

2022 AIIB CARBON FOOTPRINT REPORT

Greenhouse Gas Emissions Resulting from AIIB Internal Operations



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ABBREVIATIONS

AIIB	—	Asian Infrastructure Investment Bank
AR6	_	IPCC Sixth Assessment Report
BOD	_	biochemical oxygen demand
BSI	_	British Standards Institution
CH4	_	methane
CO ₂	_	carbon dioxide
CO ₂ e	_	carbon dioxide equivalent
DB11/T 1787-2020	_	CO ₂ accounting and reporting requirements for other industries
DEFRA	_	Department for Environment, Food & Rural Affairs
FAS	_	Facilities and Administration Services Department
G	_	grams
GHG	_	greenhouse gas
GHG Protocol	_	Greenhouse Gas Protocol
GJ	_	gigajoule
GWP	_	global warming potentials
HFC	_	hydrofluorocarbon
IPCC	_	Intergovernmental Panel on Climate Change
ICEM	_	Institutional Carbon Emission Management
kg	_	kilogram
kWh	_	kilowatt-hour
MDB	_	multilateral development bank
MRV	_	monitoring-reporting-verification
NF ₃	_	nitrogen trifluoride
N ₂ O	_	nitrous oxide
PFC	_	perfluorocarbon
SF ₆	_	sulfur hexafluoride
WBCSD	_	World Business Council for Suitable Development
WRI	_	World Resources Institute

FOREWORD



SIR DANNY ALEXANDER Vice President, Policy and Strategy AIIB



LUKY EKO WURYANTO Vice President and Chief Administration Officer AllB

In an era where sustainability is a critical aspect of responsible business, the Asian Infrastructure Investment Bank (AIIB) has undertaken extensive efforts to make our own internal operations sustainable. Part of this policy is an analysis and disclosure of our greenhouse gas emissions associated with our internal operations so that we can serve as an example of how a multilateral development bank manages its carbon emissions while managing its growing operations.

This report, our second annual carbon footprint report since 2021, provides a detailed and transparent account of our institutional environmental footprint. This is part of our efforts to implement our first Climate Action Plan, which states, "On the internal activities related to facility management and staff travel, AllB will measure and monitor carbon footprint and achieve carbon neutrality prior to 2025."

Tracking emissions allows AllB to address our own environmental impact by managing our internal activity and energy use. It represents an immediate and actionable approach to reducing our institutional carbon footprint. Although our institution and our operations have been growing steadily since our establishment in 2016, we have observed a decline in energy and resource consumption at our Permanent Headquarters in the past years, particularly in electricity, heating, and water use. This reduction is the result of deliberate efforts to integrate energy-saving measures and implement sustainable initiatives.

As AllB navigates the evolving landscape of global business, we acknowledge the challenges presented by the increase in business travel-related emissions and the establishment of our newly established offices as part of our global presence. Among them is the anticipated resurgence in travel after relaxation of COVID-19 restrictions as well as the global expansion of the youngest multilateral development bank, which necessitates a strategic approach to manage and minimize this aspect of our carbon footprint. In response, we are developing policies that emphasize sustainability, such as promoting virtual meetings where feasible and encouraging the use of eco-friendly transportation options. We will continue to look for ways to leverage the tools at our disposal and implement green initiatives as we align our internal activities with the objectives of the Paris Agreement.

We encourage all of you to delve into the details of this report. It reflects our commitment to sustainability and environmental responsibility. AllB remains dedicated not only to reducing our carbon footprint but also to fostering a culture of transparency, accountability, and continuous improvement.

bsi.



Verification Report

Verification Opinion

Verified as Satisfactory						
Based on the process and procedures conducted, the GHG statement contained in the AIIB Carbon Footprint Report 2022 Greenhouse Gas Emissions Resulting from AIIB Internal Operation (approved on Oct. 20, 2023) produced by Asian Infrastructure Investment	 <i>Is</i> materially correct and is a fair representation of GHG data and information. <i>Has</i> been prepared in accordance with ISO14064-1 and its principles. 					
DdllK Lead Verifier Bell Deng 邓中华						
Independent Reviewer	Shirley Qian 线韶丽					
Signed on behalf of BSI	Michael Lam - Managing Director Assurance, APAC					
Issue Date 25/10/2023						
BSI Management Systems Certification (Beijing) Co., Ltd. Address: Rm. 2008 East Ocean Centre, No. 24A Jianguomenwai Street, Beijing 100004, P.R. China						
NOTE: BSI Management Systems Certificatio Investment Bank. This 3 rd party Verification C of verifying its statement relating to its GHG other purpose. In making this Statement, BS provided to it by Asian Infrastructure Invest (Beijing) Co., Ltd. accepts no liability to any t	n (Beijing) Co., Ltd. is independent to and has no financial interest in Asian Infrastructure Dpinion has been prepared for Asian Infrastructure Investment Bank only for the purposes emissions more particularly described in the scope above. It was not prepared for any I Management Systems Certification (Beijing) Co., Ltd. has assumed that all information ment Bank is true, accurate and complete. BSI Management Systems Certification hird party who places reliance on this statement.					

...making excellence a habit."



EXECUTIVE SUMMARY

The Asian Infrastructure Investment Bank (AIIB or the Bank) aims to lead by example in managing its carbon emissions and disclosing the impact of its internal operations. It analyzed carbon emission impacts associated with its internal operations for the first time in September 2020 (for its 2017–2019 emissions) and then again in September 2021 (for the 2020 emissions), tracking the carbon footprint from scopes linked with its internal operations. Starting from the report of 2021 activities, AIIB has continuously been monitoring and verifying its carbon emissions on an annually basis and discloses this information to the public.

This report, as the second verified annual Carbon Footprint Report, provides a comprehensive analysis of the carbon footprint generated by the internal operations of AIIB's Permanent Headquarters in Beijing and its backup office in Tianjin, China. Annual data has been prepared for the 12-month period from January 1, 2022 to December 31, 2022. As in the previous report, the 2022 report identifies the sources of greenhouse gases and categorizes them is consistent with ISO 14064-1:2018 and the Greenhouse Gas Protocol (GHG Protocol).

In 2022, emissions from AllB's internal operations totaled 9,536 metric tons of carbon dioxide equivalent (CO_2e). Notably, this is the first year the Bank has included in its annual Carbon Footprint Report emissions from the Tianjin backup office which represents 6% of AllB's total emissions from internal operations. Due to the significant efforts on saving energy and implementing green initiatives, the total consumption of resources such as electricity, heating, and water has declined between 2021 and 2022 after AllB's move to its Permanent Headquarters and despite increase in business size and scale. However, electricity and heating are still the largest two which take up around 80% of AllB's overall carbon footprint, necessitating further efforts.

Emissions from business travel accounted for 10%, an increase from the 7% previously recorded in 2021. As China relaxed its COVID-19 policies starting in December 2022, business travel, especially international travel, is expected to rebound in the coming years. As a result, emissions from this source are likely to increase in 2022, 2023, and 2024. Although data quality assessment shows that in 2022 data quality remains the same level as 2021, the improvement in data quality total score highlights the significant efforts made in the past year to improve data quality in addition to reducing the carbon footprint itself.

2022 AIIB Carbon Footprint Report

This report describes the methodology for selecting and collecting data and computing carbon emissions for all relevant emission categories, using internal and external documentation, interviews from key AllB personnel and service suppliers, and source data. To ensure the accuracy of the calculations and the findings, GHG data is managed in strict accordance with the ISO14064-1:2018 standard. This document prioritizes open data, the processing of data to provide results, and enhancement of the data's usability and annual maintenance.

This report does not cover AllB's lending or technical support activities for its clients.

1 GENERAL DETAILS, PURPOSE, AND POLICY

1.1 Introduction

This report includes the complete greenhouse gas (GHG) emissions inventory of the Asian Infrastructure Investment Bank (AIIB) for 2022. AIIB's reporting procedures and emission categorizations adhere to international regulations and standards. Similar to the first report, this report conforms to the standards of ISO 14064-1:2018. The information given adheres to the standards established in Part 9.3.1, and when applicable, Part 9.3.2 of the said ISO.

This document provides organization-wide information, including corporate overview and goals, boundary conditions of the inventory, emissions quantification methods, data management methods, base year selection discussion, list of management tools, and auditing and verification processes. The report sets forth the current scope and vision of AlIB's commitment to inventory and managing GHG emissions for its internal global business operations and contains AlIB's GHG inventory methodology. It sets forth AlIB's intention to create a GHG inventory that is consistent with the principles and guidance of the World Resources Institute (WRI) and the World Business Council for Sustainable Development's (WBCSD) GHG Protocol Initiative for its internal corporate GHG accounting and reporting. The inventory methodology is designed to meet the most rigorous and complete accounting and reporting standards.

