ClimatePartner

Corporate Carbon Footprint – 2023

KBR, Inc.
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Summary

ClimatePartner has measured KBR's Corporate Carbon Footprint for 2023 (January - December 2023). In performing these calculations, ClimatePartner has adhered to the *Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol*), which is the world's most widely used greenhouse gas accounting standards for companies.

This report provides an overview of the carbon dioxide equivalent (CO_2e) emissions generated by KBR in 2023 for the following GHG Protocol emissions categories and associated business activities:

Scope 1 Emissions:

1. Facility heating;
2. Facility cooling [refrigerant leakage]; and
3. Company-owned vehicles

Scope 2 Emissions:

1. Purchased electricity

Scope 3 Emissions:

1. Category 1: Purchased goods and services
2. Category 2: Capital Goods
3. Category 3: Fuel-and energy-related activities
4. Category 4: Upstream transportation and distribution
5. Category 5: Waste generated in operations
6. Category 6: Business Travel
7. Category 7: Employee Commuting
8. Category 8: Upstream leased assets
9. Category 9: Downstream transportation and distribution
10. Category 10: Processing of sold products
11. Category 11: Use of sold products
12. Category 12: End-of-Life treatment of sold products
13. Category 13: Downstream leased assets
14. Category 15: Investments

Category 14: Franchises were evaluated as part of the emissions assessment and were determined to be irrelevant based on KBR's business operations.

In 2023, KBR's business activities generated a total of 1,079,894 tonnes of carbon dioxide equivalent (CO_2e) across all scopes of emissions.

Emissions calculations completed in previous years were limited to Scope 1, Scope 2 emission plus emissions from business travel, and indirect emissions from energy consumption. Emissions from these categories in 2023 amounted to 78,044 tonnes of CO_2e, which is 7% of total emissions calculated across all relevant scopes. This is a 46% reduction relative to 2020 and a 42% increase relative to the 2022 corporate carbon footprint.

Table 1. Summary of Site-Related Emissions and KBR Sites Year over Year

Year	Emissions (t CO2)	Sites
2020	144,604	159[a]
2021	40,706	180[b]
2022	54,932	154[c]
2023	78,044	132[d]

a - Thirty-six (36) locations were added to the site list for the 2021 evaluation. Based on the years of operation, emissions from some of these locations were also added to the 2020 Recalculation for a total of 159 sites in the baseline re-evaluation. The net difference in site numbers is reflected as 21 additional in 2021.

b - 182 KBR sites were evaluated as part of the 2021 Corporate Carbon Footprint. Emissions or partial emissions for 180 of the 182 locations were able to be calculated based on primary or secondary data.

c –159 unique lease IDs were reported to be under KBR's operational control in 2022. However, due to lease consolidation, these were considered to be 154 separate facilities.

d – 133 KBR sites were determined to be under KBR's operational control in 2023, including the Heavy Equipment Transport (HET) office. One location was confirmed to be absent of utilities and is omitted from the site count above.

An operational control approach was used to determine the system boundaries of the corporate carbon footprint emissions calculation. In 2023, KBR reported operational control over 133 facilities in 17 countries globally versus 154 facilities in 15 countries globally in 2022. Executive suites (e-suites) and virtual offices were omitted from the 2023 system boundaries. See summary table below.

Table 2. Location and Total Lease Area Over Time

	2022		2023		Year on Year Change	
Country	*Locations*	*Sq Ft Occupied*	*Locations*	*Sq Ft Occupied*	*Location Delta*	*Total Square Ft Delta*
Australia	16	176,553	14	163,774	-2	(12,779)
China	1	8,084	1	8,084	0	(0)
Finland	-	-	1	3,444	1	3,444
Germany	2	15,780	2	14,789	0	(991)
India	4	158,178	4	158,178	0	-
Indonesia	2	1,834	-	-	-2	(1,834)
Kazakhstan	1	10,732	-	-	-1	(10,732)
Korea	1	5,502	1	5,502	0	(0)
Netherlands	1	409	-	-	-1	(409)
Oman	1	2,207	1	150	0	(2,057)
Qatar	-	-	1	151	1	151
Russia	3	1,387	1	388	-2	(1,000)
Saudi Arabia	7	168,645	4	131,198	-3	(37,447)
Singapore	2	29,393	1	6,847	-1	(22,546)
United Arab Emirates	8	43,459	8	32,050	0	(11,409)
United Kingdom[a]	16	555,910	16	501,888	0	(54,022)
United States	89	2,798,145	78	2,907,339	-11	109,194
Total	**154**	**3,976,217**	**133**	**3,933,781**	**(21)**	**(42,436)**

a –HET Wing House office and annex not included in occupied area.

Total Global Emissions (metric tonnes CO_2e)

1,079,894

This amount corresponds to…

… the melting of

3.3 million m^2

of Artic ice in summertime

…

3.4 billion km

driven by car

… the amount of CO_2 sequestered by

88 million

beech trees per year

Company Overview

KBR delivers science, technology and engineering solutions to governments and companies around the world (NYSE: KBR). At the end of 2023, KBR employed approximately 34,000 people performing diverse, complex and mission critical roles in over 30 countries. In addition, KBR's unconsolidated joint ventures employ approximately 9,000 employees.

KBR operates two (2) core business segments – Government Solutions and Sustainable Technology Solutions. The Government Solutions (GS) Business Segment provides full life cycle support solutions to defense, space, aviation, intelligence, as well as other programs and missions for military and government agencies around the world. The Sustainable Technology Solutions (STS) Business Segment combines KBR's licensed proprietary technologies, equipment and catalyst supply, digital solutions, and associated knowledge-based services, working closely with customers to provide an optimal approach to maximizing their return on investment.

