are not directly owned or controlled by the reporting company. The general calculation approach for the emissions, counted in mtCO<sub>2</sub>e, is multiplying the activity data with its corresponding emission factor. When doing this, a unit analysis is performed in order to make sure the results of the emissions are obtained in the desired unit mtCO<sub>2</sub>e.

The greenhouse gas (GHG) emissions calculation approach is calculated by multiplying the activity with its equivalent emission factor based on a unit analysis to convert the emissions into the mtCO<sub>2</sub>e unit, according to the adjacent equation.

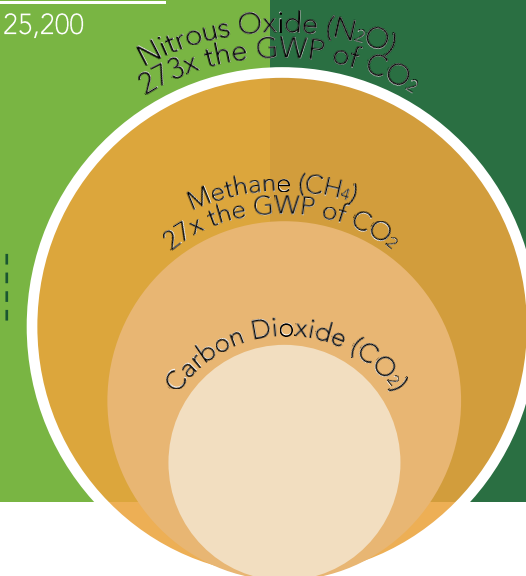
As required by best practice in organizational GHG accounting and the chosen WBCSD/WRI GHG Protocol, all seven Kyoto Protocol greenhouse gasses have been included in the assessment where applicable and material.

Global warming potentials (GWPs) are factors describing the radiative forcing impact of one unit of a specific greenhouse gas (e.g. methane) relative to one unit of carbon dioxide. They are used in GHG accounting to convert individual greenhouse gas emissions to a standardized unit for comparison; carbon dioxide equivalent (CO<sub>2</sub>e).

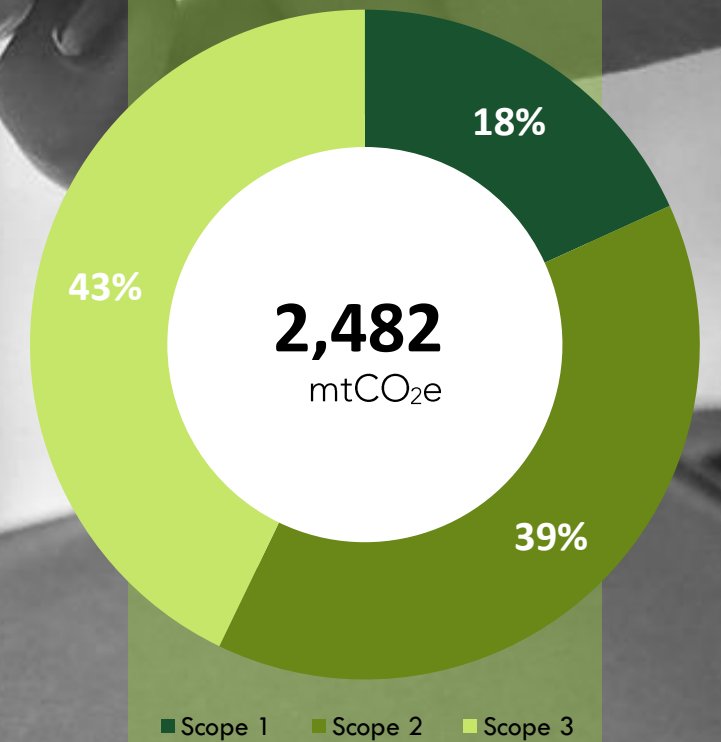
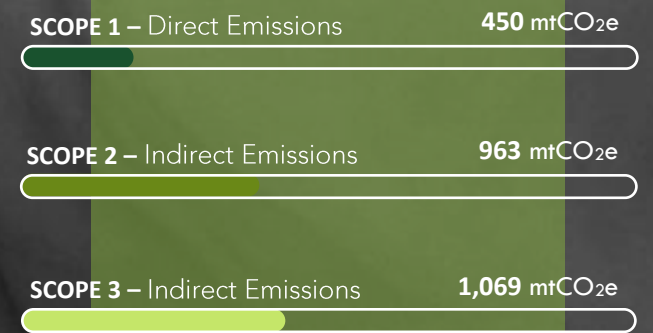
aiBank applied 100-year GWPs to all emissions data in this inventory in order to calculate total emissions, in metric tons carbon dioxide equivalent (mtCO<sub>2</sub>e). Global warming potential values were sourced from the Intergovernmental Panel on Climate Change's (IPCC) sixth Assessment Report (AR6 2021), the most recent IPCC report available at the time of assessment. GHGs stated in the Kyoto Protocol and their respective GWPs are listed in the adjacent table.