This report includes information that applies to AIIB's Permanent Headquarters in Beijing and Tianjin Backup Office located in China. Emissions from both offices are calculated using the same methodology to ensure consistency in the quantification process. This report is utilized for reporting to external stakeholders.

1.2 Purpose of this Report

AllB aims to (a) follow the best practices of multilateral development banks (MDBs) regarding consistency, comparability, and completeness in the accounting of GHG emissions, (b) lead by example by managing its own carbon emissions, and (c) align its internal activities with a pathway toward low GHG emissions and with the objectives of the Paris Agreement.

This report:

- relates to AIIB emissions from internal activities in 2022. AIIB's portfolio emissions are not included in this report.
- reflects AllB's initial attempt to report its GHG emissions in compliance with standards ISO 14064-1: 2018, as well as its attempts to better understand and eventually enhance its monitoring-reporting-verification (MRV) performance concerning emissions.
- has been prepared in line with the standards of ISO 14064-1: 2018 by the Facilities and Administration Service Department (FAS) of AIIB.
- attempts to use primary data whenever possible, particularly for all major emission sources. In the absence of primary data, a consistent and conservative calculation method is used.
- does not include confidential information.

1.3 Introduction to AIIB

By investing in infrastructure and other productive sectors, AIIB aims to encourage sustainable economic development, create wealth, and strengthen infrastructural connections in Asia. Working with other international and bilateral development institutions, AIIB is also tasked with fostering regional cooperation and partnerships to address development concerns. AIIB adapts and innovates continuously to provide its clients with personalized investment solutions that overcome obstacles. They rely on AIIB's resiliency to assist them in achieving their goals even during the most difficult times.

For further information, please visit www.AllB.org.

1.3.1 Institutional Carbon Management Policies and Strategies

AllB announced its Institutional Carbon Emission Management (ICEM) Plan (the Plan)(see Figure 1) in January 2022 to assist the Bank in achieving carbon neutrality by 2025 and align its internal activities with the Paris Alignment. The Plan presents a five-year overview of AllB's institutional GHG management strategy (2021–2025), which prioritizes emission tracing and management and information disclosure. It identifies steps for the Bank to monitor, verify, and report its institutional carbon footprint, as well as the high-level strategies the Bank might employ to cut and decarbonize its institutional energy use.



Source: AIIB

The Plan also sets four decarbonization targets for 2021–2025 as part of AIIB's efforts to curb climate change:

- AllB will measure and manage its carbon footprint, continuously enhancing the data quality of its institutional carbon footprint wherever possible. AllB will continue to hone its methods to enhance coverage and transparency and to prepare for disclosure.
- AllB will publish its institutional GHG emissions resulting from business travel and facilities by the end of 2022.
- In 2023/2024, AllB will begin purchasing renewable electricity to cut indirect emissions, eventually covering 100% of the electrical needs of its offices.
- Prior to 2025, AllB will offset its remaining GHG emissions from internal activities.

In recent years, AIIB has implemented multiple initiatives to reduce its carbon footprint. Chapter 6 provides more details.

1.3.2 Institutional Carbon Monitoring, Reporting, and Verification

The ICEM Plan established the MRV system for AIIB's internal carbon footprint. AIIB analyzed carbon emission impacts associated with its internal operations for the first time in September 2020 (for 2017–2019 emissions) and then again in September 2021 (for 2020 emissions), tracking the carbon footprint through scopes linked with its internal operations. Starting with the 2022 report (for 2021 emissions), AIIB has been continuously monitoring and verifying its emissions annually basis and disclosing this information to the public.

This report provides a comprehensive analysis of the carbon footprint generated by AllB's internal operations at its Permanent Headquarters in the Chaoyang area of Beijing, and its backup office in Binhai New District of Tianjin. It was compiled using internal and external documentation, submitted by key AllB personnel and service suppliers, and source data and data-gathering systems. Further, it describes the methodology for selecting and collecting data and computing carbon emissions for all relevant emission categories. It prioritizes the data source's openness, the data processing to provide results, and the enhancement of its usability and annual maintenance. This report does not address AllB's lending or technical support activities for its clients.

Pursuant to AIIB's expansion of its global presence, in April 2023, the Bank opened its first office outside of China—the Interim Operational Hub in Abu Dhabi, United Arab Emirates (UAE). AIIB will undertake additional efforts in the coming years to capture the environmental impact of its offices, and the release of the reports will be determined by future capacity.

ISO 14064 Part 1 is generally consistent and compatible with the GHG Protocol developed by the WBCSD and WRI. Furthermore, it provides a framework for GHG accounting and verification to organizations looking to quantify and reduce their GHG emissions.

1.3.3 AIIB Carbon Consultative Group

Using its current knowledge and experience, AIIB established the Carbon Consultative Group in 2021 to address issues connected to resource usage efficiency, waste reduction, and pollution prevention. The Carbon Consultative Group's primary objectives are to (a) identify ways to reduce the Bank's nonportfolio carbon footprint; (b) educate, inspire, and motivate employees to change their behavior both in and out of the workplace; and (c) ultimately empower all AIIB employees to live greener lives in a greener working environment. Leveraging on the Bank's skills and experience, the Carbon Consultative Group addresses resource conservation, waste reduction, and pollution control issues. AIIB has carefully evaluated and adopted key proposals and solutions from the Carbon Consultative Group, such as substituting durable and recyclable materials for plastic containers in the canteen and café.

The Carbon Consultative Group's six core members include representatives from the following departments:

- Strategy, Policy and Budget Department
- Operational Services Department
- Corporate Secretariat
- Information Technology Department, and
- Facilities and Administration Services Department (two representatives)

1.3.4 AIIB Climate Change Action Plan

AllB released its first Climate Action Plan in September 2023. It consolidates AllB's climate commitments and achievements, aligning them with the principles of climate financing and outlining key actions that will guide AllB's investments in support of its Members. Regarding internal activities, it mentioned that AllB will explore and implement good practices for the Bank's internal operations (e.g., building management, staff commuting and travel, pension management) to minimize its carbon footprint as envisaged in Building Block Six of the Joint MDB Paris Alignment Framework. On the internal activities related to facility management and staff travel, AllB will measure and monitor carbon footprint and achieve carbon neutrality before 2025.

1.4 Persons Responsible

1.4.1 Governance of the Institutional Carbon Emission Management Plan

ICEM governance is explained by the following:

• AllB institutional carbon emissions are the subject of the analyses

(scope 1, scope 2¹ and part of scope 3², including travel, commuting, waste management, water consumption, etc.)

- Staff responsible for ICEM:
 - Vice President and Chief Administration Officer or Director General, Facilities and Administration Services (FAS) Department: Leads the function.
 - Institutional Carbon Management Specialist: Supports the entire function.
 - Facility Officer(s) and facility management service providers: provides energy and electrical statistics, building energy efficiency measures, etc.
 - Administrative Officer(s) and corporate services providers: provides information regarding waste management, water use, vehicle operation, staff commute data, and other green activities.
 - Procurement Officer(s): provides procurement data, green procurement programs, etc.

Staff training: ICEM provides regular training to increase awareness of the importance of lowcarbon emissions and environmental preservation. Specific trainings have been provided by thirdparty verifiers to data managers (see 1.4.2) for data collection and maintenance.

¹ United States Environmental Protection Agency Scope 1 and Scope 2 Inventory Guidance: https://www.epa.gov/ climateleadership/scope-1-and-scope-2-inventory-guidance

² United States Environmental Protection Agency Scope 3 Inventory Guidance: https://www.epa.gov/climateleadership/scope-3-inventory-guidance

Document keeping: ICEM documents (UL360) are kept in an electronic format and maintained using a third-party inventory management system that is accessible to both internal and external parties. ICEM documents and management system are examined annually as part of internal and external auditing/verification.

1.4.2 Persons Responsible

AllB prepared the AllB Carbon Footprint Report 2022 with significant collaboration among departments of the Bank and service providers.

Overall responsibility lies with:

- Dan Yang, Director General, FAS
- Zhan Wang, Manager, Administrative and Facilities Services, FAS

Responsibility for the preparation of the GHG inventory and report lies with:

• Yuan Lin, Senior Institutional Carbon Management Specialist

Data managers:

- Ying Zhang, Administration Officer
- Yechao Zhu, Administration Officer
- Lihai Yin, Senior Facility Management Officer
- Yang Zhang, Head of Security and Emergency
- Chong An, Digital Program Specialist

1.5 Audience and Dissemination Policy

This report is intended for all AIIB stakeholders interested in AIIB's GHG emissions inventory and the accompanying reporting format, notations, and explanations. It is made available to the public after appropriate third-party verification. In addition, the report communicates:

- AllB's institutional GHG performance, and
- AllB's institutional resolve to achieve GHG performance improvements

The intended users of this document are:

- stakeholders and peers
- intergovernmental entities, and
- the public

1.6 Reporting Period and Frequency of Reporting

This Carbon Footprint Report covers the calendar year from January 1, 2022 to December 31, 2022. AIIB's Carbon Footprint Reports.