System Boundaries

Organizational Boundaries

ClimatePartner applies the 'operational control' approach when determining which locations, assets, and/or activities must be included within the scope of KBR's corporate carbon footprint. Operational control is considered to apply in all cases where KBR employs its operational policies and procedures within an entity or facility.

Given that KBR's legal entities are often subcontracted to run operations on behalf of its clients, it was essential to identify those operations over which KBR has full operational control. All operations that KBR manages as part of its service provision, but where client's operational policies and procedures applied, are considered to fall outside of the system boundaries of this assessment. ClimatePartner does not follow a financial control or an equity-share approach in this scenario.

It was determined that the following instances are not within KBR's operational control, and therefore, are considered beyond the scope of this assessment:

1. Residential leases.
2. Passthrough agreements, where KBR is linked to a facility by lease agreement only.
3. Joint venture leases, where KBR is not the primary occupant.
4. Executive suites and/or virtual offices, where there is limited KBR presence.

Company vehicles used for internal corporate services are retained within the boundaries of the Scope 1 and Scope 2 calculations. Company vehicles assigned for employee commuting / personal use and company vehicles assigned to specific projects are included in the Scope 3 emissions.

Operational Boundaries

KBR has chosen to account for its Scope 1, Scope 2, and full Scope 3 emissions (previously reflecting scopes 1, 2, and 3 (categories 3 and 6)). Operational boundaries were set, and business operations classified as follows:

- **Scope 1:** Direct emissions from company facilities (heating and cooling) and company-owned vehicles.
- **Scope 2:** Indirect emissions from purchased electricity for company facilities and for company-owned electric vehicles.
- **Scope 3:** All other material emissions, including those from:
  - Category 1: Purchased goods and services
  - Category 2: Capital Goods
  - Category 3: Fuel-and energy-related activities
  - Category 4: Upstream transportation and distribution
  - Category 5: Waste generated in operations
  - Category 6: Business Travel
  - Category 7: Employee Commuting

- Category 8: Upstream leased assets
- Category 9: Downstream transportation and distribution
- Category 10: Processing of sold products
- Category 11: Use of sold products
- Category 12: End-of-Life treatment of sold products
- Category 13: Downstream leased assets
- Category 15: Investments

Changes in System Boundaries

KBR emissions calculated prior to 2023 were limited to Scope 1 and Scope 2 emissions plus emissions from business travel and indirect energy consumption emissions. For 2023, the scope of assessment was expanded to include emissions across Scope 1, Scope 2 and relevant Scope 3 categories.

Executive suites and virtual offices were determined to be outside of KBR's operational control and were omitted from the 2023 emissions calculations (whereas previously included). Lease agreements for executive suites and virtual offices are maintained by KBR for infrequent or temporary office use or are in place to establish an address for a given geography. KBR does not have operational authority over such spaces, and with limited use, the emission associated would be immaterial.

Emissions from KBR's Heavy Equipment Transport (HET) and Aspire Defense Services business units were included in the 2023 emissions calculations. Contributions from these business units were not previously included in the system boundaries of KBR's corporate operations, and were added for a comprehensive global evaluation in 2023.

Data Quality and Limitations

Data Sources

KBR's 2023 global emissions calculation relied on a combination of activity data, assumption-based activity data and spend-based data. Activity-based calculation methods apply consumption data (fuel used, miles traveled, etc.) to a corresponding emissions factor to determine the resulting emissions, whereas spend-based calculation methods use financial values to determine emissions. Spend-based calculations are generally broader and less accurate. See table below for the calculation methodology used for the 2023 emissions calculation.

Table 3. Data source and calculation methodology applied

Scope	Category	Sub-Category	Data Source
Scope 1	Direct emissions from company facilities	Refrigerant leakage	Average data
Scope 1	Direct emissions from company facilities	Heat (self-generated)	Fuel-based data
Scope 1	Direct emissions from company vehicles	Vehicle fleet	Fuel-based data
Scope 2	Purchased electricity for own use	Electricity (stationary)	Average data
Scope 2	Purchased electricity for own use	Electricity (vehicle fleet)	Average data
Scope 3	Purchased Goods and Services/ Capital Goods	Purchased Goods and Services	Spend-based data
Scope 3	Fuel- and energy-related activities	Upstream emissions electricity/ heat	Average data
Scope 3	Upstream/ Downstream Transportations	Upstream/ Downstream Transportations	Spend-based data
Scope 3	Waste from Operations	Waste from Operations	Average data
Scope 3	Business travel	Flights	Distance-based
Scope 3	Business travel	Hotel nights	Average data
Scope 3	Business travel	Rental and private vehicles	Fuel-based data
Scope 3	Business travel	Rail	Distance-based
Scope 3	Business travel	Other Travel-Related Accounts	Spend-based data
Scope 3	Employee commuting	Employee Commuting	Average data
Scope 3	Employee commuting	Home office	Average data
Scope 3	Downstream Leased Assets	Project Vehicles	Fuel-based data
Scope 3	Downstream Leased Assets	Leased Assets (Spend)	Spend-based data
Scope 3	Investments	Equity and Other Investments	Spend-based data

Data Gaps

Primary data is key for a comprehensive and complete carbon footprint assessment. Where primary energy and/or fuel consumption data is not available, secondary data is used. The GHG Protocol defines primary and secondary data as follows:

- **Primary Data:** Data provided by suppliers or other value chain partners related to specific activities in the reporting company's value chain.
- **Secondary Data:** Industry-average data (e.g., from published databases, government statistics, literature studies, and industry associations), financial data, proxy data, and other generic data.