Greenhouse Gas	100-Year GWP
Carbon dioxide (CO <sub>2</sub> )	1
Methane (CH <sub>4</sub> )	27
Nitrous oxide (N <sub>2</sub> O)	273
Hydrofluorocarbons (HFCs)	124 – 14,800
Perfluorocarbons (PFCs)	7,390 – 12,200
Nitrogen trifluoride (NF <sub>3</sub> )	17,400
Sulphur hexafluoride (SF <sub>6</sub> )	25,200

$$\begin{array}{l}
 \text{Activity Data} \quad | \text{A} | \\
 \text{[unit]} \quad \times \\
 \text{Emission Factor} \quad | \text{EF} | \\
 \text{[mtCO}_2\text{e/unit]} \quad = \\
 \text{GHG Emissions} \quad | \text{E} | \\
 \text{[mtCO}_2\text{e]}
 \end{array}$$



# CARBON FOOTPRINT RESULTS





# SCOPE 1 DIRECT EMISSIONS

## MOBILE COMBUSTION

**291** mtCO<sub>2e</sub>

### Owned vehicles fuel burning

Emissions attributed to the direct fuel consumption of aiBank's owned vehicles during the reporting period amounted to **291 mtCO<sub>2e</sub>**. The total petrol fuel consumption was **124,400 liters**. Specifically, the consumption of **117,900 liters** of Petrol 92 contributed to approximately **276 mtCO<sub>2e</sub>**, while the consumption of **6,500 liters** of Petrol 95 resulted in emissions of around **15 mtCO<sub>2e</sub>**.



## FUGITIVE EMISSIONS

**159** mtCO<sub>2e</sub>

### Refrigerants leakage

Refrigerants play a vital role in cooling spaces through refrigeration cycles.

The utilized refrigerants included "R407A" and "R22". Over the course of the 2022 reporting period, a total of **40.5 kg** of "R22" was used, which led to approximately **73 mtCO<sub>2e</sub>** in direct emissions. In addition, **40.5 kg** of refrigerant type "R407A" was used, which led to approximately **86 mtCO<sub>2e</sub>** in direct emissions.

# SCOPE 2 INDIRECT EMISSIONS



## PURCHASED ENERGY

**963** mtCO<sub>2e</sub>

### Purchased electricity

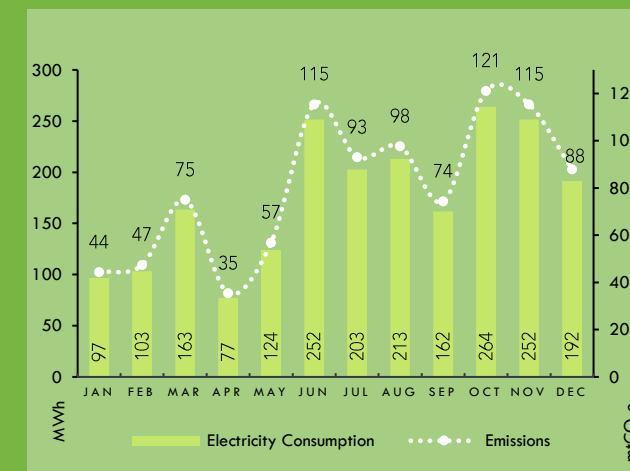
For the 2022 reporting period, the total electricity consumption within the HQ amounted to **2,100 MWh** leading to direct emissions of **963 mtCO<sub>2e</sub>**.

The peak electricity consumption and associated emissions occurred in October, with a consumption of **264 MWh**, resulting in emissions of **121 mtCO<sub>2e</sub>**. Additionally, similar consumption levels were observed in June and November, each recording **252 MWh**, corresponding to indirect emissions of **115 mtCO<sub>2e</sub>**.

Conversely, the lowest electricity consumption was documented in April, with a consumption of **77 MWh**, leading to indirect emissions of **35 mtCO<sub>2e</sub>**.

Electricity intensity is one of the frequently employed metrics for international performance assessment. After conducting thorough research on international banks and office spaces, a performance assessment criterion has been formulated, as demonstrated in the table below.

The electricity intensity has improved, with a current value of **201.9 KWh/m<sup>2</sup>** compared to last year's **215.6 KWh/m<sup>2</sup>**. Although it still falls within the D scoring, the decrease indicates enhanced efficiency and lower electricity intensity compared to the preceding year.



Score	Electricity Consumption (KWh/m <sup>2</sup> )
A+	< 128
A	128 – 148
B	148 – 168
C	168 – 195
D	195 – 218
E	> 218

MONTHLY ELECTRICITY CONSUMPTION AND EMISSIONS

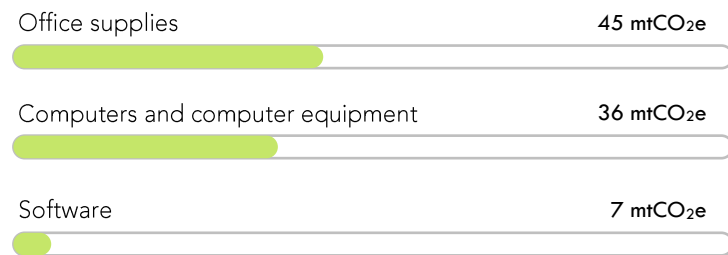
# SCOPE 3 INDIRECT EMISSIONS

## PURCHASED GOODS & SERVICES

**120** mtCO<sub>2e</sub>

**Office supplies** 88 mtCO<sub>2e</sub>

All expenditures, encompassing office supplies (excluding paper), computers and computer equipment, and software, collectively amounted to a total expenditure of **67,685 USD** and **12,147,965 EGP**. This expenditure was associated with indirect emissions totaling **88 mtCO<sub>2e</sub>**.



**Printing supplies** 27 mtCO<sub>2e</sub>

Emissions arising from the utilization of various printing supplies are categorized under this category. aiBank has reported emissions associated with the use of copy paper and ink cartridges. The HQ consumed **26 tons** of paper, leading to emissions of **24 mtCO<sub>2e</sub>**. Additionally, the HQ utilized a total of **565 ink cartridges**, resulting in **3 mtCO<sub>2e</sub>**.