1.7 Reporting Standards, Approach, and Verification

1.7.1 Compliance with ISO 14064-1:2018

The GHG report for the year ending on December 31, 2022 has been prepared in accordance with ISO 14064-1:2018.

1.7.2 Audit of GHG Inventory

This report has been verified to reasonable assurance by the British Standards Institution (BSI).

1.8 Declaration Statement by AIIB

AllB, in its capacity as a "Reporting Organization" for the purposes of this report, therefore, certifies that the inventorying and reporting of GHG emissions have been performed in accordance with ISO 14064-1:2018. (Specification with Guidance at the Organization Level for Quantification and Reporting of Green House Gas Emissions and Removals).

AllB initiated data collection and reporting in a structured format in accordance with ISO 14064-1:2018 requirements.



2 PRINCIPLES FOLLOWED IN GREENHOUSE GAS REPORTING

In preparing this report, AIIB followed these five principles set forth under in the 14064-1:2018 to ensure that GHG-related information is true and accounted fairly:

- Relevance
- Completeness
- Consistency
- Accuracy and
- Transparency

Relevant GHG sources and sinks at the Bank were identified and quantified for the purpose of GHG reporting based on the methodology described in the respective chapters of this report. In the event of uncertainty or lack of data, reasonable assumptions were made based on information accessible on various data platforms to limit the uncertainty and risks associated with GHG accounting.

AllB maintains the records used to collect data for the quantification of GHG emissions. Collecting sufficient and relevant GHG-related information allows the intended users to make decisions with an acceptable degree of confidence and enable the formulation of a road map to reduce internal GHG emissions.



3 GREENHOUSE GAS INVENTORY BOUNDARIES

3.1 Geographic Boundaries of the Inventory

AllB calculates its carbon footprint using the operational control approach. This method considers any emissions over all areas where AllB has direct physical or operational control, but not necessarily financial control. As such, it encompasses the Bank's Permanent Headquarters in the Chaoyang area of Beijing, where its office facilities and administrative functions are located, and the Bank's Backup office in the Binhai New District of Tianjin. This report currently excludes AllB's where its office facilities and administrative functions are located, and the Binhai New District of Tianjin. In the following reporting years, AllB will make additional efforts at capturing the environmental impact of its subsidiary offices worldwide.



Address: AllB, Tower A, Asia Financial Center, No.1 Tianchen East Road, Chaoyang District, Beijing 100101

Source: Amap



Source: Amap

3.2 Reporting Boundary

3.2.1 Emissions Categories and Classification

AllB has chosen to set its organizational boundaries for the GHG inventory according to the operational control approach. Consistent with this approach, AllB accounts for GHG emissions from its locations for which it has direct control over operations, and where it can influence decisions that impact GHG emissions. This includes all owned and leased facilities and vehicles operated by AllB. A portion of leased facilities operate under full service gross leases, where the building owner/manager pays the utilities directly and AllB does not have access to actual energy consumption information. AllB includes these facilities in its definition of operational control and estimates the energy consumption as well as refrigerant use if this data is unavailable as described in the Data Management section.

This report is directed by FAS of AIIB. Reporting boundaries have been established within the AIIB offices, including emissions from facilities and office use in the Permanent Headquarters and Tianjin office, emissions from corporate vehicles, Bank staff commute and travel, and emissions from the use of certain products. The boundary does not encompass AIIB investment projects or their associated

upstream and downstream emissions. AllB's carbon footprint from investment projects are managed and disclosed by AllB's other initiatives.

The sources of GHG emissions have been identified and categorized in accordance with ISO 14064-1:2018. Although ISO 14064-1: 2018 is consistent with the GHG Protocol, the standard classifies emissions into six categories, which differ slightly from scopes 1 through 3 of the GHG Protocol. The following are the six categories and their corresponding scopes in the GHG Protocol:

- Category 1 (scope 1): Direct GHG emissions and removals
- Category 2 (scope 2): Indirect GHG emissions from imported energy
- Category 3 (scope 3): Indirect GHG emissions from transportation
- Category 4 (scope 3): Indirect GHG emissions from products used by the organization
- Category 5 (scope 3): Indirect GHG emissions associated with the use of products from the organization
- Category 6 (scope 3): Indirect GHG emissions from other sources

According to the requirements of ISO 14064-1:2018, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).

3.2.2 Significance and Materiality

Factors for consideration in assessing significance and materiality include:

- Emission size
- Difficulty in obtaining data
- AllB's influence on the emission source
- Validity in available quantification and estimation approaches
- Risks and opportunities
- Staff engagement possibilities

AllB selected inclusions and exclusions in strict accordance with the ISO 14064-1:2018 standard. Table 1 displays the significance scores of all identified emission sources within the geographic boundaries of the inventory. All direct and indirect emission sources with significant or medium impacts are reported in this document. Emission sources with scores of 20 or higher are marked as **significant**; between 11 and 19 as **medium**; and scores of 10 or lower as **insignificant**. Based on the results of the significance assessment, emission sources with insignificant impact are not included in this report but are elaborated upon in Section 3.2.4.

2022
Sources,
Emissions
l Indirect
and
Direct
of
Score
ificance
Sign
Ë
Table

	Summary			Significant	Significant	Significant		Medium	Medium	Medium			Significant	Significant	Significant	Significant
	Tota			20	20	20		19	19	19			22	20	20	22
Staff	Engagement			1	1	1		1	1	1			1	1	1	1
	Outsourcing			1	1	1		1	1	1			1	1	1	1
Sectoral	Guidance Availability	<u>×</u>		ო	3	3		С	ε	3			ĸ	ĸ	ю	ო
	Opportunity	and Removal		7	2	2	ting scope	1	1	1	ting scope	Energy	7	2	2	2
	Impact	Emissions		1	1	1	in the repo	1	1	1	in the repo	n Imported	1	1	1	1
Risk	Possibility	Gas (GHG)		-1	1	1	identified with	1	1	1	identified with	Emissions fror	1	1	1	1
.	Influence	reenhouse		Ч	1	1	Not	1	1	1	Not	lirect GHG	m	1	1	m
Emission	Factor Availability	'y 1: Direct G		Ŋ	5	5		5	5	5		Category 2: Inc	ß	5	5	വ
Quantitative	Method	Catego		ъ	5	5		5	5	5			ى	5	5	ъ
Emission	Sources		Diesel for	Emergency Generator	Natural Gas	Gasoline for Corporate Fleet		Release of Refrigerant	Carbon Dioxide Fire Extinguisher	Septic tank			Electricity from Grid	Hot water	Regional cooling	Heating
	ubcategory			Stationary Combustion		Mobile Combustion	Industrial Process		Fugitive		Land Use, Land Use Change and Forestry		Indirect GHG Emissions from Imported Electricity	Indirect	Emissions	Energy
	งี			1.1		1.2	1.3		1.4		1.5		2.1		2.2	

continued on next page

2022 AIIB Carbon Footprint Report

Summary				Medium	Insignificant	Medium	Medium	Medium	Insignificant	l on next page
Total				13	10	18	18	18	13	continued
Staff Engagement				m	1	1	1	1	1	0
Outsourcing				1	1	1	1	1	1	
Sectoral Guidance Availability				1	1	1	1	1	1	
Opportunity	rtation	rting scope	rting scope	1	1	1	1	1	1	
lisk y Impact	from Transpo	vithin the repo	vithin the repo	1	1	1	1	1	1	
Possibilit	Emissions	identified v	identified v	1	1	1	1	1	1	
Influence	ndirect GHG	Not	Not	7	1	7	7	2	1	
Emission Factor Availability	Category 3:			7	5	വ	Ð	Ð	ณ	
Quantitative Method				1	1	ស	£	S	1	
Emission Sources				Staff Commuting	Visitor Transport	Business Travel- Flight	Business Travel- Train	Business Travel- Hotel	Business Travel- Local Transport	
ubcategory		Emissions from Upstream Transport and Distribution for Goods	Emissions from Downstream Transport and Distribution for Goods	Emissions from Employee Commuting	Emissions from Client and Visitor Transport			Dusiness Iravel		
S		3.1	3.2	3.3	3.4		о С	0		

