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# GHG Inventory

FY-2023-24

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**AFC Furniture System Pvt  
Ltd**



# **GHG INVENTORY REPORT – FY 2023-24**

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## Introduction

GHG emissions are closely linked with human induced climate change – a topic which is a top priority for our stakeholders. Stakeholders are pushing for increasingly ambitious GHG emission reduction goals, making our work to track and reduce our GHG emissions more vital than ever.

Climate change has been identified as one of the greatest challenges facing nations, governments, businesses, and citizens. Climate change has implications for both human and natural systems and could lead to significant changes in resource use, production, and economic activity. In response, international, regional, national and local initiatives are being developed and implemented to limit greenhouse gas (GHG) concentrations in the Earth's atmosphere. Such GHG initiatives rely on the quantification, monitoring, reporting and verification of GHG emissions and/or removals, which could be done within the framework of ISO 14064 / The GHG Protocol – A Corporate Accounting & Reporting Standard by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

The GHG Protocol specifies principles and requirements at the organization level for quantification and reporting of greenhouse gas (GHG) emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organization's GHG inventory and it is a tool for greenhouse gas (GHG) limitation and reduction.

## Our Approach to Climate Change

We stand at the forefront of addressing the critical challenges posed by climate change and greenhouse gas (GHG) accounting and reporting. Recognizing these issues as pivotal to our governance and strategic considerations, we have implemented a comprehensive

approach. Regular GHG inventories, encompassing Scopes 1, 2, and 3 emissions (Category 6, employee commute & 7, employee travel), form the basis of our commitment to transparency and accountability. Holding ISO 50001:2018 certification and prioritizing green manufacturing practices, we continually enhance energy efficiency and integrate renewable sources into our operations. Our dedication to innovation extends to adopting technologies that minimize environmental impact. Collaborating with suppliers, we emphasize sustainable practices throughout our supply chain. Certifications like **ISO 14001:2015**, and **Indoor Advantage Gold** underscore our commitment to environmental responsibility. Transparent reporting and employee engagement initiatives contribute to fostering awareness and accountability within our organization. We view sustainability as an ongoing journey, and through stakeholder collaboration, we aspire to make meaningful contributions to global efforts in combating climate change.

## About us

Since our inception in 2008, AFC Furniture Solutions has become a beacon of innovation and advancement in the realm of office furniture manufacturing. Proudly rooted in India, we have swiftly ascended as the industry's fastest-growing brand, providing comprehensive end-to-end solutions through our state-of-the-art Green Manufacturing facility spanning an impressive 2.5 lakh sq ft.

### **Our Journey:**

From modest origins focused on panel manufacturing, AFC Solutions has evolved into a dynamic organization within a mere three years. Fueled by passion and unwavering commitment, our dedicated team has prioritized delivery timelines, product quality, and client satisfaction, culminating in the establishment of a proficient in-house manufacturing unit capable of delivering modular furniture solutions.

### **Product Excellence:**

Dedicated to going beyond mere furniture provision, AFC Solutions excels in tailoring solutions to diverse client needs. Our extensive product portfolio spans Workstations, Cabins, Seating Solutions, Loose Furniture, Storage, Educational setups, Laboratories, and more.

### **Certifications & Compliance:**

Adhering to the highest industry standards, AFC Solutions proudly holds certifications such as ISO 9001:2015, ISO 50001:2018, ISO 45001:2018, and ISO 14001:2015. Additionally, being BIFMA & GREENGUARD Certified and members of NSIC and MSME, underscores our commitment to excellence and compliance.

### **Green Manufacturing & Sustainability:**

At AFC Solutions, sustainability is not just a practice; it's part of our DNA. Embracing green manufacturing principles to minimize our environmental impact, our products are proudly crafted in India using cutting-edge global technologies and equipment.

### **Recent Acquisitions:**

Demonstrating our commitment to expansion and excellence, AFC Solutions has recently acquired esteemed brands - Livo, Vibrant, and X-Bench, formerly under the wing of Wipro Enterprises' furniture business.