**Water use** 5 mtCO<sub>2e</sub>

Scope 3 emissions encompass various indirect emissions, including those associated with water use. In the reporting period of 2022, aiBank consumed a total of **15,018 m<sup>3</sup>** of water. This water use resulted in emissions equivalent to approximately **5 mtCO<sub>2e</sub>**.

## FUEL AND ENERGY-RELATED ACTIVITIES (not included in Scope 1 & 2)

**75** mtCO<sub>2e</sub>

**Well-to-Tank (WTT)**

To comprehensively assess the climate impacts associated with fuel burning activities, aiBank accounted for well-to-tank (WTT) emissions. These emissions, falling under scope 3, capture the full extent of environmental consequences arising from fuel consumption.

In the reporting period of 2022, the WTT emissions related to aiBank's owned vehicles reached **75 mtCO<sub>2e</sub>**.

## BUSINESS TRAVEL

**28** mtCO<sub>2e</sub>

**Air travel & WTT** 10 mtCO<sub>2e</sub>

During the reporting period, aiBank employees collectively traveled a distance of **8,250 km**, encompassing both domestic and international flights. The passenger-kilometer (p.km) metric for air travel reached **47,788 p.km**. This comprehensive travel resulted in indirect emissions of approximately **9 mtCO<sub>2e</sub>**, along with **1 mtCO<sub>2e</sub>** in WTT.

The breakdown for international flights involved 7 passengers covering a total distance of **22,190 p.km**, contributing to emissions of **4 mtCO<sub>2e</sub>** and **0.4 mtCO<sub>2e</sub>** in WTT. On the domestic front, 31 passengers covered a distance of **25,598 p.km** during domestic flights, leading to emissions of **5 mtCO<sub>2e</sub>** and **0.5 mtCO<sub>2e</sub>** in WTT. This data reflects our commitment to transparently accounting for the environmental impact of our employees' travel activities.

**Hotel stays** 18 mtCO<sub>2e</sub>

In the base year of 2022, employees spent a total of **376 nights** in various hotels across 3 different countries. The total emissions resulting from these hotel stays amounted to approximately **18 mtCO<sub>2e</sub>**. This figure represents the environmental impact of the accommodations and the associated carbon footprint.

## WASTE GENERATED IN OPERATIONS

**12** mtCO<sub>2e</sub>

**Solid waste disposal** 3 mtCO<sub>2e</sub>

The category encompasses emissions stemming from the solid waste generated at aiBank's HQ. Throughout the year 2022, a total of **150 tons** of solid waste were efficiently managed through our closed-loop waste management system. In this system, materials are sent to a recycling facility to recycle and reuse the waste. This sustainable waste management approach has resulted in emissions amounting to **3 mtCO<sub>2e</sub>**.

**Wastewater treatment** 9 mtCO<sub>2e</sub>

Within the Scope 3 category, wastewater treatment emissions are accounted for. Specifically, during the reporting period of 2022, the HQ was responsible for approximately **13,516 m<sup>3</sup>** of water that drained into the sewage system for treatment. The wastewater treatment process resulted in emissions totaling approximately **9 mtCO<sub>2e</sub>**.

## EMPLOYEE COMMUTING

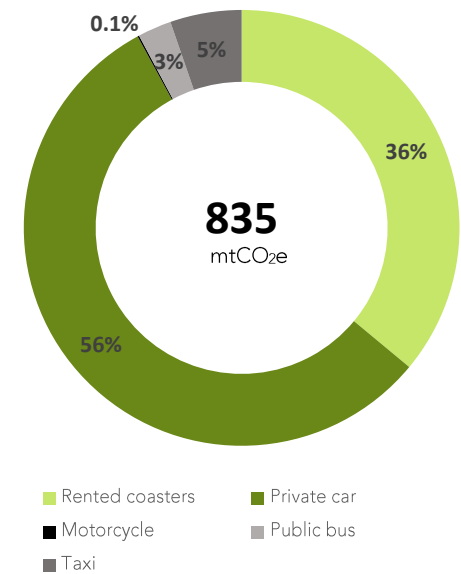
**835** mtCO<sub>2e</sub>

**Rented coasters** 304 mtCO<sub>2e</sub>

The combined distance traveled by **177** passengers utilizing rented coasters reached **2,506,752 p.km**, resulting in indirect emissions totaling **242 mtCO<sub>2e</sub>**, with an additional **63 mtCO<sub>2e</sub>** in WTT emissions. The data encompasses **15 destinations** across Egypt over a total of **240 working days**.

**Commuting & WTT** 531 mtCO<sub>2e</sub>

The remaining employees working in the HQ who don't use rented coasters (455 employees) traveled a collective distance of **2,495,283 km** and **170,403 p.km**, during the reporting year, leading to indirect emissions of **531 mtCO<sub>2e</sub>**. Emissions calculations were based on assumptions developed from the typical commuting profile of employees in Egypt. Various modes of transportation were considered encompassing private cars, motorcycles, public buses, and taxis.



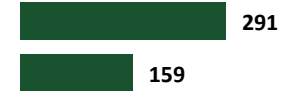
# CFP RESULTS SUMMARY

Total Scope 1 direct emissions in aiBank's HQ amount to **450 mtCO<sub>2</sub>e**. Among these, mobile combustion total **291 mtCO<sub>2</sub>e**, representing **65%** of overall Scope 1 emissions, while fugitive emissions represented the remaining **35%**.

Scope 2 emissions, including only purchased electricity, account for **39%** of the total emissions.