Greenhouse Gas Inventory Boundaries

cate	gory	Emission	Quantitative Method	Emission Factor	Influence	Risk		Opportunity	Sectoral Guidance	Outsourcing	Staff Fraggement	Total	Summary
		Sources	Method	Availability		Possibility	Impact		Availability		Engagement		
			Category	4: Indirect GH	G Emissions	from Product:	ts Used by t	the Organizatio	Ę				
		Cloud Service	വ	Ð	1	1	1	1	1	1	1	17	Medium
missions trom [—] Purchased	1	Tap Water	ъ	Ð	1	1	1	2	1	1	1	18	Medium
Goods	I	Other Purchased Goods	2	1	1	1	1	2	1	1		10	Insignificant
missions from Capital Goods					Not	identified withi	in the repor	ting scope					
Emissions om Disposal of Solid and Liquid		Waste	5	ß	5	7	7	1	1	1	σ	19	Medium
missions from Jse of Assets					Not	identified withi	in the repor	ting scope					
		Ca	tegory 5: Indired	t GHG Emissi	ons Associat	ed with the Us	se of Produ	icts from the Oi	rganization				
Emissions or lemovals from he Use Stage f the Product					Not	identified withi	in the repor	ting scope					
missions from Downstream eased Assets					Not	identified withi	in the repor	ting scope					
missions from End-of-life Stage of the Product					Not	identified withi	in the repor	ting scope					
missions from Investments					Not	identified withi	in the repor	rting scope					
				Category 6: li	ndirect GHG	Emissions fro	m Other S	ources					
Indirect GHG missions from					Not	identified withi	in the repor	ting scope					
Other Sources													

3.2.3 Summary of Emissions Source Inclusions

Establishing operational limits for AIIB GHG emissions is mostly influenced by fossil fuel usage in purchased electricity and energy consumption, refrigerant gas consumption in chillers and air conditioning units at the Permanent Headquarters, staff business travel, among others.

Emission Sources	Category	Data Source	Methodology
Diesel for Emergency Generator		Fuel consumption statistics - Emergency Generator engine operation record	Fuel use provided in liters
Corporate Fleet	Category 1 (Scope 1) —	Fuel consumption statistics – gasoline procurement records	Fuel use provided in liters and refrigerant refilled in kilogram (kg)
Natural Gas		Fuel billing and meter record	Fuel use provided in cubic meter (m³)
Release of Refrigerant		Refrigerant billing	Refrigerant refilled in kg
Fire Extinguisher		Extinguisher quality and capacity. Fire drill records	Carbon dioxide (CO ₂) and refrigerant refilled in kg
Septic tank		Total man-days and depth of tank	Assumed by biochemical oxygen demand (BOD) conversion factor, tank depth, etc.
Heating		Heating billing	Billing by gigajoule (GJ)
Hot Water	– Category 2 –	Hot water billing	Billing by GJ
Centralized cooling	(Scope 2)	Cooling billing	Billing by kilowatt-hour (kWh)
Electricity from Grid		Electricity billing	Billing by kWh
Staff Commuting		Survey	Staff provided information on their commuting methods
Business Travel – Flight	Category 3	Provider reports on emissions	Direct emission reports
Business Travel – Train	(Scope 3)	Provider reports on emissions	Direct emission reports
Business Travel – Hotel		Provider reports on total room nights	Assumed by the emission factor
Procurement – Cloud Service		Provider reports on emissions	Direct emission reports
Waste Disposal	Category 4 (Scope 3)	Provider reports on tonnes	Assumed by tonnes of different types of waste
Procurement – Tap Water		Water billing	Billing by m ³

Table 2: Summary of Included Sources of Emissions, 2022

Source: AllB Staff

Regarding Categories 3 and 4, AIIB chose staff commuting, business travel (flight, train, hotel), tap water and cloud service procurement, and waste disposal based on their relevance, applicability to AIIB, and availability of raw data.

Emissions derived from biomass have not been identified within the organization boundary and the reporting boundary.

3.2.4 Summary of Emissions Source Exclusions

As defined in the 2021 report, the AIIB Carbon Footprint Report evaluated emission sources exclusively from its internal operations. AIIB's lending or technical support activities for its clients are not addressed by this report.

The following sources of emissions (see Table 3) have been discovered but are not included in the emissions inventory. The stakeholders and context of the inventory do not deem these sources substantial or material, nor is it possible or viable to calculate them at this time. These emission sources have been identified as insignificant and have been excluded from this report per the Table 1 on the Significance Score of the Direct and Indirect Emission Sources.

There are no Category 6 emissions identified as falling within the reporting boundary.

Emission Sources	Category	Reason for Exclusion
Business Travel – local transport, e.g., taxi	Category 3	AllB's business travel expense reimbursement system, SAP Concur, can only record reimbursed cab expenditures without distance information. AllB expects this part of emissions to be below 1 percent of the total emissions. AllB does not calculate the price of a local cab for this report due to the wide pricing disparity between regions.
Emissions from client and visitor transport	Category 3	Visitors to the AIIB Permanent Headquarters are responsible for their own transportation reimbursement. AIIB expects this part of emissions to be below 1 percent of the total emissions.
Procurement – other goods and services	Category 4	In 2022, 164 products and services in 8 subcategories have been procured. Most of these are consultancy services and services for information technology. This report only examines the emissions associated with tap water consumption and cloud services acquisition.
Emissions from Investment	Category 5	The boundary does not encompass AIIB investment projects or their associated upstream and downstream emissions.

Table 3: Summary of Excluded Sources of Emissions, 2022

Source: AIIB Staff

4 QUANTIFIED GREENHOUSE GAS INVENTORY OF EMISSIONS

4.1 Consolidated Statement of Greenhouse Gas Emissions

Table 4: Summary of CO₂e Emissions by ISO 14064-1:2018 (Categories 1-6)

	Beijing CO ₂ e (tonne)	Tianjin CO ₂ e(tonne)	
Category I	58	32.16	
Emergency Generators	8.96	-	
Kitchen Cookers	43.28	-	
Official Vehicles	15.45	-	
Vehicle Refrigerants	0	-	
Refrigerators	8.57	0	
Air conditioners	0	0	
Chillers	206.55	-	
Carbon Dioxide Fire Extinguishers	223.60	0	
Septic tanks	75.00	0.75	
Total	581.41	0.75	
	Beijing CO ₂ e (tonne)	Tianjin CO ₂ e (tonne)	
Category 2	7,74	9.79	
Municipal Heating	2,317.79	267.67	
Municipal Hot Water Supply	96.80	-	
Regional Cooling	-	73.20	
Electricity for Office Buildings	4,746.47	247.86	
Total	7,161.06	588.72	
	Beijing CO ₂ e (tonne)	Tianjin CO ₂ e (tonne)	
Category 3	1,10	5.92	
Staff Commuting (car, tram, metro, etc.)	100.33	-	
Staff Business Travel (High-Speed Rail)	0.86	-	
Staff Business Travel (by air)	898.69	-	
Staff Business Accommodation	106.04	-	
Total	1,105.92	0	
	Beijing CO ₂ e (tonne)	Tianjin CO ₂ e (tonne)	
Category 4	98.09		
Cloud Service	92.57	-	
Waste Disposal (food waste)	0.08	0	
Waste Disposal (other waste)	0.09	0	
Domestic Water Supply	5.33	0	
Total	98.06	0.03	
	8,946.45	589.51	
Iotal Emissions (Category 1–6)	9,53	5.96	



Figure 4: Summary of Carbon Dioxide Equivalent Emissions (CO₂e)

This document does not provide any recommendations or requirements for removal.

4.2 Methodologies for the Collection and Quantification of Data

Although the majority of the data sources are part of FAS everyday operations, the format and level of detail of the original data vary markedly because AIIB has only just began collecting fundamental data on carbon emissions from various service providers and sources. In accordance with the ISO 14064-1:2018 standard, the emissions summary consolidates and standardizes emissions data and provides a full explanation of working and estimation.

An overview of emissions sources and their respective data sources are provided in Section 3.2.3. The best available data and computation methods are utilized when estimation is necessary.

The combustion process is defined by the rapid oxidation of substances (i.e., fuels) with the release of thermal energy (i.e., heat). Category 1 activities emit direct GHG such as CO_2 , CH_4 and N_2O as well as ambient air pollutions. Emission of these gases from Category 1 sources depend upon fuel characteristics and size, along with combustion technology. Emissions also vary with operation and maintenance practices. This guidance only addresses direct emissions of the following types of GHG, i.e., CO_2 , CH_4 and N_2O .