### **Client Satisfaction & Nationwide Presence:**

In our 15 years of operation, AFC Solutions has achieved a remarkable 97% client satisfaction rate across various sectors. Our agile business model enables us to concentrate on quality, design, manufacturing, and timely delivery, reaching clients nationwide, including tier 2 and 3 regions.

### **Crafting Sustainable Excellence:**

As we navigate the dynamic landscape of the office furniture industry, AFC Solutions remains unwavering in its dedication to crafting sustainable excellence, fostering innovation, and surpassing client expectations. We eagerly anticipate the opportunity to contribute to your unique story and play a pivotal role in transforming your workspace.



## Vision

AFC Furniture Solutions envisions being a global leader in office furniture, known for sustainable excellence and innovative workspaces that inspire productivity and well-being. Our vision extends beyond furniture; we envision a future where every workspace we touch becomes a testament to the seamless integration of aesthetics, functionality, and sustainability.

## Mission

Our mission is to redefine office furniture standards by delivering customized, sustainable solutions that exceed client expectations, with a commitment to agility, innovation, and environmental responsibility.



## Reporting Boundary

The reporting boundary covers the Greater Noida Plant of AFC Furniture Solutions. This report also outlines the management processes and methodologies used to determine the GHG inventory.

## Operational boundary

The annual GHG Inventory – Scopes 1, 2, and 3 emissions (Category 6, employee commute & 7, employee travel) is in accordance with the requirements of ISO 14064 / The GHG Protocol standard in

all material respects. This document has been prepared in conformance with the GHG Protocol Corporate Accounting and Reporting Standard prepared by the World Business Council on Sustainable Development (WBCSD) and the World Resources Institute (WRI). To ascertain the operational boundary, the AFC Furniture has identified several sources of emissions of major Greenhouse Gases (GHGs) associated with its operations including:

- Carbon dioxide (CO<sub>2</sub>),
- Methane (CH<sub>4</sub>),
- Nitrous oxide (N<sub>2</sub>O),
- Hydrochloroflourocarbons (HFCs),
- Perflourocarbons (PFCs)
- Sulphur Hexafluoride (SF<sub>6</sub>)

These sources are categorized as direct and indirect emissions and recognized as Scope 1, 2 & 3 depending on their sources.

| Scope                         | Source                                       |
|-------------------------------|--|
| Direct GHG Emission Sources   |  |
| Scope 1                       | DG - Diesel Consumption                      |
| Scope 1                       | Petrol consumption in Company owned Vehicles |
| Scope 1                       | HVAC Refrigerants                            |
| Scope 1                       | PNG consumption                              |
| Scope 1                       | Gases top-up in CO2 type Fire Extinguisher   |
| Energy indirect GHG emissions |  |
| Scope 2                       | Grid Electricity Consumed                    |
| Scope 3                       |  |
| Cateogary-6                   | Employee commuting                           |
| Cateogary-7                   | Business travel                              |

## Methodology

Data for the various GHG source was maintained by the respective departments of the Company in excel spreadsheet format and was checked with the source documents.

| GHG Source Type         | GHG Activity Data     | Source                     | Frequency of Data Collection |
|-------------------------|-----------------------|----------------------------|------------------------------|
| DG - Diesel Consumption | Fuel Quantity (Ltrs.) | Fuel Bill, Service Records | Monthly                      |

|  |                             |  |         |
|--|-----------------------------|--|---------|
| Petrol consumption in Company owned Vehicles | Fuel Quantity (Ltrs.)       | Fuel Bill, Service Records                                   | Monthly |
| HVAC Refrigerants                            | Refrigerant Refill Quantity | Service Records / Invoices / Statement from service provider | Annual  |
| PNG consumption                              | Fuel Quantity (Ltrs.)       | Fuel Bill, Service Records                                   | Monthly |
| Gases top-up in CO2 type Fire Extinguisher   | CO2 Quantity                | Service Records / Invoices / Statement from service provider | Annual  |
| Grid Electricity Consumed                    | Units Consumed              | Meter Readings   | Monthly |
| Employee commute and travel data             | Km covered / Hotel nights   | Travel expenditure   | Monthly |

Starting FY 2022-23, AFC Furniture has decided to track its GHG Intensity performance normalized against the Production in Metric Tons (MTs). GHG incentivization at AFC Furniture is carried out with the underlying business objective of identifying potential areas for reduction of GHG, wherever possible.