ClimatePartner considers data provided by KBR to be primary data. Secondary data indicates the application of assumption-based activity data.

Table 4. Yearly Ratio of KBR Facility Primary and Secondary Data

Scope, activity	Primary Data 2020	Primary Data 2021	Primary Data 2022	Primary Data 2023	Secondary Data 2020	Secondary Data 2021	Secondary Data 2022	Secondary Data 2023
Scope 1								
Heating[a]	5%	6%	29%	55%	95%	94%	71%	45%
Cooling (refrigerant leakage)[b]	NA	3%	16%	21%	NA	97%	84%	81%
Vehicle fleet	100%	100%	100%	100%	0%	0%	0%	0%
Scope 2								
Electricity	51%	29%	60%	67%	49%	71%	40%	33%

a – The 2023 percentage of primary heating data given omits those sites assumed to have electric heating
b – The 2023 percentage of primary cooling data given is determined based on the number of facilities that reported the coolant used or confirmed no reported releases.

Facility-Related Data Gaps

Three locations – two in Australia and one in the United States – were reported to receive electricity via on-site renewable energy generation. The consumption of renewable energy at these locations could not be determined so a conservative assumption of 20% renewable energy was applied for these locations. This data gap can lead to an over or understatement of Scope 2 emissions, but the data gap is considered immaterial to the overall emissions.

Limited facilities measure and track heating and ventilation system maintenance, making it difficult for KBR to collect consistent data on potential refrigerant leakage. Other factors contributing to data reporting gaps include:

1. Unregulated reporting requirements (i.e., maintenance reports and/or invoices may not reflect necessary data such as refrigerant type, leakage or top-up amounts)
2. Reluctance of landlords to share records, particularly for government facilities
3. Difficulty in isolating which HVAC units service KBR leased areas, particularly when KBR is not a primary tenant (and may occupy <10% of a facility)

Unless directly provided by the vendor, cooling-related emissions therefore relied upon an area-based calculation, in which the coolant system type and annual leakage rate is assumed. With this approach, the emissions are scaled by the leased area and the refrigerant used. KBR continues to work with landlords to reduce the data gap where possible through increased use of primary data thereby improving the accuracy of estimates.

KBR facilities may also use emergency generators to maintain operations during periods of power outages. Generator use would create additional Scope 1 facility-related emissions. The number of generators and usage data was not available for the 2023 reporting period and is considered a data gap. Emissions from generators is considered immaterial.

Scope 3 Emissions Data Gaps

Based on the granularity of financial data needed for mapping spend data to appropriate emissions product categories, emissions calculations could not distinguish between:

1. Purchased goods and services (Scope 3, Cat. 1) and capital goods (Scope 3, Cat. 2);
2. Upstream transportation and distribution (Scope 3, Cat. 4) and downstream transportation and distribution (Scope 3, Cat. 9)
3. Upstream leased assets (Scope 3, Cat. 8) and downstream leased assets (Scope 3, Cat. 13)

Related emissions have therefore been consolidated and reported under purchased goods and services, upstream transportation and downstream leased assets, respectively.

Additionally, emissions related to processing of sold products (Scope 3, Cat. 10), use of sold products (Scope 3, Cat.11) and end-of-Life treatment of sold products are contributed by services provided by KBR at client sites. Separation of such activities was not possible for the 2023 reporting period due to current data gathering and reporting approach. Emissions from activities related to these Scope 3 categories are currently included and reported under Scope 3 categories (including but not limited to employee commuting).

Scope 3 emissions – both spend-based and activity-based - are currently assessed at a global level. For the purposes of this report and the 2023 emissions calculation, Scope 3 emissions could not be reported based on contributing geography or business unit.

Exclusions

Exclusions have been made in the assessment, namely those listed below:

- A warehouse facility was excluded from site-related emissions calculations, as it was reported this location did not have utility connections.
- Three (3) United Kingdom locations have been excluded from the cooling (refrigerant leakage) emissions calculation, as these locations were confirmed to have no measured refrigerant leakage.
- Eight (8) United Kingdom locations have been excluded from the heating emissions calculation, as it has been confirmed that these locations are not supplied with natural gas heating and/or these locations were not being actively used.
- Sites located in the Australia, Oman, Qatar, Saudi Arabia, Singapore, United Arab Emirates and the southern United States have been excluded from the heating emissions calculation, as it is assumed that heating is provided via electricity in these geographies, and this would be reflected in the electricity consumption (unless primary data was provided which indicated a heating source other than electricity).
- Storage or warehouse locations were excluded from the cooling calculations as the primary data provided only accounted for office and mixed locations, and a plausible proxy for the facility use type could not be established. It is also presumed that warehouse/ storage locations are not temperature controlled.

- Two (2) vehicles associated with KBR's United States vehicle fleet were excluded from the Scope 1 direct emissions calculation as KBR was unable to verify usage.
- Scope 3 emissions Category 14: Franchises was evaluated as part of the emissions assessment but was excluded as determined to be irrelevant based on KBR's business operations.

The exclusions noted here are for activities that fall within the calculation system boundaries and do not pertain to those deemed to be outside of KBR's operational control.

Conclusion Data Quality

Improving data quality will generate more accurate calculations, which is important for identifying emissions "hot spots" and determining relevant, effective reduction measures.

As demonstrated in Table 4, KBR continues to improve upon primary data collection for facility heating, cooling and electricity. However, Scope 1 emissions for heating and cooling in 2023 predominantly remain based on secondary data. Reducing the number of assumptions will improve the overall data quality.