In Scope 3, among the five categories included, Category 7: Employee commuting accounts for the largest share of Scope 3 emissions at **78%**, followed by Category 1: Purchased goods and services at **11%**. The least contributing activity in this category is the waste generated from operations, representing **1%** of total Scope 3 emissions.

SCOPE 1 – DIRECT EMISSIONS (mtCO <sub>2</sub> e)			2022	
Mobile combustion	Fuel burning – Owned delivery vehicles		291	18%
Fugitive emissions	Refrigerant leakage		159	
<b>Total Scope 1 (mtCO<sub>2</sub>e)</b>			<b>450</b>	

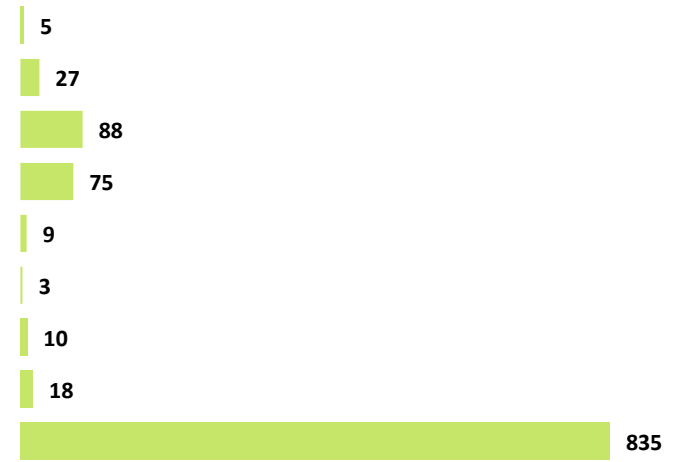


SCOPE 2 – INDIRECT EMISSIONS (mtCO <sub>2</sub> e)			2022	
Purchased energy	Purchased electricity		963	39%
<b>Total Scope 2 (mtCO<sub>2</sub>e)</b>			<b>963</b>	

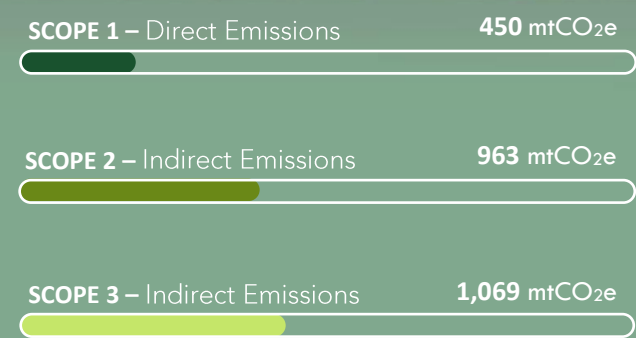
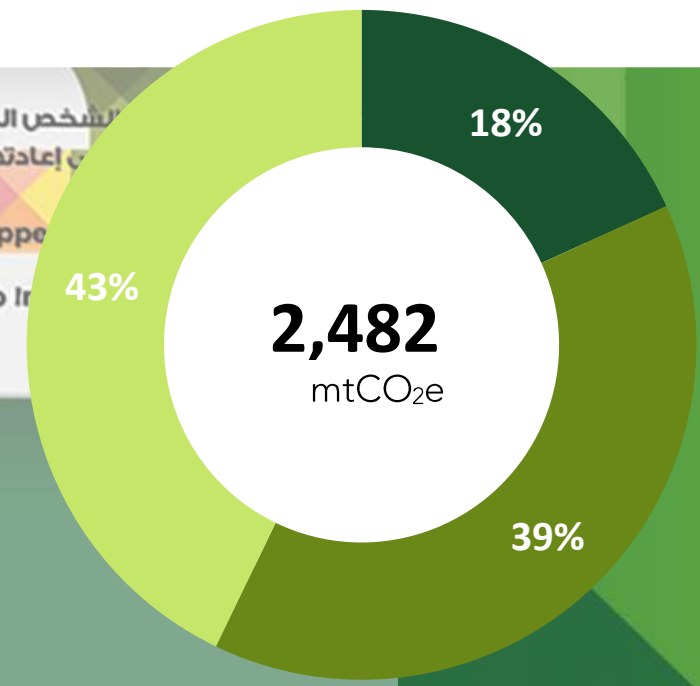
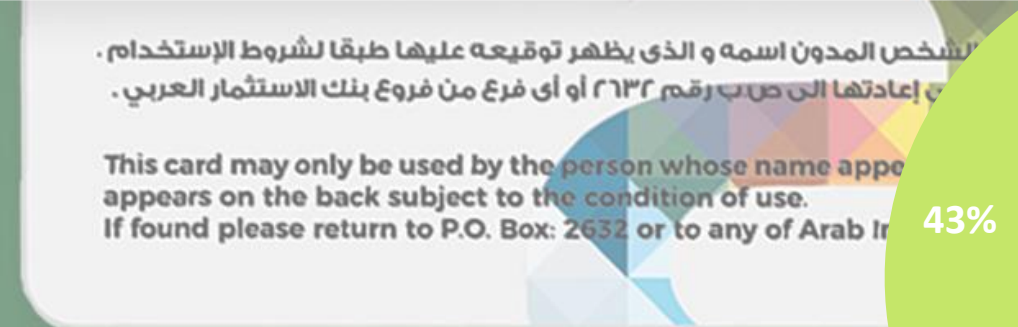


<b>Total Scope 1 &amp; 2 Emissions</b>		<b>1,413</b>	mtCO <sub>2</sub> e
<b>Scope 1 &amp; 2 Carbon intensity</b>		<b>2.24</b>	mtCO <sub>2</sub> e/FTE