## GHG Information Management System and Data Quality Control

AFC Furniture Solutions has established and maintained GHG information management procedures that:

- Ensure conformance with the principles of standard ISO 14064 / The GHG protocol – A Corporate Accounting & Reporting Standard, Corporate value chain (Scope 3) Accounting and Reporting Standards and Technical Guidance for Calculating Scope 3 Emission.
- Ensure consistency with the intended use of the GHG inventory
- Provide routine and consistent checks to ensure accuracy and completeness of the GHG inventory
- Identify and address errors and emissions, and
- Document and archive relevant GHG inventory records, including information management activities



## GHG Emission summary

The reported GHG emissions for the reporting period for the calendar FY 2022-23 and 2023-24 are:

| Description  | GHG emission (in MTs of CO <sub>2</sub> e) | GHG emission (in MTs of CO <sub>2</sub> e) |
|--|--|--|
|  | Year 2023-24                               | Year 2022-23                               |
| Scope 1  | 503  | 165  |
| Scope 2  | 968  | 669  |
| Scope 3  |  |  |
| Employee Commute   | 215.68                                     | 175.18                                     |
| Business Travel  | 1280.94                                    | 716.26                                     |
| Total Scope 1+ Scope 2 + Scope 3   | 2967.62                                    | 1725.44                                    |
| Emission Intensity –<br>Scope1+ Scope2 + Scope 3<br>TCO <sub>2</sub> e / MT Production |  |  |

Refer **Appendix A** for the emission factors used to calculate the stated GHG emissions.

## Appendix A

### Emission Factors

| Scope   | Activity Type                     | Fuel Type               | Reference   |
|---------|-----------------------------------|-------------------------|---|
| Scope 1 | Stationery Fuel                   | DG - Diesel Consumption | PowerTool Ver 2.0_2015. 2.86 Tons CO2/KL  |
|         | Stationery Fuel                   | PNG consumption         | UK GHG Conversion Factors Ver.2 2023. 0.002054 Tons/SCM   |
|         | Company Vehicles                  | Petrol                  | PowerTool Ver 2.0_2015. 2.43 Tons CO2/KL  |
|         | Fugitive emissions - HVAC Systems | <b>Refrigerant Type</b> |   |
|         |                                   | R-134a                  | UK GHG Conversion Factors Ver.2 2022. 1430 Ton CO2/Ton  |
|         |                                   | R-410a                  | UK GHG Conversion Factors Ver.2 2022. 2088 Ton CO2/Ton  |
|         | CO2 used in Fire Extinguishers    | Gases Used              |   |
|         |                                   | CO2                     | IPCC 5th Assessment report  |
| Scope 2 | Purchased Electricity             | <b>Units</b>            |   |
|         |                                   | MWHs                    | CEA Baseline Carbon Dioxide Emission Database Version 18.0. for CY 2022, Latest Available on 31st March'22 & and CH4, N2O from UK DEFRA 2022  |
| Scope 3 | Employee                          | <b>Type</b>             |   |
|         |                                   | Communte                | DEFRA UK, and <a href="https://indiaghgp.org/sites/default/files/Road%20Transport%20Technical%20Paper.pdf">https://indiaghgp.org/sites/default/files/Road%20Transport%20Technical%20Paper.pdf</a> |
|         |                                   | Business Travel         | DEFRA UK, and <a href="https://indiaghgp.org/sites/default/files/Road%20Transport%20Technical%20Paper.pdf">https://indiaghgp.org/sites/default/files/Road%20Transport%20Technical%20Paper.pdf</a> |