With the addition of relevant Scope 3 emissions categories in 2023, there are areas to improve the spend-based data quality and data usability. Refined granularity in the spend-based data could provide more useful insights, especially when needing to assess where impacts exist across business units and geographies. While it is the nature of spend-based calculations to provide a broader emissions estimation, ultimately, less reliance on spend-based data will improve overall data quality.

Methodology

Operational Period Adjustments

If site-related primary data was provided for only a portion of the year – monthly or quarterly – the data was extrapolated to calculate the annual consumption value.

For locations that were not under KBR operational control for the full year, the calculated consumption was adjusted to reflect only the months of operation. For example, if a KBR lease commenced on July 1, 2023, only 6 months of emissions were attributed to that location. A similar approach was taken for leases that ceased part way through the year. If a lease ceased in its entirety by the end of 2022, that location was not considered as part of the 2023 evaluation.

Scope 1 Emissions Calculations – Heating

Calculation Overview

Emissions from facility heating are accounted for under Scope 1, 'self-generated heat', as KBR's facilities primarily utilize natural gas, which is combusted on site. One site in Russia is presumed to use district heating, which is categorized separately as 'purchased heat' due to combustion occurring off-site. This type of heat is accounted for under Scope 2 emissions.

Heating emissions were calculated using the 2023 natural gas emissions factors published by the United Kingdom's Department for Environment, Food & Rural Affairs (DEFRA).

Assumptions

United Kingdom:

Seven (7) United Kingdom locations confirmed to have gas heating, four (4) of which provided primary consumption data. Primary consumption data was averaged on an annual consumption per area basis and applied to the locations where primary consumption data could not be obtained. The remaining United Kingdom facilities were reported to not use natural gas as the heating source.

One location obtained renewable heating credits through the first three quarters of 2023. The heating emissions associated for this location and for this timeframe were calculated using a biogas emissions factor from DEFRA.

United States:

In order to ascertain a proxy for heating fuel usage across the United States, ClimatePartner has reviewed the *Commercial Buildings Energy Consumption Survey (CBECS) and published by the U.S. Energy Information Administration (EIA)*. According to this survey, in all census regions except South, most buildings use natural gas as the energy source for primary space heating. Energy source by region is listed below:

- Northeast* - Natural Gas
- Midwest - Natural gas
- South - Electricity

- West - Natural gas

* As noted in the *KBR Corporate Carbon Footprint – 2021* dated August 2022, Delaware has been reclassified for the purposes of this assessment as a Northeastern state to better reflect the state's climate and infrastructure.

Where electricity is considered the main energy source for heating, it is assumed that heating is included in the electricity consumption data. Therefore, facilities located in the southern United States are not included in KBR's natural gas consumption value, unless primary data was received indicating otherwise.

For sites where natural gas is considered the main heating energy source, and primary data was not provided, ClimatePartner applied the following assumptions:

1. If primary data was received for a like location within the same state, an average energy intensity ratio was calculated from the primary data and applied to the lease area.
2. If there was no primary data available for a location within the given state, ClimatePartner adhered to EIA recommendations and used the average energy intensity ratios from the *Commercial Buildings Energy Consumption Survey (CBECS)* for the respective state.

The methodology and application of assumptions is consistent with the previous reporting year.

Australia:

Based on an article published by the Australian Government, electricity is considered as the primary energy source for heating (*Baseline Energy Consumption and Greenhouse Gas Emissions - In Commercial Buildings in Australia)*. It is assumed that the related consumption is provided with the total electricity consumption and reported under Scope 2. Australian facilities are not included in KBR's natural gas consumption value.

The methodology and application of assumptions is consistent with the previous reporting year.

Germany:

Natural gas is considered the primary heating energy source in Germany according to the online publication Verlgleichswerte fur den Energieverbrauch von Nichtwohngebauden (Comparative values for the energy consumption of non-residential buildings). Space area size and average energy intensity provided in this study is used to estimate the total heating energy consumption in KBR's locations in Germany.

The methodology and application of assumptions is consistent with the previous reporting year.

Middle East (Oman, Qatar, Saudi Arabia and United Arab Emirates):

Based on statistics provided by the International Renewable Energy Agency, electricity is considered the primary energy source for heating in the United Arab Emirates (UAE). Due to unavailability of reliable statistics on heating/cooling energy consumption in Oman, Qatar and Saudi Arabia, UAE statistical data is assumed to be representative for the whole Middle East region. It is assumed that heat consumption for facilities in these countries is included with the total electricity consumption and reported under Scope 2.

The methodology and application of assumptions is consistent with the previous reporting year.

Singapore:

According to statistics published by the Building and Construction Authority (BCA) of Singapore and provided in *the BCA Building Energy Benchmarking Report 2014*, electricity is considered as the primary energy source for heating in Singapore. It is assumed that the related heat consumption is provided with the total electricity consumption, reported under Scope 2.

The methodology and application of assumptions is consistent with the previous reporting year.

China and Republic of Korea:

KBR reported primary facility heating data for their one location in Korea.

In the previous reporting year, natural gas consumption in Korea was applied as the nearest geographic proxy for the heat consumption in China. To enhance the 2023 Scope 1 emissions calculation, statistics taken from a 2017 *study and analysis of office building energy consumption performance in China* were applied to determine the natural gas consumption based on the leased area.

This is a deviation from the assumptions applied in the previous reporting year.

India:

Neither a close geographical proxy nor secondary external source data could be applied for locations in India. A global average of primary heating data was used in this instance. KBR should aim to collect primary data for these locations for subsequent assessments.

The methodology and application of assumptions is consistent with the previous reporting year.