SCOPE 3 – INDIRECT EMISSIONS (mtCO <sub>2</sub> e)			2022	
Category 1: Purchased goods and Services	Water use		5	43%
	Purchased materials		27	
	Purchased goods		88	
Category 3: Fuel and energy-related actives (not included in scope 1 and 2)	Fuel burning – Owned delivery vehicles (WTT)		75	
Category 5: Waste generated in operations	Wastewater treatment		9	
	Solid waste disposal		3	
	Air Travel + (WTT)		10	
Category 6: Business travel	Hotel stay		18	
	Employee commuting + (WTT)		835	
<b>Total Scope 3 (mtCO<sub>2</sub>e)</b>			<b>1,069</b>	



<b>Total Scope 1, 2 &amp; 3 Emissions (mtCO<sub>2</sub>e)</b>		<b>2,482</b>	mtCO <sub>2</sub> e
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■ Scope 1 ■ Scope 2 ■ Scope 3

# PERFORMANCE EVALUATION



# CARBON INTENSITY

**CARBON INTENSITY**  
**aiBANK**

2021  
**2.32** mtCO<sub>2e</sub>/FTE

2022  
**2.24** mtCO<sub>2e</sub>/FTE

Carbon intensity measures the emission rate of greenhouse gas (GHG) emissions in mtCO<sub>2e</sub> over a specific period, relative to a relevant measure of activity. It's important to note that reported values of direct and indirect carbon emissions alone don't provide insights into an organization's resource consumption efficiency levels. Carbon intensity-based metrics, on the other hand, indicate the efficiency of an organization's resource use by assessing whether it emits less for a unit of output.

During this reporting period, aiBank has achieved an emissions intensity of **2.24 mtCO<sub>2e</sub>/FTE** for Scope 1 + 2 emissions. This metric serves as a crucial measure of aiBank's environmental efficiency. In comparison to the base year carbon intensity, there has been a **3.4% decrease**. This decrease is mainly attributed to the decrease in fugitive emissions and purchased electricity emissions. This highlights the bank's efforts towards sustainable and low-carbon operations.

## BENCHMARKING

Benchmarking is used to assess the performance of a certain organization over time and compare it against others within the same industry. In addition, benchmarking allows organizations to determine industry best practices, and identify further opportunities for improvement. Scope 1 & 2 carbon emission intensities (per FTE and per m<sup>2</sup>) are used to benchmark the performance of aiBank nationally, while electricity intensity per m<sup>2</sup> is used to assess it on a wider international level.

Published and unpublished data of a 20+ banks' headquarters were used to calculate the national average emission intensity (per FTE and m<sup>2</sup>). Accordingly, a methodology for a national rating has been developed. The table shows aiBank's national rank compared to other banks' headquarters in Egypt. aiBank has an emission intensity for the year 2022 of **2.24 mtCO<sub>2e</sub>/FTE** & **0.14 mtCO<sub>2e</sub>/m<sup>2</sup>** with a **"C"** and an **"A"** score, respectively.

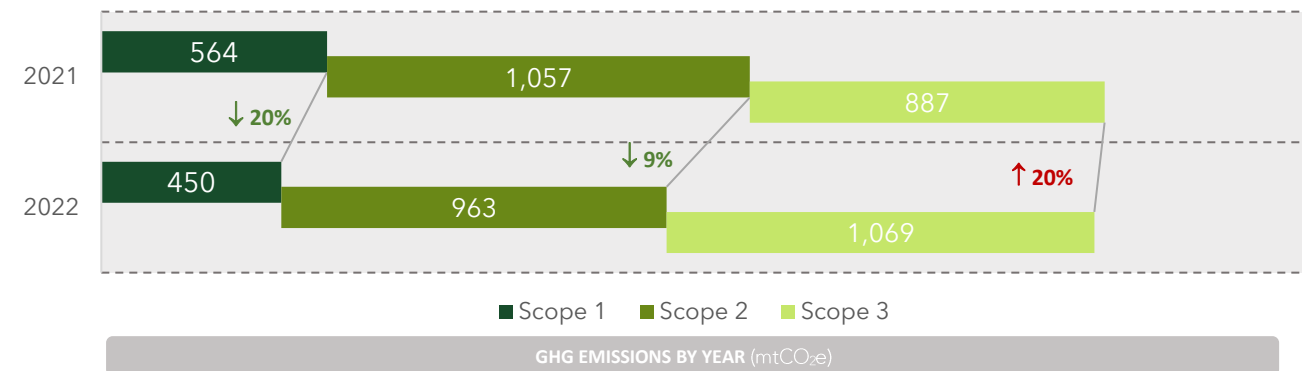
Score	Emissions Intensity (mtCO <sub>2e</sub> /FTE)	Emissions Intensity (mtCO <sub>2e</sub> /m <sup>2</sup> )
<b>A</b>	<1	<0.2
<b>B</b>	1-2	0.2 - 0.4
<b>C</b>	2-3	0.4 - 0.6
<b>D</b>	3-4	0.6 - 0.8
<b>E</b>	>4	>0.8

This year, we conducted a comprehensive comparison of our business performance relative to the base year to evaluate our progress. We can confirm that there have been no changes in operational and organizational boundaries compared to the base year.

The total absolute emissions in Scope 1 & 2 for aiBank during the year 2022 have experienced a **13% decrease**, and the carbon intensity per Full-Time Equivalent (FTE) has been **decreased by 3.4%**. Additionally, in terms of carbon intensity per square meter (m<sup>2</sup>) for Scope 1 + 2 emissions, it stands at **0.14 mtCO<sub>2e</sub>/m<sup>2</sup>**, reflecting a **12.5% decrease** from the base year.

