

# GREENHOUSE GAS REPORT 2019—2022

# Methodology

In accordance with widely accepted accounting standards for Greenhouse Gas (GHG) inventory management practices, Morgan Business Consulting, LLC (MBC) performed an internal GHG inventory accounting application of the **Greenhouse Gas Protocol Corporate Standard**<sup>i</sup> criteria and guidance.

## Company and Inventory Boundary

#### Organizational Boundaries

*Control Approach*: MBC's internal business operations account for 100 percent of the GHG emissions from internal operations over which it is has control.

#### **Operational Boundaries**

MBC operates from a typical, office-based setting, with no direct emissions and no forms of combustion generated by business activity. Only **Scope 2** and **Scope 3** emissions are generated by MBC operational activities, with no **Scope 1** emissions to report. This GHG report covers calendar years 2019 – 2022.

#### Tools Utilized

MBC utilized tools and resources provided by the U.S. Environment Protection Agency (EPA) Center for Corporate Climate Leadership<sup>ii</sup>. These tools include:

- EPA Calculator Tool for Small Business / Low Emitters<sup>iii</sup>
- Annual GHG Inventory Summary & Target Tracking Form
- Simplified Inventory Management Plan

#### **Data Sources**

The following GHG emissions data categories were identified and recorded:

- Scope 2: Indirect Emissions
  - o Total Amount of Electricity Purchased
- Scope 3: Employee Business Travel
  - o Personal Vehicle, Rental Car or Taxi Business Travel by Vehicle-Miles
  - o Rail of Bus Business Travel by Passenger-Miles
  - o Air Business Travel by Passenger-Miles

#### 52.223-22 Public Disclosure of GHG Emissions and Reductions Goals-Representation<sup>iv</sup>

This GHG emissions report fulfills U.S. FAR 52.223-22(b)(1) "The Offeror (itself or through its immediate owner or highest-level owner)  $\blacksquare$  does,  $\Box$  does not publicly disclose greenhouse gas emissions, i.e., make available on a publicly accessible website the results of a greenhouse gas inventory, performed in accordance with an accounting standard with publicly available and consistently applied criteria, such as the Greenhouse Gas Protocol Corporate Standard."

This report also fulfills U.S. FAR 52.223-22(c) "If the Offeror checked "does" in paragraphs (b)(1) or (b)(2) of this provision, respectively, the Offeror shall provide the publicly accessible website(s) where greenhouse gas emissions and/or reduction goals are reported: <a href="https://morganbusinessconsulting.com/community/">https://morganbusinessconsulting.com/community/</a>."

#### Information on Emissions

#### Total Scope 1, Scope 2, and Scope 3 Emissions (2019 – 2022)

MBC selected calendar year 2019 to serve as the base year because it is the earliest relevant point in time with which reliable data is meaningfully available. It is important to note that the COVID-19 pandemic caused significant changes in electricity consumption (Scope 2) and employee business travel (Scope 3) emissions from 2020 and into 2022, as work from home became the standard operating practice for most MBC employees and business travel became more conservative.

MBC has no direct emissions, including zero emissions from biological sequestered carbon (e.g., CO<sub>2</sub> from burning biomass/biofuels), so this form of emissions is not reported separately from the scopes anywhere.



Table 1: Total Scope 1, Scope 2, and Scope 3 Emissions (2019 – 2022).

Emissions data calculated using the U.S. EPA Simplified GHG Emissions Calculator ("the Calculator").

# Emissions Data for All GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>)

The following emissions data encompasses all required six GHGs to fulfill the GHG Protocol Corporate Standard reporting requirements. It is important to note that MBC does not produce any Scope 1 direct emissions, including no Fluorinated Gases (HFCs, PFCs, SF<sub>6</sub>) emissions to report.