Scope 1 Emissions Calculations – Cooling (Refrigerant Leakage)

Calculation Overview

KBR reported primary data for their facility refrigerants through a combination of three (3) data points:

1. The refrigerant(s) used in given location's cooling systems;
2. The measured leakage volume, which is determined by volume of coolant needed to refill the air conditioning system; or
3. The cooling system charge capacity, which provides the total volume of coolant the air conditioning system contains.

Due to inconsistent and incomplete facility responses and the inability to verify the data given, a change in approach was agreed upon for KBR's 2023 emissions calculation. It was decided that an area-based calculation would be employed for all facilities to determine the 2023 Scope 1 refrigerant leakage emissions.

ClimatePartner utilized an internal calculation tool that determines the refrigerant-related emissions based on a set of parameters: 1) the leased area, 2) the refrigerant used, and 3) the type of cooling system.

Refrigerant varieties can have a broad range of global warming potentials (GWP), which is a measure of how much greenhouse gas would be absorbed in the atmosphere and consequently contribute to global warming. Refrigerant GWP values used in the external calculation are sourced from the Intergovernmental Panel on Climate Change (IPCC) and the Climate Change 2021: The Physical Science Basis, Sixth Assessment Report.

This approach was followed in previous years for those KBR facilities in Europe where country-specific proxies could not be formulated. This is a deviation from the methodology and assumptions applied in the previous reporting year.

Assumptions

ClimatePartner's external calculation assumes a ceiling height of three meters (3 m; or 9.8 feet) which, in conjunction with the facility's areal data, determines the space being cooled and the size of cooling system needed. For KBR's 2023 emissions calculation, a variable refrigerant flow (VRF) cooling system was assumed for all locations – unless otherwise excluded. Industry research compiled by ClimatePartner's Research and Development team determined such VRF systems have an annual leakage rate of 7%.

The calculation approach applies the leakage rate to a cooling system capacity to determine the leakage volume. The leakage volume is then multiplied by the refrigerant's GWP to determine the cooling-related emissions. Twenty-one (21) facilities reported the specific refrigerant(s) used in 2023, and seven (7) other facilities reported this data point in 2022. If a refrigerant was not reported over the previous two reporting years, coolant R-410A was assumed to be used, as this is one of the most common cooling agents in commercial systems. Where multiple refrigerants were reported, the contribution from each refrigerant was averaged over the entire lease area.

Also, as noted in the Exclusions, storage or warehouse locations were excluded from the cooling calculations as a plausible proxy for the facility use type could not be established.

United Kingdom:

Three (3) locations in the United Kingdom reported a measured refrigerant loss of '0'. There are separate emissions reporting requirements in the United Kingdom, so these data points were considered reliable and verifiable. No coolant-related emissions were therefore accounted for at these locations.

Chilled Water Cooling:

One location in the United Arab Emirates and three (3) locations in India reported using chilled water as the source of facility cooling. In lieu of refrigerants, which have harmful global warming potentials, chilled water is circulated for temperature control. Electricity used to chill the water is accounted for under Scope 2 – Purchased Electricity and is not considered to be a Scope 1 - Refrigerant-related emission.

Scope 1 Emissions Calculations – Vehicle Fleet

Calculation Overview

Emissions related to vehicles controlled by KBR (i.e., company vehicles) are calculated using either fuel consumption data or the distance travelled by a given vehicle class or vehicle type. Vehicles issued by KBR to employees for commuting or personal use are accounted for under Scope 3 emissions as per GHG protocol.

Company vehicles included in Scope 1 vehicle fleet emissions are limited to ground transport vehicles in the United States, the United Kingdom and Australia. For the 2023 emissions calculation, the fuel and vehicle emissions factors from DEFRA were applied for vehicles in all geographies to maintain consistency across datasets.

In the previous reporting year, emissions attributed to KBR's flight services were also considered to be Scope 1 emissions because of KBR's ownership stake in the service. In 2023, the accounting approach was revisited, and it was determined that the ownership stake is in the service provided and not a specific vehicle. For those reasons, KBR's use of flight services was considered to be business travel, and therefore, has been accounted for under Scope 3 emissions for this reporting period.

Scope 2 Emissions Calculations – Purchased Electricity

Calculation Overview

Sixty-seven percent (67%) of KBR sites within the scope of assessment reported primary electricity consumption data in 2023. Locations for which primary data was provided comprise 84% of the total lease area being evaluated for this reporting period.

Emissions for Scope 2 purchased electricity are calculated using both the market-based method and the location-based method. This dual reporting approach is recommended by the

GHG Protocol. For the market-based method, the company provides supplier-specific emission factors for the electricity they purchased. If these specific factors were not available, factors for the residual mix in the country of operation are used. The residual mix is defined as the country's average grid mix with any renewable energy usage removed. If this is unavailable, the average grid mix of the country is used, incorporating both renewable and non-renewable power generation. The report also states the location-based method, which calculates the average electricity grid mix for the country.

KBR has invested in Renewable Energy Credits (RECs; also known as Energy Attribute Certificate (EACs)) for all global electricity consumption. These credits certify that the specified energy consumption volume was from a verified renewable energy source and the certificate holder can claim that they used renewable energy once the certificate has been retired. The renewable energy contribution is reflected in the market-based emissions. Since KBR has invested in RECs to cover all global electricity consumption, the Scope 2 market-based emissions are '0'.

In addition, two primary facilities in the United Kingdom have entered into a Green Tariff with their power provider, which ensures the energy consumed at these locations is solely from a renewable energy source. One location in the United States participates in California's Clean Impact Plus program, which stipulates 50% energy consumed is from renewable sources.