This report tries to use regional emission factors instead of international emission factors. It uses the most relevant factors indicated by:

- China Greenhouse Gas Emission Coefficient Library for Product Life Cycle
- General rules for calculation of the comprehensive energy consumption
- Guidelines for the Preparation of Provincial Greenhouse Gas Inventories
- The Notice Regarding the Management of Greenhouse Gas Emission Reports from Power Generation Industry Enterprises for the Years 2023–2025 by the Ministry of Ecology and Environment

- CO₂ accounting and reporting requirements for other industries
- IPCC Sixth Assessment Report Global Warming Potentials
- 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- 2022 China Garbage Classification and Treatment Industry In-Depth Research and Analysis Report

4.2.1 Calculation of Greenhouse Gas Emissions, Beijing Headquarters

A fuel-based approach is applied to calculate GHG emissions. The approach typically requires the collection of activity data, in the form of the type and quantity of fuel consumed for combustion purposes. To calculate emissions using fuel type, fuel consumption and emission factor data, the following equations are applied:

Emissions from Diesel Consumption:

Emission (tonnes of carbon dioxide equivalent $[tCO_2e]$) = consumption (liter [L]) * density (kilogram [kg]/L) * emission factor (t/t) /1,000 = 3,516.4 (L) * 0.82 (kg/L) * 3.11 (t/t) /1,000 = 8.96 (tCO_2e)

Diesel is exclusively used in AIIB's emergency generator. Consumption data is recorded in the generator operating records. Diesel density information is provided by the diesel supplier. The GHG emission factors of diesel are calculated using the IPCC methodology and local Chinese diesel factors.

Emissions from Petrol Consumption:

Emission (tCO_2e) = consumption (L) * density (kg/L) * emission factor (t/t) /1,000 = 6,783.62 (L) * (0.72+0.775)/2 (kg/L) * 3.05 (t/t) /1,000 = 15.45 (tCO_2e)

Petrol is exclusively used in AIIB's corporate vehicles, and it is purchased from Sinopec. Consumption data is recorded in the procurement records. Petrol density information, with an average range of 0.720–0.775 grams per cubic centimeter (g/cm³), is sourced from the Sinopec website,³ and petrol density is calculated from the average of the range. The GHG emission factors of petrol are calculated using the IPCC methodology and local Chinese petrol factors.

³ Sinopec data.

Emissions from Natural Gas Consumption:

Emission (tCO_2e) = consumption (L) * density (kg/L) * emission factor (t/t) /1,000 = 23,559 (cubic meters [m³]) * 0.775 (kg/m³) / 1,000*2.37 (t/m³) = 43.28 (tCO₂e)

AllB's canteen kitchen exclusively uses natural gas. Consumption data is recorded in the natural gas meter. The GHG emission factors of natural gas are calculated using the IPCC methodology and local Chinese natural gas factors.

Emissions from Fire Extinguishers:

Emission (tCO₂e) = Quantity of CO₂ refilled in 2022 (kg) /1,000 + quantity of heptafluoropropane refilled in 2022 (kg) * GWP of heptafluoropropane /1,000 = (7+1.7447*228)/1,000 + 62*3,600/1,000= 223.60 (tCO₂e)

In 2022, only one fire drill was conducted at the Permanent Headquarters, using one fire extinguisher, resulting in a total consumption of 7 kilograms (kg) of carbon dioxide (CO_2). In addition, in 2022, each of the 228 fire extinguishers been refilled with 1.7447 kg of CO_2 , and 62 kg of heptafluoropropane used.

Emissions from Refrigerant Make Up for Air Conditioners and Refrigerators:

Emission (tCO_2e) = Quantity of refrigerant refilled in 2022 (kg) * Global Warming Potential [GWP]/1,000 = (0.34 kg+135 kg)*1,530/1,000 (tCO2e)= 206.55 (tCO_2e)

R134a, R404a and R32, which are used in AllB's refrigeration and air conditioning sectors, are GHGs with global warming potentials (GWP) much higher than that of CO_2 . Therefore, the uncontrolled release of these gases into the atmosphere may have significant potential impact on climate change. However, because of two facilities without refrigerant charge information, the uncontrolled release of the gases to calculate the emissions cannot be used. Instead, the refrigerant refilling quantity was used. In 2022, 340 g of R134a were added to the refrigerator, and 135 kg of R134a were used for the water chiller. Emissions are calculated as above. Chapter 4.2.4 provides more information on GWP.

Emissions from the Septic Tank:

Emission (tons of methane [tCH4]) = total people * total day * (BOD) generation (grams [g]/per capita per day) BOD transfer factor (tCH₄/tBOD) * coefficient of correction emission (for 4.4 meter tank) /1,000 /1,000 = 700 (people) * 200 (day) * 40 (grams [g]/per capita per day) * 0.6 * 0.8 /1,000 /1,000 = 2.69 (tCH₄) Emission (tCO₂e) = Emission (tCH₄) * CH₄ GWP (tCO₂e/tCH₄) = 2.69 (tCH₄) * 27.9 (tCO₂e/tCH₄) = 75.00 (tCO₂e)

As monitored in 2021, the depth of the septic tank is 4.4 meters. In 2022, AIIB did not track the total number of employees and service providers who visited the Permanent Headquarters. As part of the Bank's improvement efforts, beginning 2023, this information will be monitored to track personal emissions. Based on an estimation from AIIB's security team, for emissions in 2022, an average of 700 employees and service providers worked in the office.

Emissions from Electricity Consumption:

Emission $(tCO_2e) = consumption (kWh) * emission factor (kg/kilowatt-hour [kWh]) /1,000$ = 8322768.36 (kWh) * 0.5703 (kg/kWh) / 1,000 $= 4746.47 (tCO_2e)$ $Emission (tCO_2) = Emission (tCO_2e)$ $= 4746.47 (tCO_2)$

Emissions from Heat and Hot Water Consumption:

Hot Water

Emission (tCO_2e) = consumption (gigajoule [GJ]) * emission factor (kg/GJ) /1,000 = 880 (GJ) * 110 (kg/GJ) /1,000 = 96.80 (tCO₂e)

Heat

Emission (tCO₂e) = consumption (GJ) * emission factor (kg/GJ) /1,000 = 21,070.80 (GJ) * 110 (kg/GJ) /1,000 = 2,317.79 (tCO₂e) Last year, emission factor for heat and hot water from this paper: Carbon Dioxide Emission Factors of Nature Gas Boilers and Its Uncertainty in Beijing. This report notes how the generation of heat and hot water from natural gas can produce both CO_2 and CH_4 in the city of Beijing. This year we changed the emission factors from those in DB11/T 1787-2020 Requirements for Carbon Dioxide Emission Accounting and Reporting. The emission factor is nearly doubled; however, the emission factor from this standard is considered more reliable than the previous one.

Emissions from Tap Water Consumption

Emission $(tCO_2e) = consumption (m3) * emission factor (kg/m3) /1,000)$ = 25,019.34 (m³) * 0.21 (kg/m3) / 1,000 = 5.33 (tCO_2e) Emission (tCO_2) = Emission (tCO_2e) = 5.33 (tCO_2)

Emissions from Business Travel – Flight and Train

Emission $(tCO_2e) = Train + Flight$ = 0.86 $(tCO_2e) + 898.69 (tCO_2e)$ = 899.55

Emissions from flights and trains for the 2021 Carbon Footprint Report have been calculated through a service provider. In late 2021, AIIB switched its travel service provider to CWT, which can provide carbon emission information for each flight and train based on guidelines produced by Department for Environment, Food and Rural Affairs GHG Conversion Factors. After reviewing their methodologies, which appear reasonable, their emission data were used.

- Factors published by Department for Environment, Food & Rural Affairs (DEFRA) are released yearly, typically in the middle of the year. To maintain consistency, the factors published in one year are applied to tickets issued in the subsequent year.
- CO₂e values are calculated at the flight segment level, and values reported at "higher" levels (subtrip and ticket) are summed up based on the associated flight segments (coupons).
- Short-haul flights are those less than 785 kilometers (km).
- Medium-haul flights are those greater than 785 km but less than 3,700 km.
- Long-haul flights are those greater than 3,700 km.

Emissions from Business Travel – Hotel

Emission = Σ nights in one country * emission factor / 1,000 (kg/night) = 106.04 (tonnes)

In the 2021 report, due to a lack of detailed location information, AIIB used global average factors to calculate emissions from hotels. In 2022, the Bank recorded detailed country-specific information for hotels and began using country averages instead of global averages to achieve more precise results. In cases where there are no hotel factors available for a country on the list, emission factors from neighboring countries were used instead.