In terms of the breakdown by scope, both Scope 1 and 2 have witnessed decreases of **20%** and **9%**, respectively. However, there is an increase of **19%** in Scope 3 emissions. These insights provide a nuanced understanding of our environmental impact and guide our ongoing sustainability efforts.

	Base Year (2021)	Emissions (2022)	Indicator
<b>Scope 1 emissions (mtCO<sub>2e</sub>)</b>	564	450	↓ 20%
<b>Scope 2 emissions (mtCO<sub>2e</sub>)</b>	1,057	963	↓ 9%
<b>Scope 1 + 2 emissions (mtCO<sub>2e</sub>)</b>	1,621	1,413	↓ 13%
<b>Carbon intensity (mtCO<sub>2e</sub>/FTE)</b>	2.32	2.24	↓ 3.4%
<b>Carbon intensity (mtCO<sub>2e</sub>/m<sup>2</sup>)</b>	0.16	0.14	↓ 12.5%
<b>Scope 3 emissions (mtCO<sub>2e</sub>)</b>	887	1,069	↑ 20%
<b>Total Scope 1,2 &amp; 3 emissions (mtCO<sub>2e</sub>)</b>	2,508	2,482	↓ 1.4%





# DECARBONIZATION PLAN



The insights gained from this assessment contribute to the development of more sustainable business scenarios and the evaluation of future policies through a series of projects with varying levels of complexity. The decarbonization plan is designed to decrease the energy consumption of the organization's operations, ultimately reducing its overall carbon footprint. To tailor a specific decarbonization plan, a comprehensive carbon audit has been conducted to examine the environmental performance of the building. This audit focuses on evaluating five key categories, as outlined in the below table.

CATEGORY	DESCRIPTION
<b>Building Construction</b>	Building components (such as walls, roofs, windows, and doors) in relation to levels of heat gain/loss
<b>Heating, Ventilation &amp; Air Conditioning (HVAC)</b>	Heating and cooling systems
<b>Lighting</b>	Loads related to lighting
<b>Plugs</b>	Plug loads resulting from various equipment and appliances
<b>Water</b>	Indirect energy sources related to water usage, water waste, and treatment

The carbon audit conducted has revealed key areas for improvement, paving the way for the development of a tailored decarbonization action plan for aiBank. Moving forward, the feasibility of selected projects will undergo thorough examination, encompassing a detailed analysis of critical aspects to determine their viability. Based on these evaluations, the necessary steps will be taken to advance the identified decarbonization initiatives.

	Low cost & time to implement
	Medium cost & time to implement
	High cost & time to implement

PROJECT	DESCRIPTION	BENEFITS
ISO certification for waste management	Obtain ISO 14001 certification for headquarters including an integrated waste management plan to monitor waste generation, increase the recycling rate and reduce the percentage of waste disposed in landfills.	<ul style="list-style-type: none"> <li>- Material circularity</li> <li>- Waste reduction and allowing for segregation, accurate quantification, and reuse/ recycling/ recovery</li> </ul>
Maintenance to avoid refrigerants leakage	Conduct regular maintenance at head office utilizing refrigerants to identify any leakages and ensure proper reparations instead of loss of refrigerant leakages since refrigerant leakage reported the largest share of GHG emissions in Scope 1, accounting to around 66% of total Scope 1 emissions.	<ul style="list-style-type: none"> <li>- Reduced indirect costs/Increased profit</li> <li>- Identification of any leakages and avoid higher costs of reparation at a later stage</li> <li>- Increased safety of workers</li> </ul>
Green building guidelines	Develop and adopt green building guidelines including refurbishment of building such as insulation, draught proofing, efficient lighting and lighting control, HVAC operational parameters and control, external shading optimization, daylight and occupancy sensors and building energy and water efficiency and management. External shadings need to be cleaned regularly, as entered daylight is reduced due to accumulated dirt.	<ul style="list-style-type: none"> <li>- Improved health and well-being of employees and customers</li> <li>- Improved customer satisfaction</li> <li>- Increased employee fulfillment</li> <li>- Enhanced building performance with longer lifetime and less maintenance</li> </ul>
Sustainability policies	Introduce and adopt sustainability policies for aiBank business & activities, with commitment to practices and standards to promote environmentally and socially responsible operations, incl. developing low-carbon business travel policy.	<ul style="list-style-type: none"> <li>- Enhanced sustainability performance with reduced environmental impacts</li> </ul>
Capacity building	Educating employees about climate change, decarbonization and climate resilience.	<ul style="list-style-type: none"> <li>- Enhanced capacity building of all employees and workers</li> </ul>
Reduction targets	Set specific carbon emission reduction targets with due dates.	<ul style="list-style-type: none"> <li>- Reduced long-term and short-term carbon footprint</li> </ul>
Water system efficiency	Water efficiency audit for all facilities to achieve reduced water usage and consumption. Install auto shut-off faucets.	<ul style="list-style-type: none"> <li>- Reduced indirect costs/Increased profit</li> <li>- Less water use contributes positively to a society going towards water scarcity</li> </ul>
Maintenance of transport fleet	Ensure regular maintenance of all vehicles and equipment on a regular basis, with proper controls and maintenance. Install GPS for all vehicles for shortest routes. Utilize a tracking system for the vehicles and equipment to identify any defects	<ul style="list-style-type: none"> <li>- Reduced indirect costs/Increased profit</li> <li>- Less pollution and enhanced air quality</li> <li>- Increased safety of drivers and workers utilizing the equipment</li> <li>- Possible time savings and well-being of drivers</li> </ul>
Bank cards	Design an innovative system in which expired banks cards are collected, and its plastic components are recycled.	<ul style="list-style-type: none"> <li>- Material Circularity</li> <li>- Waste reduction and allowing for segregation, accurate quantification, and reuse/recycling/recovery</li> <li>- Value recovery</li> </ul>
Green supply chain	Design Green Supply Chain policies by setting a criterion for new supplier selection, suppliers' monitoring, and auditing programs, minimizing waste and improve environmental footprint values. The traditional supply chain could be converted to a green one by taking environmental considerations into account at all stages, from product development and manufacturing to distribution and end customers.	<ul style="list-style-type: none"> <li>- Compliance with international guidelines</li> <li>- Potential for both short-term and long-term carbon footprint reduction</li> </ul>
Carbon offsets	Invest in environmental projects to compensate for the share of aiBank emissions.	<ul style="list-style-type: none"> <li>- Reduced overall carbon footprint</li> </ul>
Renewable energy	Utilize renewable energy sources (e.g. solar PV).	<ul style="list-style-type: none"> <li>- Reduced indirect cost/ increased profit</li> <li>- Less dependance on grid electricity and diesel generators, with reduced risk of power outage</li> </ul>
Lighting systems efficiency	Install occupancy and daylight sensors. Use daylight more efficiently.	<ul style="list-style-type: none"> <li>- Reduced electricity consumption and cost</li> </ul>