Furthermore, three locations – two in Australia and one in the United States – were reported to receive electricity via on-site renewable energy generation. The consumption of renewable energy at these locations could not be determined so a conservative assumption of 20% renewable energy was applied for these locations.

Assumptions

For the 33% of KBR locations that did not report primary electricity data, secondary data values were calculated. In most instances, primary consumption data from other locations within the same general geography and of the same use type is used as a proxy. In these instances, an energy intensity ratio is calculated on a consumption (kWh) per square foot basis. This energy intensity is applied as a best proxy where only KBR's operational area (lease area) is known.

Where primary data was not available for a geography, external data sources were used to determine the most appropriate secondary data values. The following provides a summary of the electricity calculation approach used for each country and any deviations:

Americas Region

United States:

Forty-five (45) of 78 United States locations (58%) reported primary electricity consumption data. These locations amount to 81% of the total leased space within the United States for 2023. For the remaining locations, secondary data was applied based on the following:

1. If primary data was available for a facility (or facilities) within a given state, and of a similar use type, primary data was used to calculate an energy intensity ratio (consumption per area) for that state.

2. If a primary data point was not available within a given state, and for a like use type, state-specific energy intensity ratios from the United State's Energy Information Administration (EIA) were applied on an area basis to determine consumption.

The EIA national average for warehouses was applied as state specific information for that given facility use type is not available.

Asian Pacific Region

Australia:

Twelve (12) of 14 Australian locations provided primary electricity data. A country average energy intensity ratio was applied as the secondary data proxy. The methodology and application of assumptions is consistent with the previous reporting year.

India:

Primary electricity data was provided for all India facilities considered within the scope of the 2023 calculation.

China and Korea:

Primary electricity data was provided for all Korea facilities considered within the scope of the 2023 calculation.

In the previous reporting year, electricity use in Korea was applied as the nearest geographic proxy for the electricity consumption in China. To enhance the 2023 Scope 1 emissions calculation, statistics taken from a 2017 *study and analysis of office building energy consumption performance in China* were applied to determine the electricity consumption based on the leased area.

This is a deviation from the assumptions applied in the previous reporting year.

Singapore:

Due to the absence of 2023 data, primary data collected in 2021 was applied as the secondary data proxy. The lease space or occupational duration has not changed at this location over the past two reporting periods. The methodology and application of assumptions is consistent with the previous reporting year.

European Region

Germany:

An external resource published on German commercial building energy intensities is used as a secondary data proxy (Comparative values for the energy consumption of non-residential buildings).

Finland:

An external resource published by Lund University's Department of Energy Sciences on Energy Consumption in Sweden is used as a secondary data proxy (Energy Consumption in Tertiary Buildings in Sweden). Due to the geographic proximity, the Swedish specific dataset was assumed to be the closest representation of conditions in Finland.

Russia:

An external resource published on Russian building energy intensities is used as a secondary data proxy (A review on buildings energy consumption in Russia).

United Kingdom:

Primary electricity data was provided for the 15 facilities in Great Britain.

Middle East Region

Oman and Qatar:

A Middle East regional average for offices was calculated based on the primary data from Saudi Arabia and the United Arab Emirates. This area-based ratio was applied as the secondary data proxy.

Saudi Arabia:

Primary electricity data was provided for the four (4) KBR facilities in Saudi Arabia.

United Arab Emirates:

Primary electricity data was provided for five (5) of eight (8) KBR facilities located in the United Arab Emirates. An energy consumption average for these locations was applied to the remaining facilities within the UAE to determine electricity consumption.

Scope 3 – Purchased Goods and Services

Calculation Overview

The emissions for Scope 3 - Purchased Goods and Services followed a spend-based calculation approach, which applies an emissions factor specific to a financial value. Spend-based emissions factors are specific to financial values and variable based on the currency, year (and inflation value of the currency) and the business activities associated with the financial activity.

Based on the granularity of financial data available, financial activities associated with capital goods could not be distinguished from those related to purchased goods and services. Emissions associated with purchased goods and services and capital goods are therefore reported collectively under purchased goods and services.

For Scope 3 spend-based emissions calculations, 2023 spend-related general ledger account balances were extracted from their internal accounting systems. The account types were used to link the financial value to an activity, as well as to an appropriate Scope 3 emissions

category. The activity descriptor was first determined by KBR and later reviewed by ClimatePartner for concurrence.

For financial activity confirmed to be for operations within the United Kingdom, the activity descriptions were mapped to the SIC activities codes published by DEFRA. The DEFRA activity codes were the basis for activity descriptor and therefore mapped closely to the line-item activity assignments.

For financial activity linked to remaining global operations, the activity descriptions were mapped to the spend-based activity categories published by Quantis. The Quantis spend-based emissions factors follow a more generalized approach, and as a result, many of the DEFRA activity descriptions are consolidated into fewer, broader spend-based categories. Since DEFRA is a dataset specific to the United Kingdom, a more generalized approach for the other spend-based emissions was decided to be most appropriate.

Assumptions

KBR financial data was provided in multiple currencies, including US dollars (USD), Australian dollars (AUD), British pounds (GBP) and Indian rupees (INR). UK-specific financial activities were reported in GBP. Spend-based calculations for these businesses were completed using the DEFRA spend-based factors, and no currency conversion was required. All other financial accounts using the Quantis spend-based factors were converted to USD, based on the annual average conversion rate.

ClimatePartner's internal calculation approach requires that the Quantis spend-based factors be adjusted annually based on the U.S. Bureau of Economic Analysis's global inflation rates. At the time of the 2023 calculation, the 2022-corrected Quantis spend-based factors was the most current dataset available. Therefore, where necessary, financial data was also adjusted to be in terms of 2022 equivalents based on compound inflation rates for a currency. ClimatePartner performed currency and inflation adjustments to align with the most contemporary Quantis spend-based emissions factors available.