2019 – Scope 2: Total Amount of Electricity Purchased by eGRID Subregion

					Market-Based Use these cells to enter applicable market-based emission factors					Location-Based				
Table 1. Total Amount of E	lectricity Purchased by eGRID	Subregion				Emission Factor			Emissions		Emissions			
Source	Source	Source	eGRID Subregion	Electricity	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	
ID	Description	Area (sq ft)	where electricity is consumed	Purchased	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	
				(kWh)	(lb/MWh)	(lb/MWh)	(lb/MWh)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb)	
Bldg-012	East Power Plant	12,517	HIMS (HICC Miscellaneous)	200,000	0	0	0	0.0	0.0	0.0	226,880.0	27.0	4.2	
GHG-Elec-2019-410-001	Unknown - estimate made ba	5,995	RFCE (RFC East)	6,353	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,274.1	0.3	0.0	4,274.1	0.3	0.0	
GHG-Elec-2019-410-002	Unknown - estimate made ba	5,995	RFCE (RFC East)	6,523	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,388.4	0.3	0.0	4,388.4	0.3	0.0	
GHG-Elec-2019-410-003	Unknown - estimate made ba	5,995	RFCE (RFC East)	6,569	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,419.7	0.3	0.0	4,419.7	0.3	0.0	
GHG-Elec-2019-410-004	Unknown - estimate made ba	5,995	RFCE (RFC East)	6,505	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,376.6	0.3	0.0	4,376.6	0.3	0.0	
GHG-Elec-2019-410-005	5/15/2019 - 6/11/2019	5,995	RFCE (RFC East)	5,164	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,474.4	0.3	0.0	3,474.4	0.3	0.0	
GHG-Elec-2019-410-006	6/11/2019 - 7/11/2019	5,995	RFCE (RFC East)	6,243	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,200.4	0.3	0.0	4,200.4	0.3	0.0	
GHG-Elec-2019-410-007	7/11/2019 - 8/11/2019	5,995	RFCE (RFC East)	6,889	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,635.2	0.3	0.0	4,635.2	0.3	0.0	
GHG-Elec-2019-410-008	8/11/2019 - 9/10/2019	5,995	RFCE (RFC East)	6,588	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,432.3	0.3	0.0	4,432.3	0.3	0.0	
GHG-Elec-2019-410-009	9/10/2019 - 10/9/2019	5,995	RFCE (RFC East)	5,992	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,031.2	0.3	0.0	4,031.2	0.3	0.0	
GHG-Elec-2019-410-010	10/9/2019 - 11/7/2019	5,995	RFCE (RFC East)	5,943	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,998.3	0.3	0.0	3,998.3	0.3	0.0	
GHG-Elec-2019-410-011	11/7/2019 -12/9/2019	5,995	RFCE (RFC East)	6,468	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,351.5	0.3	0.0	4,351.5	0.3	0.0	
GHG-Elec-2019-410-012	12/9/2019 - 1/12/2020	5,995	RFCE (RFC East)	7,535	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	5,069.8	0.4	0.1	5,069.8	0.4	0.1	
					<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>							
Total Emissions for All Source	Total Emissions for All Sources 76,772							51,652.0	3.8	0.5	51,652.0	3.8	0.5	

#### 2020 – Scope 2: Total Amount of Electricity Purchased by eGRID Subregion

					Market-Based Use these cells to enter applicable market-based emission factors						Location-Based			
Table 1. Total Amount of Electricity Purchased by eGRID Subregion						Emission Facto	rs		Emissions		Emissions			
Source	Source	Source	eGRID Subregion	Electricity	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	
ID	Description	Area (sq ft)	where electricity is consumed	Purchased	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	
	1		· ·	(kWh)	(lb/MWh)	(lb/MWh)	(lb/MWh)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb)	
Bldg-012	East Power Plant	12,517	HIMS (HICC Miscellaneous)	200,000	0	0	0	0.0	0.0	0.0	226,880.0	27.0	4.2	
GHG-Elec-2020-410-001	1/12/2020 - 2/11/2020	5,995	RFCE (RFC East)	7,282	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,899.5	0.4	0.1	4,899.5	0.4	0.1	
GHG-Elec-2020-410-002	2/11/2020 - 3/11/2020	5,995	RFCE (RFC East)	6,659	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,479.9	0.3	0.0	4,479.9	0.3	0.0	
GHG-Elec-2020-410-003	3/11/2020 - 4/12/2020	5,995	RFCE (RFC East)	5,213	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,507.6	0.3	0.0	3,507.6	0.3	0.0	
GHG-Elec-2020-410-004	4/12/2020 - 5/11/2020	5,995	RFCE (RFC East)	4,732	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,183.6	0.2	0.0	3,183.6	0.2	0.0	
GHG-Elec-2020-410-005	5/11/2020 - 6/10/2020	5,995	RFCE (RFC East)	5,352	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,601.1	0.3	0.0	3,601.1	0.3	0.0	
GHG-Elec-2020-410-006	6/10/2020 - 7/12/2020	5,995	RFCE (RFC East)	6,746	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,539.0	0.3	0.0	4,539.0	0.3	0.0	
GHG-Elec-2020-410-007	7/12/2020 - 8/10/2020	5,995	RFCE (RFC East)	7,480	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	5,032.5	0.4	0.1	5,032.5	0.4	0.1	
GHG-Elec-2020-410-008	8/10/2020 - 9/9/2020	5,995	RFCE (RFC East)	8,030	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	5,402.7	0.4	0.1	5,402.7	0.4	0.1	
GHG-Elec-2020-410-009	9/9/2020 - 10/8/2020	5,995	RFCE (RFC East)	6,137	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,129.2	0.3	0.0	4,129.2	0.3	0.0	
GHG-Elec-2020-410-010	10/8/2020 - 11/8/2020	5,995	RFCE (RFC East)	5,426	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,650.9	0.3	0.0	3,650.9	0.3	0.0	
GHG-Elec-2020-410-011	11/8/2020 - 12/10/2020	5,995	RFCE (RFC East)	6,120	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,117.3	0.3	0.0	4,117.3	0.3	0.0	
GHG-Elec-2020-410-012	12/10/2020 - 1/11/2021	5,995	RFCE (RFC East)	6,245	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,201.4	0.3	0.0	4,201.4	0.3	0.0	
					<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>							
Total Emissions for All Sources 75,423							50,744.6	3.7	0.5	50,744.6	3.7	0.5		