Emissions from Waste

Emission (tCO_2e) = mass of waste (Food waste and other waste) * emission factor (kg/tonne [t]) /1,000 = (46.41 + 53.04) (t) * 1.65 (kg/t) / 1,000 = 0.17 (tCO_2e)

The AIIB Permanent Headquarters strictly adheres to Beijing's waste classification management policy. Waste is categorized into recyclable waste, food waste, hazardous waste, and other waste. Throughout 2022, the HQ office did not generate any hazardous waste. The number of barrels generated and the average weight per barrel were recorded for recyclable waste, food waste, and other waste. Among these categories, carbon emissions from recyclable waste were calculated as 0 based on emission factor and methodology. Since both food waste and other waste were incinerated for power generation, emissions calculations were performed using incineration for power generation emission factors.

This report notes that waste treatment can produce both CO_2 and CH_4 . However, China Greenhouse Gas Emission Coefficient Library for Product Life Cycle only provides CO_2e emission factors for waste incineration and cogeneration. There is no other source providing emission factors for all the GHG gases. Therefore, this report only calculates CO_2e emissions for waste treatment (incineration and cogeneration).

Emissions from Commuting

Emission (tCO₂e) = Σ commuting method * emission factor of this method (kg/kilometer [km]) /1,000 = 100.33 (tonnes) AllB designed a five-question survey to understand staff commuting methods. Ten percent of staff participated in the survey, with a total of 76 responses. AllB staff commuting methods include walking; cycling; and riding taxis, motorbikes, buses, private cars, or the subway.

This report understands that commuting by bus, private car, subway, motor and taxi can produce CO_2 , CH_4 and N_2O . However, the China Greenhouse Gas Emission Coefficient Library for Product Life Cycle only provides CO_2e emission factors for each of the commuting methods and there is no other source providing emission factors for all of the GHG gases. Therefore, this report only calculates CO_2e emissions for staff commuting.

Emissions from Cloud Services

There are two cloud service providers, Microsoft Azure and AWS. Both can provide AIIB's carbon footprint from the use of their cloud servers.

Emission (tCO_2e) = Microsoft Azure CO_2e + AWS CO_2e = 29.77 (tCO_2e) + 62.80 (tCO_2e) = 92.57 (tCO_2e)

4.2.2 Calculation of Greenhouse Gas Emissions, Tianjin Backup Office

A fuel-based approach is also used for the Tianjin backup office. Since this was the first year that emissions for the Tianjin office were monitored, data quality and readiness are lower compared to those of the Permanent Headquarters. For instance, there are no separate meters for heating and cooling, so the data are allocated proportionally based on office area. Furthermore, only quantities of "dry waste" and "kitchen wet waste" have been recorded. AllB will gradually improve data quality in the future.

There are no corporate vehicles specifically for the Tianjin office. Emissions from corporate vehicles, staff travel, staff commuting, and cloud services have been calculated together with the Permanent Headquarters office. Furthermore, unlike the Permanent Headquarters office, there are no air conditioners and cooling chillers (instead, the Tianjin office uses regional central cooling, so the energy consumed has been calculated), and there is no kitchen (thus, no natural gas consumption). Hot water is electrically heated, and this consumption is included in the electricity calculation.

Emissions from Refrigerant Make Up for Refrigerators:

Emission (tCO₂e) = Quantity of refrigerant refilled in 2022 (kg) * GWP/1,000 = 0 (tCO₂e)

R134a and R404a are used in AllB's refrigeration at the Tianjin office. To align with the methodology used in Beijing, the refrigerant refilling quantity was used to calculate emissions. In 2022, no refrigerant was added to the refrigerator.

Emissions from the Septic Tank:

Emission (tCH₄) = total people * total day * Biochemical Oxygen Demand generation (g/per capita per day) BOD transfer factor (tCH₄/tBOD) * coefficient of correction emission (for 5.6m tank) /1,000 /1,000 = 7 (people) * 200 (day) * 40 (g/per capita per day) * 0.6 * 0.8 /1,000 /1,000 = 0.03 (tCH₄) Emission (tCO₂e) = Emission (tCH₄) * CH₄ GWP (tCO₂e/tCH₄) = 0.03 (tCH₄) * 27.9 (tCO₂e/tCH₄) = 0.75 (tCO₂e)

The depth of the septic tank at the Tianjin office is 5.6 meters. In 2022, due to office arrangements and the COVID-19 pandemic, no AIIB staff worked in the Tianjin office, and no staff retreats were held there. However, seven full-time service providers worked onsite to maintain daily operations, including reception, security, facility, and IT management; and their emissions have been calculated.

Emissions from Heat Consumption

Heat Emission (tCO₂e) = consumption (GJ) * emission factor (kg/GJ) /1,000 = 2,433.36 (GJ) * 110 (kg/GJ) /1,000 = 267.67 (tCO₂e)

As mentioned earlier, due to the lack of a separate heating meter, the consumption is allocated proportionally based on the total building consumption and the office area percentage (4,258.38 m³ compared to the total of 85,888.45 m³).

Emissions from Centralized Cooling

Emission (tCO_2e) = consumption (kWh) * emission factor (kg/kWh) /1,000 = 12,8347 (kWh) * 0.5703 (kg/kWh) /1,000 = 73.20 (tCO₂e)

Binhai New District provides regional centralized cooling. Since specified emission factors for this cooling service are unavailable, the national electricity emission factor was used for calculation.

Emissions from Electricity Consumption:

Emission $(tCO_2e) = consumption (kWh) * emission factor (kg/kWh) /1,000 = 434,609.15 (kWh) * 0.5703 (kg/kWh) / 1,000 = 247.86 (tCO_2e) Emission (tCO2) = Emission (tCO_2e) = 247.86 (tCO_2)$

Emissions from Waste

Emission from other waste (tCO_2e) = mass of other waste * incineration for power generation emission factor (kg/t) /1,000 = 1 * 7 * 200 * 1.65 (kg/t) / 1,000 / 1,000 = 0.00231 (tCO_2e)

The AIIB Tianjin office strictly adheres to Tianjin's waste classification management policy. Waste is categorized into recyclable waste, kitchen wet waste (food waste), hazardous waste, and dry waste (other waste). However, the office has not yet started to record the mass of each type of waste. Therefore, the total weight of each type of waste is estimated. Since there is no kitchen in office, and only seven full-time employees or service providers working in 2022, it is assumed that there was no food waste generated. The total other waste generated in 2022 was 1,400 kg.

This report notes that waste treatment can produce both CO_2 and CH_4 . However, China Greenhouse Gas Emission Coefficient Library for Product Life Cycle only provides CO_2e emission factors for waste incineration and cogeneration. There is no other source providing emission factors for all the GHG gases. Therefore, this report only calculates CO_2e emissions for waste treatment (incineration and cogeneration).

Emissions from Tap Water Consumption

Emission $(tCO_2e) = consumption (m^3) * emission factor (kg/m^3) /1,000)$ = 139.69 (m³) * 0.21 (kg/m³) / 1,000 = 0.03 (tCO_2e) Emission (tCO_2) = Emission (tCO_2e) = 0.03 (tCO_2)

4.2.3 Change in Methodologies from Prior Year/Base Year

This report, which represents the 2022 data, is the second verified GHG report produced by AIIB. With 2021 report still serving as baseline for future evaluations, there is no change to the base year calculations in the 2022 reporting period.

The year 2021 is the first full operational year following the June 2020 relocation of AllB's headquarters office to its new, permanent location. AllB discovered that conditions and emissions vary significantly between its former and current headquarters. Therefore, 2021 is temporarily regarded as the emission base year, serving as a benchmark for future emissions comparisons and preserving data set integrity.

The scope of the 2022 report remains the same as in 2021 for Beijing, except for the addition of the Tianjin office. Because 2022 marked the first full operational year for the Tianjin backup office, the Tianjin emissions data in the 2022 report will serve as this site's baseline for future evaluations.

As mentioned in the 2021 report, it is recognized that the sudden and nearly complete shutdown of passenger air travel in 2020 due to COVID-19 had a significant impact on the Bank's carbon footprint. Therefore, 2021 is not a typical benchmark year for the long term. Following China's relaxation of its COVID-19 policies since December 2022, business travel, especially international travel, has been gradually restored. Thus, emissions from business travel are expected to rebound in the 2022, 2023, and 2024 reports. Consequently, AIIB is taking steps to encourage employees to use lower-carbon transportation options and will also consider selecting a more appropriate base year in the future.

Recalculation of the base year will be applied where necessary to maintain an effective comparison. Reasons for this might include:

- if the emission factors used change significantly and become relevant to prior years
- if the total emission changes significantly due to the host country's post-COVID-19 policy change and/or calculation scope change
- if a significant estimation method has been changed/improved
- if a significant data sourcing strategy has been changed/improved
- if the scope of the inventory is changed (for instance, emissions from other offices included).