Scope 3 – Transportation and Distribution

The emissions for Scope 3 - Transportation and Distribution followed a spend-based calculation approach. Refer to the methodology and assumptions detailed for Scope 3 – Purchased Goods and Services emissions, as the same approach was used for Transportation and Distribution emissions.

Based on the granularity of financial data available, financial activities associated with Upstream Transportation and Distribution could not be distinguished separately from those related to Downstream Transportation and Distribution. Emissions associated with either are therefore reported collectively as Scope 3 – Transportation and Distribution.

Scope 3 – Waste Generated in Operations

Calculation Overview

Due to limitations in data availability, KBR collected waste generation data from four (4) facility locations – one in the United States and three (3) in the United Kingdom. Each facility collected different metrics regarding waste and waste streams, so waste generated in operations was categorized generally as "Recycled waste" and "Non-Recycled waste".

Along with the weight of waste generated, each location reported on the average number of employees present on a given day. These data points were collectively used to establish a weight of waste per employee per working day for each waste category. This average ratio was then extrapolated across KBR's facility headcount of 34,000 employees to determine the amount of global waste generated in operations.

Additional details on the assumptions applied to determine Scope 3 – Waste Generated in Operations emissions are provided below.

Assumptions

ClimatePartner disposal calculation methodologies follow the cut-off by classification approach, which aligns with recommendation of the GHG Protocol and IPCC. Following this approach, emissions related to the recycling of waste (collection, transport, sorting and processing of waste) are allocated to the outcome of that waste stream - the subsequent useful life of the recycled material. Hence, the reporting company, KBR, does not need to account for any emissions from the recycling process, and the emissions related to recycling are '0'.

Non-recycled waste will result in emissions following the cut-off by classification methodology, and it is assumed that such waste will be either landfilled or incinerated. Emissions were calculated assuming that non-recycled waste was evenly distributed across these two end-of-life fates. The emissions for non-recycled waste generation also include those emissions created when transporting the waste. ClimatePartner's standard disposal model assumes an average distance to disposal to be 25 kilometers, and this assumption was applied to KBR's Scope 3 – Waste Generated in Operations emissions.

When determining the number of working days for which employees might be generating waste, 220 working days per employee on average was assumed for employees within the United Kingdom, and 240 working days per employee was assumed for all other employees. These assumptions are consistent with assumptions used in determining employee commuting impacts. See details on Employee Commuting in subsequent sections.

Scope 3 – Business Travel

Calculation Overview

KBR's 2023 Scope 3 - Business travel emissions were calculated through a combination of activity-based data (93%) and spend-based data (7%).

Travel by Air

Flight class (economy, premium economy, business and first) and specific flight distances (e.g., long-haul vs. short-haul) are considered in the calculation of emissions associated with air travel. Emission factors provided by DEFRA are used to calculate emissions.

In 2023, a radiative forcing index (RFI) of 2 was applied to air travel to account for the high altitude that airplanes reach during the cruising phase, causing emissions to occur higher in the earth's atmosphere compared to all other human-made greenhouse gas emissions. In previous years, ClimatePartner applied an RFI of 3 to KBR's flight related emissions. Based on recent studies, ClimatePartner revised the RFI used to align with contemporary data and updated recommendations. This is a deviation from methodologies and assumptions previously applied.

As noted in the Scope 1 – Vehicle Fleet emissions section, emissions from KBR's use of a flight service membership were reclassified under Scope 3 - Business Travel for this reporting period. The emissions associated with these flights were determined based on the fuel consumption data provided by the third-party operator who uses a Fuel Recovery Factor to factor in ground fuel burns in addition to fuel consumed in flight, so it was determined that fuel consumed was more comprehensive than the flight mileage reported.

Business Travel and Hotel Stays

Hotel star ratings are considered when calculating emissions from hotel stays. Although not all hotels are given a star rating in data collection, the following star ratings are assumed:

- 5-star rating: Marriott, Hilton, Shangri-la, Hyatt, Intercontinental
- 4-star rating: Radisson, Accor

All other hotels are rated as 'unknown'.

In addition to the accommodation rating, emissions related to hotel stays were determined based on the duration of stay and the hotel location.

Hotel expenses classified as "leisure" were omitted from analysis. The methodology and assumptions applied are consistent with the previous reporting year.

Business Travel by Road

Fuel consumption or distance data are used to calculate emissions from business travel by road. Where only taxi expense data was available, distance travelled was estimated from total reported fares (note that local currency was considered).

The methodology and source of assumptions applied are consistent with the previous reporting year. Currency conversion rates used were updated to reflect the 2023 reporting period, and the distance per fare assumptions utilized the most contemporary data available from sources previously used.

Other Business Travel Contributions

In reviewing the general ledger account descriptions, it was determined that certain financial activity would be associated with Scope 3 - Business travel emissions. These activities included food and restaurant-related travel expenses, as well as use of reservation services. Financial

activities determined to have activity-based data were omitted from consideration as to avoid double counting the emissions contribution.

The spend-based calculation approach for business travel activities followed the same methodology and assumptions detailed under Scope 3 – Purchase Goods and Services.

Scope 3 – Employee Commuting

Calculation Overview

KBR's 2023 Scope 3 – Employee Commuting emissions were determined through activity-based calculations. Employee Commuting emission are separated into emissions generated from KBR employees travelling to and from a KBR location, and those emissions generated when employees work remotely (i.e., teleworking). 74% of Scope 3 - Employee Commuting emissions were from daily employee travel with 26% from teleworking.