# 2021 – Scope 2: Total Amount of Electricity Purchased by eGRID Subregion

					Market-Based Use these cells to enter applicable market-based emission factors						Location-Based			
T-1-1-4 T-1-1 A 4 F	ble 1. Total Amount of Electricity Purchased by eGRID Subregion							market-based		i				
						Emission Factors			Emissions		Emissions			
Source	Source	Source	eGRID Subregion	Electricity	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	
ID	Description	Area (sq ft)	where electricity is consumed	Purchased	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	
				(kWh)	(lb/MWh)	(lb/MWh)	(lb/MWh)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb)	
Bldg-012	East Power Plant	12,517	HIMS (HICC Miscellaneous)	200,000	0	0	0	0.0	0.0	0.0	226,880.0	27.0	4.2	
GHG-Elec-2021-410-001	1/11/2021 - 2/10/2021	5,995	RFCE (RFC East)	6,124	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	4,119.9	0.3	0.0	4,119.9	0.3	0.0	
GHG-Elec-2021-410-002	2/10/2021 - 3/11/2021	5,995	RFCE (RFC East)	5,743	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,863.9	0.3	0.0	3,863.9	0.3	0.0	
GHG-Elec-2021-410-003	3/11/2021 - 4/12/2021	5,995	RFCE (RFC East)	4,912	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	3,304.6	0.2	0.0	3,304.6	0.2	0.0	
GHG-Elec-2021-420-004	4/12/2021 - 5/11/2021	2,188	RFCE (RFC East)	2,166	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,457.1	0.1	0.0	1,457.1	0.1	0.0	
GHG-Elec-2021-420-005	5/11/2021 - 6/10/2021	2,188	RFCE (RFC East)	2,040	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,372.3	0.1	0.0	1,372.3	0.1	0.0	
GHG-Elec-2021-420-006	6/10/2021 - 7/12/2021	2,188	RFCE (RFC East)	2,070	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,392.9	0.1	0.0	1,392.9	0.1	0.0	
GHG-Elec-2021-420-007	7/12/2021 - 8/10/2021	2,188	RFCE (RFC East)	1,979	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,331.8	0.1	0.0	1,331.8	0.1	0.0	
GHG-Elec-2021-420-008	8/10/2021 - 9/9/2021	2,188	RFCE (RFC East)	1,990	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,339.2	0.1	0.0	1,339.2	0.1	0.0	
GHG-Elec-2021-420-009	9/9/2021 - 10/10/2021	2,188	RFCE (RFC East)	1,979	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,331.6	0.1	0.0	1,331.6	0.1	0.0	
GHG-Elec-2021-420-010	10/10/2021 - 11/8/2021	2,188	RFCE (RFC East)	2,066	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,390.0	0.1	0.0	1,390.0	0.1	0.0	
GHG-Elec-2021-420-011	11/8/2021 - 12/9/2021	2,188	RFCE (RFC East)	2,124	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,429.4	0.1	0.0	1,429.4	0.1	0.0	
GHG-Elec-2021-420-012	12/9/2021 - 1/10/2022	2,188	RFCE (RFC East)	2,354	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,584.0	0.1	0.0	1,584.0	0.1	0.0	
					<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>							
Total Emissions for All Sources			35,548				23,916.7	1.7	0.2	23,916.7	1.7	0.2		