4.2.4 Calculation and Source for Global Warming Potential

According to the requirements of ISO 14064-1:2018, the seven GHGs include CO_2 , CH_4 , N_2O , HFCs, PFCs, SF₆, and NF₃.

Quantities of GHG emissions are given in tonnes of CO_2 using the GWP from the IPCC Sixth Assessment Report (AR6). The scope of time is 100 years. Sources of direct emissions (Category 1) are expressed as both CO_2 and a thorough breakdown of their GHG emissions, including the GWP value. The most notable GHGs include:

Carbon Dioxide (CO ₂)	1
Methane (CH ₄)	27.9
Nitrous Oxide (N ₂ O)	273
Nitrogen Triflouride (NF ₃)	17,400
Sulfur Hexaflouride (SF ₆)	25,200
R125	3,740
R143a	5,810
R134a	1,530
R152a	164
R32	771
R23	14,600
R404a	4,728
R407c	1,985
R410a	2,255.5
Heptafluoropropane	3,600

Table 5: Global Warming Potential Value

Source: AllB Staff

4.2.5 Review, Internal Audit, and Improvement

As defined in the 2021 report, where data is absent or incomparable, conservative estimation methods have been deployed, creating an incentive to continuously improve the ratio of source data to estimation methods. In future years, AIIB plans to highlight enhancements to AIIB's framework and methodology for capturing and calculating emissions figures and reduce ambiguity in this section.

Compared to the 2021 report, the 2022 report has made these improvements:

- In the 2021 report, unifying the statistical rigor of activity data to enhance data quality
 and maximize the utilization of monitoring data was recommended. This includes fuel
 consumption purchase records for the corporate fleet and distance data for business
 travel using local taxis. In 2022, data quality has improved significantly. For instance,
 both diesel procurement information and operational data for the emergency generator
 have been recorded. The 2022 report opted to record operational data for the
 emergency generator as it provides more precise diesel consumption data.
- As AllB manages its own carbon footprint, it also influences its supply chain to become more aware of carbon management. More service suppliers, such as travel agencies, have started to monitor and manage their product and service carbon footprint.
- This is AllB's first year to monitor emissions from its offices outside the Permanent Headquarters. Despite the difficulties in collecting and ensuring data quality from the new office, the Bank showed determination to cover as many emission sources as possible within its operations.

4.2.6 Removals

There are no carbon removals to report for the current reporting period.



5 GREENHOUSE GAS INVENTORY QUALITY MANAGEMENT

The GHG emissions data is derived from raw data supplied by various data sources. To ensure the accuracy of the calculations and findings, GHG data is managed strictly according to the ISO 14064-1:2018 and GHG Protocol, and data quality scoring system regulated by these standards are used to assess the quality of this year's inventory data.

The data quality scores for each emission source are positively correlated with their performance as well as the quantity of emissions in relation to the total emissions. There are two indicators for assessing the performance of each emission source: the activity data error level and the emission factor error level. Scores range from error level 1 (score 1) to error level 3 (score 3), with lower scores indicating better data quality. For instance, organizations are advised to use automatically and continuously measured activity data (score 1). If such data is unavailable, they can opt for intermittent measurements (score 2). When both types of data are missing, organizations can resort to self-estimation, alloting scores 1-3, the highest of which is 3. Each emission source is also given weight according to its emission share. Consequently, the total score is a weighting of the scores of all emission sources, and the lower the total score, ranging from 0 to 10, the higher the overall data quality.

In 2022, the computed average score according to the standard is 4.70, which corresponds to Level 2. Although it remains at the same level as the 2021 data quality, the score is significantly lower than in 2021 (4.95). This highlights the significant efforts made in the past year to improve data quality in addition to reducing by the bank carbon footprint itself, as mentioned in Section 4.2.5. Category 2 emissions from purchased electricity, heating, centralized cooling, and hot water have the most accurate statistics. Other categories range from 0.01 to 0.31.

The specific calculation process is as follows:

Table 6: Inventory Quality Score

Activity	Fuel	Emission (t)	Percentage (%)	Score
Emergency generators	Diesel	8.96	0.09	0.002
Kitchen cookers Natural gas		43.28	0.45	0.009
Official vehicles	Petrol	15.45	0.16	0.003
Vehicle refrigerants	R134a	0.00	0.00	0.000
Freezers	R134a	8.57	0.09	0.005
Freezers	R404a	0.00	0.00	0.000
Split air conditioners	R32	0.00	0.00	0.000
Chillers	R134a	206.55	2.17	0.130
Chillers	R410a	0.00	0.00	0.000
Carbon dioxide fire extinguishers	CO ₂	0.40	0.00	0.000
Heptafluoropropane fire extinguishers	Heptafluoropropane	223.20	2.34	0.047
Septic tanks	CH4	75.75	0.79	0.071
	Category 1			0.27
Municipal heating	Natural gas	2,585.46	27.11	0.542
Municipal hot water supply Natural		96.80	1.02	0.020
Centralized cooling	Centralized cooling Electricity		0.77	0.015
Electricity for office buildings	Electricity supply to the grid	4,994.33	52.37	3.142
	Category 2			3.720
Staff commuting (car, tram, metro, etc.)	Electricity, petrol, diesel, etc.	100.33	1.05	0.063
Staff Business Travel (high-speed rail)	Electricity	0.86	0.01	0.001
Staff business travel (by air)	Aviation diesel, etc.	898.69	9.42	0.565
Staff business accommodation	Electricity etc.	106.04	1.33	0.044
	Category 3			0.674
Waste disposal (food waste)	CH4	0.08	0.00	0.000
Waste disposal (other waste)	CH_4	0.09	0.00	0.000
Waste disposal (recycling)	CH_4	0.00	0.00	0.000
Cloud service	Electricity	92.57	0.97	0.039
Domestic water supply	Electricity	5.36	0.06	0.001
	Category 4			0.040
	Total			4.70

6 MITIGATION ACTIVITIES

Part of AIIB's mitigation efforts include ongoing efforts to reduce GHG emissions from its building and facilities. AIIB has an integrated program for operating and maintaining its offices and seeks to meet LEED specifications for resource conservation. The Bank achieved its LEED Existing Building Operation & Maintenance Platinum certification in 2022. Indirect sources of GHG emissions such as electricity, heating, and water have declined between 2020 and 2023 after the move to the Permanent Headquarters, and despite the increase in business size and scale.

AllB encourages the use of videoconferencing and combining several business missions into one trip to reduce business travel which contributes to GHG emissions generated outside the Permanent Headquarters. To promote low-carbon commuting, the Bank provides bike racks and changing facilities to encourage staff to bike to work. Additionally, the Bank has implemented various measures to reduce office waste, such as eliminating much of this single-use and disposable packaging. Waste generation declined between 2020 and 2023 as well.

AllB's information management policies resulted in initiatives to reduce its carbon footprint, such as digitizing collections to reduce the need for paper as well as physical storage space. The Bank prioritizes records keeping in electronic formats, preferring digital formats for both AllB's knowledge products and library resources.

To promote staff and public engagement, AIIB has launched various sustainability supporting events, including Earth Hour, Earth Day, and Biodiversity Day. Trainings regarding climate change are also provided regularly. AIIB is trying to cultivate a culture of low carbon management in the workplace, minimizing its carbon footprint and championing sustainability. Every small action from AIIB staff, from energy-conscious practices to waste reduction, contributes to a greener future for the Bank.

AllB since 2016 has been supporting the Earth Hour campaign, switching off all lights from 8:30 pm to 9:30 pm, in its Permanent Headquarters, and encouraging staff to do the same at home, every last Saturday of March of each year. This is an important campaign to acknowledge the array of challenges our world faces in terms of energy, climate, and poverty.

Every spring, AllB organizes a tree-planting activity for staff. Since 2018, Bank personnel and their families have planted 1,750 trees. In April 2023, a third-party organization verified that the planted trees could absorb around 534 kg of CO_2 during their lifetime.

AllB also collaborated with the Beijing government on the Nocturnal Bird Migration project to monitor nocturnal bird migration. Beijing is along the East Asian-Australasian Flyway for millions of birds flying to and from their breeding grounds. The project can help protect biodiversity by raising awareness about these birds and the ecological benefits of bird migration.

Although these efforts may seem small in terms of global GHG emissions, small actions can still make a big difference. AllB's efforts align with its strategic priority to address climate change and demonstrate its commitment to taking tangible actions to back up its words. The Bank's efforts also underscore the benefits and necessity for collective efforts by all stakeholders to address climate threats. AllB continues to look out for all possible opportunities to reduce operational emissions and promote sustainable development well into the future.