# ANNEX

## DEFINITIONS

**Base year**

A base year is a reference year in the past with which current emissions can be compared. To maintain consistency and comparability with future carbon footprints, base year emissions need to be recalculated when structural changes occur in the company that change the inventory boundary (such as acquisitions or divestments). If no changes to the boundaries of the inventory happen, the base year is not adjusted.

**Carbon footprint**

The amount of Carbon Dioxide that an individual, group, or organization lets into the atmosphere in a certain time frame.

**CO<sub>2</sub>e**

Carbon dioxide equivalent or CO<sub>2</sub> equivalent, abbreviated as CO<sub>2</sub>e, is a metric used to compare the emissions from various GHGs based on their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

**Direct emissions**

Greenhouse gas emissions from facilities/sources owned or controlled by a reporting company, e.g., generators, blowers, vehicle fleets.

**Emission factors**

Specific value used to convert activity data into greenhouse gas emission values.

**Fugitive emissions**

Fugitive emissions are emissions of gases or vapors from pressurized equipment due to leaks and other unintended or irregular releases of gases, mostly from industrial activities. Besides the economic cost of lost commodities, fugitive emissions contribute to air pollution and climate change.

**GHG protocol**

Greenhouse Gas Protocol is a uniform methodology used to calculate the carbon footprint of an organization.

**GWP**

Global Warming Potential is an indication of the global warming effect of a greenhouse gas in comparison to the same weight of carbon dioxide.

**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, e.g., purchasing of electricity.

**Kyoto protocol**

It operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets.

**Operational boundary**

Determination of which facilities or sources of emissions will be included in a carbon footprint calculation.

**Organizational boundary**

Determination of which business units of an organization will be included in a carbon footprint calculation.

**Refrigerant**

A refrigerant is a substance or mixture, usually a fluid, used in a heat pump and refrigeration cycle.

**Scope 1**

Direct emissions from sources that are owned or controlled by the reporting entity (i.e., any owned or controlled activities that release emissions straight into the atmosphere).

**Scope 2**

Indirect emissions associated with the consumption of purchased electricity, heat or steam from a source that is not owned or controlled by the company.

**Scope 3**

Indirect emissions resulting from other activities that are not covered in scope 1 and 2. This includes transport fuel used by air business travel, and employee-owned vehicles for commuting to and from work; emissions resulting from courier shipment; emissions from waste disposal, etc.

# DATA SOURCES & QUALITY

All the information used to compute the carbon footprint comes from aiBank's database. The data quality has been evaluated and presented below, with data from each business sector evaluated independently to enable better analysis and display of resolution and further explanations. The quality of the data is divided into 3 levels to assess possible areas of improvement for each activity.

	Good, no changes recommended.
	Satisfactory, could be improved.
	Weak, priority area for improvement.

**Primary data:** data taken from documents that are directly linked to the assessment, such as electricity invoices, to calculate emissions caused due to electricity.

**Secondary data:** such as databases, studies, and reports.

**Assumptions:** assumptions made based on internationally recognized standards and studies.

SCP	ACTIVITY	DATA	UNITS	RESOLUTION
1	Mobile combustion	Owned vehicles	124,400 liters Petrol	Data was received as yearly petrol consumption for delivery vehicles
1	Fugitive emissions	Refrigerants leakage	81 kg	Data was received as yearly recharge quantity of each refrigerant
2	Purchased energy	Purchased electricity	2,100 MWh	Data was received as monthly electricity consumption.
3	Purchased goods and services	Water use	15,018 m <sup>3</sup>	Data was received as monthly water use as a fixed monthly quantity.
		Printing supplies	26 tons Paper	Data was received as yearly quantity of A4 paper and ink cartridges used.
		Office supplies	565 units Ink cartridges	
		Office supplies	12,147,965 EGP 67,685 USD	Data was received as yearly quantity.
3	Employee commuting	Commuting & WTT	2,506,752 p.km Rented coasters	Data included distance traveled, number of passengers, destinations, and duration of usage.
			170,403 p.km Public bus	
			2,124,448 km Private car	Data based on assumptions developed from the typical commuting profile of employees in Egypt.
			5,121 km Motorcycle	
			168,075 km Taxi	
3	Business travel	Air travel	617,654 p.km	Data was received yearly encompassing both local and international flights, and includes details such as the country of take-off, and country of landing.
		Hotel stays	376 nights	Yearly total recorded, including country of stay.
3	Waste generated in operations	Solid waste disposal	150 tons	Data was received as total solid waste disposed yearly (paper).
		Wastewater treatment	13,516 m <sup>3</sup>	Wastewater is assumed to be 90% of total water usage.