# 2022 – Scope 2: Total Amount of Electricity Purchased by eGRID Subregion

					Market-Based						Location-Based		
							Use these cells to enter applicable market-based emission factors						
Table 1. Total Amount of Electricity Purchased by eGRID Subregion						Emission Facto	rs		Emissions		Emissions		
Source	Source	Source	eGRID Subregion	Electricity	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO <sub>2</sub>	CH₄	N <sub>2</sub> O
ID	Description	Area (sq ft)	where electricity is consumed	Purchased	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions
			·	(kWh)	(lb/MWh)	(lb/MWh)	(lb/MWh)	(lb)	(lb)	(lb)	(lb)	(lb)	(lb)
Bldg-012	East Power Plant	12,517	HIMS (HICC Miscellaneous)	200,000	C	0	0	0.0	0.0	0.0	226,880.0	27.0	4.2
GHG-Elec-2022-420-001	1/10/2022 - 2/9/2022		RFCE (RFC East)	2,607	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,754.1	0.1	0.0	1,754.1	0.1	0.0
GHG-Elec-2022-420-002	2/9/2022 - 3/10/2022	2,188	RFCE (RFC East)	2,230	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,500.3	0.1	0.0	1,500.3	0.1	0.0
GHG-Elec-2022-420-003	3/10/2022 - 4/10/2022	2,188	RFCE (RFC East)	2,074	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,395.2	0.1	0.0	1,395.2	0.1	0.0
GHG-Elec-2022-420-004	4/10/2022 - 5/10/2022	2,188	RFCE (RFC East)	1,901	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,279.3	0.1	0.0	1,279.3	0.1	0.0
GHG-Elec-2022-420-005	5/10/2022 - 6/9/2022	2,188	RFCE (RFC East)	1,780	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,197.7	0.1	0.0	1,197.7	0.1	0.0
GHG-Elec-2022-420-006	6/9/2022 - 7/11/2022	2,188	RFCE (RFC East)	1,790	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,204.0	0.1	0.0	1,204.0	0.1	0.0
GHG-Elec-2022-420-007	7/11/2022 - 8/9/2022	2,188	RFCE (RFC East)	1,808	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,216.2	0.1	0.0	1,216.2	0.1	0.0
GHG-Elec-2022-420-008	8/9/2022 - 9/8/2022	2,188	RFCE (RFC East)	1,845	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,241.5	0.1	0.0	1,241.5	0.1	0.0
GHG-Elec-2022-420-009	9/8/2022 - 10/9/2022	2,188	RFCE (RFC East)	1,881	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,265.2	0.1	0.0	1,265.2	0.1	0.0
GHG-Elec-2022-420-010	10/9/2022 - 11/7/2022	2,188	RFCE (RFC East)	1,814	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,220.7	0.1	0.0	1,220.7	0.1	0.0
GHG-Elec-2022-420-011	11/7/2022 - 12/10/2022	2,188	RFCE (RFC East)	2,411	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,621.8	0.1	0.0	1,621.8	0.1	0.0
GHG-Elec-2022-420-012	12/10/2022 - 1/10/2023	2,188	RFCE (RFC East)	2,334	<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>	1,570.2	0.1	0.0	1,570.2	0.1	0.0
					<enter factor=""></enter>	<enter factor=""></enter>	<enter factor=""></enter>						
Total Emissions for All Source	Total Emissions for All Sources 24			24,474				16,466.3	1.2	0.2	16,466.3	1.2	0.2

## List of Facilities & Contact Person

#### **Facilities**

MBC Office Headquarters

2550 South Clark Street Suite 420 Arlington, VA 22202

#### **Contact Person**

Laura Duncan Operations Associate

Email Address: <u>laura.duncan@mbc360.com</u>

## Sources

 $<sup>^{\</sup>rm i}\,Greenhouse\,Gas\,Protocol\,Corporate\,Standard\,\underline{https://ghgprotocol.org/corporate-standard}$ 

ii U.S. EPA Center for Corporate Climate Leadership https://www.epa.gov/climateleadership

iii U.S. EPA Center for Corporate Climate Leadership, Simplified GHG Emissions Calculator <a href="https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator">https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator</a>

U.S. FAR 52.223-22 Public Disclosure of GHG Emissions and Reductions Goals-Representation https://www.acquisition.gov/far/52.223-22