APPENDICES

Appendix A: Summary of AIIB Emissions for 2022

Emission Share for Six Categories According to ISO 14064-1:2018

ISO 14064-1:2018 Category 1-6	Category 1	Category 2	Category 3	Category 4	Total
Emissions (tons of carbon dioxide equivalent [t-CO ₂ e]/year)	582.16	7,749.79	1,105.92	98.09	9,535.96
Percentage (%)	6.10%	81.27%	11.60%	1.03%	100%

Emission Share for Three Scopes According to Greenhouse Gas Protocol

GHG Protocol Scope 1-3	Scope 1	Scope 2	Scope 3	Total
Emissions (t-CO2e/year)	582.16	7,749.79	1,204.01	9,535.96
Percentage (%)	6.10%	81.27%	12.63%	100%

Emission Share for AIIB's Permanent Headquarters in Beijing and Tianjin Backup Office

	Tianjin (t-CO ₂ e/year)	Beijing (t-CO ₂ e/year)	Total (t-CO ₂ e/ year)
Emissions (t-CO2e/year)	589.51	8,946.45	9,535.96
Percentage (%)	6%	94%	1.00

Top Three Emission Sources

	Electricity	Heating	Travel	Total
Emissions (t-CO2e/year)	4,994.33	2,585.46	1,005.59	8,585.38
Percentage (%)	52%	27%	11%	90%

Appendix B

bsi.



Verification Report

Verification Opinion

Verified as Satisfactory				
Based on the process and procedures conducted, the GHG statement contained in the AIIB Carbon Footprint Report 2022 Greenhouse Gas Emissions Resulting from AIIB Internal Operation (approved on Oct. 20, 2023) produced by Asian Infrastructure Investment Bank	 <i>Is</i> materially correct and is a fair representation of GHG data and information. <i>Has</i> been prepared in accordance with ISO14064-1 and its principles. 			
Lead Verifier	Bell Deng 邓中华			
Independent Reviewer	Shirley Qian 钱韶丽			
Signed on behalf of BSI	Michael Lam - Managing Director Assurance, APAC			
Issue Date	25/10/2023			
BSI Management Systems Certification (Beijing) Co., Ltd. Address: Rm. 2008 East Ocean Centre, No. 24A Jianguomenwai Street, Beijing 100004, P.R. China NOTE: BSI Management Systems Certification (Beijing) Co., Ltd. is independent to and has no financial interest in Asian Infrastructure Investment Bank. This 3 rd party Verification Opinion has been prepared for Asian Infrastructure Investment Bank only for the purposes of verifying its statement relating to its GHG emissions more particularly described in the scope above. It was not prepared for any other purpose. In making this Statement, BSI Management Systems Certification (Beijing) Co., Ltd. has assumed that all information				
(Beijing) Co., Ltd. accepts no liability to any t	i management systems Certification (beijing) Co., Ltd. has assumed that all information ment Bank is true, accurate and complete. BSI Management Systems Certification hird party who places reliance on this statement.			

...making excellence a habit.[™]

CFV 798701 25102023

Verification Engagement

Organization	Asian Infrastructure Investment Bank		
Responsible party	Asian Infrastructure Investment Bank		
Verification Objectives	 To express an opinion on whether the organizational GHG Statement which is historical in nature: Is accurate, materially correct and is a fair representation of GHG data and information. Has been prepared in accordance with ISO14064-1 used by BSI to verify the GHG Organizational Statement. 		
Materiality Level	5%		
Level of Assurance	Reasonable		
Verification evidence gathering procedures	 Evaluation of the monitoring and controls systems through interviewing employees' observation & inquiry. Verification of the data through sampling recalculation, retracing, cross checking and reconciliation. 		
	Remark: Communicate through remote online tools.		
Verification Standards	The verification was carried out in accordance with ISO 14064-3 and ISO 14065		
Note: Asian Infrastructure Investment Bank is responsible for the preparation and fair presentation of the GHG statement and report in accordance with the agreed criteria. BSI is responsible for expressing an opinion on the GHG statement based on the verification.			

Organizational GHG Statement

Organization	1	Asian Infrastructure Investment Bank
Organizations GHG Report containing GHG		AIIB Carbon Footprint Report 2022 Greenhouse Gas Emissions
Statement		Resulting from AIIB Internal Operation
Organization	nal Boundary	Operational Control
Locations in Boundary	cluded in the Organizational	See Appendix A
Exclusions fi	om Organisational Boundary:	Nil
Scope of act	ivities:	The provision of investment and financing services for infrastructure development in Asia.
Reporting Boundary:	Direct GHG Emissions (Scope 1)	Diesel for Emergency Generator, Corporate Fleet, Natural Gas, Release of Refrigerant, Fire Extinguisher, Septic-tank
,	Direct GHG Removals (Scope 1)	Nil
	Indirect GHG Emissions from imported energy (Scope 2)	Heating, Hot Water, Centralized cooling, Electricity from Grid
	Indirect GHG emissions from transportation (Scope 3)	Staff Commuting, Business Travel – Flight, Business Travel – Train, Business Travel – Hotel,
	Indirect GHG emissions from products used by organization (Scope 3)	Procurement – Cloud Service, Waste Disposal, Procurement – Tap Water
	Indirect GHG emissions associated with the use of products from the organization (Scope 3)	Nil
	Indirect GHG emissions from other sources (scope 3)	Nil
Exclusions fit	om Reporting Boundary: <i>sions remove this section)</i>	 AIIB's business travel expense reimbursement system, SAP Concur, can only record reimbursed cab expenditures without distance information. AIIB expects this part of emissions to be below 1 percent of the total emissions. AIIB is not calculating the price of a local cab for this report due to the wide pricing disparity between regions. Visitors to the AIIB Headquarters are responsible for their own transportation reimbursement. AIIB expects this part of emissions to be below 1 percent of the total emissions. In 2022, 164 products and services in 8 subcategories have been procured. Most of these are consultancy services and IT services. This report only examines the emissions associated with tap water consumption and cloud services acquisition. The boundary does not encompass AIIB investment projects or their associated upstream and downstream emissions. AIIB's carbon footprint from investment projects are managed and disclosed by AIIB's other initiatives.
Criteria for c	leveloping the organizational	ISO14064-1:2018, GHG Protocol
GHG Invento	Dry:	January 1 2022 to December 31 2022
Reporting Pe		

tCO₂(e) of 2022 582.16 Direct Emissions non biomass (category 1) 0 Removals 7749.79 Location Based Indirect Emissions from Imported Energy (category 2) Indirect GHG emissions from transportation (category 3) 1105.92 Indirect GHG emissions from products used by organization (category 4) 98.09 Indirect GHG emissions associated with the use of products from the Not quantified organization (category 5) Indirect GHG emissions from other sources (category 6) Not quantified Total Quantified 9535.96

Summary of CO₂e Emissions by ISO 14064-1 (Category 1-6)

Summary of CO₂e Emissions by GHG Protocol (Scope 1-3)

	tCO ₂ (e) of 2022
Direct Emissions (scope 1)	582.16
Indirect Emissions from Imported Energy (scope 2) - Location Based	7749.79
Indirect GHG emissions from other sources (Scope 3)	1204.01
Total (location based)	9535.96

Appendix A

<LIST locations from the boundary of the GHG statement>

- 1. Tower A, Asia Financial Center, No. 1, Tianchen East Road, Chaoyang District, Beijing 100101
- 2. Floor 25-26, No. 681, Ronghe Rd. Binhai New District, Tianjin, 300450



Learn more about AIIB and Paris Alignment



The Asian Infrastructure Investment Bank (AIIB) aims to lead by example in managing its carbon emissions and disclosing the impact of its internal operations. It analyzed carbon emission impacts associated with its internal operations for the first time in September 2020 (for its 2017–2019 emissions) and then again in September 2021 (for the 2020 emissions), tracking the carbon footprint from scopes linked with its internal operations. Starting from the report of 2021 activities, AIIB has been continuously monitoring and verifying its carbon emissions annually and discloses this information to the public.

This report, as the second verified AIIB Carbon Footprint Report, provides a comprehensive analysis of the carbon footprint generated by the internal operations of AIIB's Permanent Headquarters in Beijing and its backup office in Tianjin. It presents annual data for the 12-month period from January 1, 2022 to December 31, 2022. This report describes the methodology for selecting and collecting data and computing carbon emissions for all relevant emission categories using internal and external documentation, interviews from key AIIB personnel and service suppliers, and source data. This report does not cover AIIB's lending or technical support activities for its clients.



AllB Headquarters, Tower A, Asia Financial Center No.1 Tianchen East Road, Chaoyang District, Beijing 100101 China