# RELEVANCY & EXCLUSIONS

The following table describes the GHG emissions sources that were excluded from aiBank's GHG inventory due to several reasons, including: lack of data, and data that is beyond aiBank's operation and control and hence considered technically infeasible to attain. The exclusion rationale per activity has also been specified.

CAT#	ACTIVITY	DESCRIPTION	EMISSIONS	STATUS
1	Purchased goods and services	This includes office supplies including paper and ink, and computers, computer equipment and software. In addition to water use. The objective is to broaden the scope of coverage for purchased products and services, reflecting a commitment to comprehensively account for the environmental impact associated with aiBank's operational activities.	120	Relevant, calculated
2	Capital goods	Includes upstream emissions from the production of capital goods purchased or acquired by the reporting company in the reporting year.	-	Relevant, not yet calculated
3	Fuel and energy related activities (not included in Scope 1 and 2)	Includes Well-to-tank emissions from fuel burning in generators and owned vehicles.	75	Relevant, calculated
4	Upstream transportation and distribution	Transportation from aiBank's upstream supply chain.	-	Relevant, not yet calculated
5	Waste generated in operations	Includes emissions from the transportation of solid waste, the landfill emissions resulting from the disposal of waste, and emissions associated with wastewater treatment.	12	Relevant, calculated
6	Business travel	Includes emissions from air travel and hotel stays.	28	Relevant, calculated
7	Employee commuting	Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by aiBank).	835	Relevant, calculated
8	Upstream leased assets	This category is not directly relevant because all assets leased are already included in the company's scope 1 and 2 emissions.	-	Not relevant, explanation provided
9	Downstream transportation	aiBank's downstream transportation emissions include transportation of business cards and letters to clients, armored vehicles, ... etc.	-	Relevant, not yet calculated
10	Processing of sold products	Includes emissions occurring due to bank issued cards.	-	Relevant, not yet calculated
11	Use of sold products	This should include emissions from the use of internet banking and other sold products.	-	Relevant, not yet calculated
12	End of life treatment of sold products	This category is not yet embraced in the calculations but could include end of life treatment of credit cards distributed to the customers.	-	Relevant, not yet calculated
13	Downstream leased assets	Emissions resulting from ATM transactions are measured as the power used during active and inactive ATM hours.	-	Relevant, not yet calculated
14	Franchises	This category is not relevant to aiBank's business and has therefore been excluded.	-	Not relevant, explanation provided
15	Investments	Emissions resulting from commercial loan activities and/or projects financed by aiBank.	-	Relevant, not yet calculated

# QUALITY ASSURANCE STATEMENT

To aiBank's Board of Directors',

We have been appointed by aiBank to conduct carbon footprint calculations pertaining to aiBank's headquarters' operations for the period from 1<sup>st</sup> of January 2022 to the 31<sup>st</sup> of December 2022.

## AUDITORS' INDEPENDENCE AND QUALITY CONTROL

We adhere to integrity, objectivity, competence, due diligence, confidentiality, and professional behavior. We maintain a quality control system that includes policies and procedures regarding compliance with ethical requirements, professional standards, and applicable laws and regulations.

## AUDITORS' RESPONSIBILITY

In conducting the carbon footprint calculations, we have adopted the Greenhouse Gas Protocol Guidelines, IPCC Guidelines for Greenhouse Gas Inventories and the ISO 14064-1:2018 specification with guidance at the organization level for quantification and reporting of GHG emissions and removals.

It is our responsibility to express a conclusion about the quality and completeness of the primary data collected/ provided by aiBank. We have performed the following quality assurance/ quality control tasks:

- Several rounds of data requests were performed whenever the received information was not clear;
- All data presented in this report were provided by the reporting entity and revised and completed by our technical teams;
- For data outliers, meetings were held to investigate the accuracy of the data and new data was provided when requested;
- Any gaps, exclusions and/or assumptions have been clearly stated in the report.

## CONCLUSION

Based on the aforementioned procedures, nothing has come to our attention that would cause us to believe that aiBank's raw data used in the carbon footprint calculations have not been thoroughly collected, verified, and truly represent aiBank's resource consumption in the reporting period related to all categories/aspects identified in this report. We do not assume and will not accept responsibility to anyone other than aiBank for the provided assurance and conclusion.

**Dr. Abdelhamid Beshara, Founder and Chief Executive Officer**  
MASADER, ENVIRONMENTAL & ENERGY SERVICES S.A.E CAIRO

December 2023




## ABOUT MASADER

Masader is an innovative interdisciplinary consulting, design and engineering sustainability firm based in Cairo, aiming at leveraging positive impact across the MENA region and globally. It specializes in Resource Efficiency, Sustainable Management of Natural Resources and Integrated Sustainability Solutions. Since 2015, Masader has led 100+ projects across the areas of energy, environment, climate change & carbon footprint, circular economy, green building (LEED), as well as corporate sustainability strategies, reporting and certification.

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