Emission factors published by DEFRA are used to calculate the travel-relation portion of Scope 3 – Employee commuting emissions. As detailed further below, the employee commuting activity-data relied primarily on conservative mode-of-transport and distance assumptions.

Assumptions

KBR provided data on the number of employees by country – approximately 34,000 employees across 54 countries. This employee headcount included internal (corporate) employees as well as those employees assigned to contracted projects.

External research was conducted by ClimatePartner to determine area-specific statistics on:

1. Average commute distances;
2. Average commute times, where distances were not available;
3. Mode of transportation used in commuting; and/or
4. Teleworking days.

An assumption-based model for employee commuting and teleworking days was built based on the external research compiled.

Regional averages were calculated based on data gathered and applied where country-specific assumptions could not be assigned. Regional or country-specific assumptions were applied for the number of days commuting, the mix of transportation methods and the distance travelled per employee for a round-trip commute. For employees commuting to work in the United States, state-specific commute distances were assumed whereas a country-specific mix of transportation modes was used for non-US and non-UK locations.

An emissions factor was applied based on the type of transport used for the portion of employees commuting the given distance and the number of days commuting. Emissions specific to each mode of transport were aggregated when multiple modes of transportation were assumed in each geography. For any locations with less than 10 total employees, it was assumed that all employees commuted via car.

It was assumed that KBR employees, on average, work 5 days a week and 48 weeks annually, to reasonably account for holidays and paid time off. This assumption was applied to global employees outside of the United Kingdom. An assumption of 220 working days was used for employee commuting within the United Kingdom, based on country-specific data available on workplace absences. An estimated average number of three (3) commuting days was used to determine the non-commuting days in each region, which was the basis for the number of employee teleworking days annually.

The assumption-based employee commuting and teleworking model was applied for all geographies, except for the United Kingdom. Due to separate emissions reporting requirements in the United Kingdom, KBR was able to collect primary data on employee commuting. The primary data was therefore used instead of distance and transportation assumptions. The calculation methodology was consistent, and emissions were determined based on mode of transport, distance traveled, and the number of employees with such a commute.

Scope 3 – Leased Assets

Calculation Overview

KBR's 2023 Scope 3 – Leased Asset emissions were calculated through a combination of activity-based (20%) and spend-based (80%) data. Spend-based calculations follow the methodology and assumptions detailed under Scope 3 – Purchased Goods and Services. Financial data for Leased Assets was reported in global general ledger accounts; therefore, global Quantis factors were applied.

Based on the granularity of financial data available, financial activities associated with Upstream Leased Assets (KBR is lessee) could not be distinguished separately from those related to and Downstream Leased Assets (KBR is lessor). Emissions associated with either are therefore reported collectively as Scope 3 – Leased Assets.

Leased Assets – Project Vehicle Fleet

KBR provided activity data for the vehicles supplied by KBR to select government-contracted projects in the US. The volume of retail fuel purchases for the project vehicle fleet was used to determine emissions. The calculation was limited to transactions identified as fuel purchases, and it was assumed that flexible fuel vehicles consumed diesel fuel as this was determined to be most conservative approach.

Emission factors published by DEFRA are used to calculate the Scope 3 – Leased Asset activity-based emissions.

Scope 3 – Investments

Calculation Overview

KBR's 2023 Scope 3 – Investments emissions were calculated following a spend-based approach.

KBR provided financial information on their equity investments, managed investments, debt investments, project financing and those classified as other investments. Other investments included pension funds available to qualified employees outside of their standard benefits. KBR reported no investment activity in 2023 related to their managed investments, debt investments or project financing.

The 2023 revenue from equity investment and pension funds were retained for the spend-based emissions calculation. Equity investment values were adjusted based on KBR's ownership percentage.

Similar to other spend-based calculations, KBR's 2023 investment activities were assigned an industry descriptor, which could be linked to a spend-based emissions factor. KBR provided the industry assignments for equity investment accounts. Other investments were noted to be pension funds and therefore were "Insurance, reinsurance and pension funding services".

Assumptions

ClimatePartner's internal methodologies for investment-related emissions follow DEFRA industry codes and spend-based emissions factors. Investment revenue was provided in USD and later converted to GBP using the annual average conversion rate in order to align with the spend-based factors available.

To avoid double-counting, the equity investment associated with Aspire Defense Limited was excluded from the Scope 3 - Investment emissions calculation as KBR's portion of the venture is accounted for in the financial data used to calculate other Scope 3 spend-based emissions.

2023 Corporate Carbon Footprint Results

Results Summary

In 2023, KBR's business activities generated a total of 1,079,894 tonnes of CO_2e, 99% of which were Scope 3 emissions. Scope 3 – Purchased Goods and Services represents the largest share of the company's reported carbon footprint at greater than 62%.

This is the first reporting period in which KBR has measured all material Scope 3 emissions. In previous reporting periods, where the breadth of analysis was limited, Scope 3 - Business Travel activities contributed the most emissions to the overall footprint.

Table 5. 2023 Emissions by Scope and Sub-Category

	[t CO_2e]	[%]
Scope 1	5,746	**1%**
Direct emissions from company facilities	5,614	1%
Refrigerant leakage	1,254	0%
Heat (self-generated)	4,360	0%
Direct emissions from company vehicles	132	0%
Vehicle fleet	132	0%
Scope 2	-	**0%**
Purchased electricity for own use (market-based)	-	0%
Electricity (sites)	-	0%
Electricity (vehicle fleet)	-	0%
Purchased heating, steam, and cooling for own use	-	0%
Purchased heat	-	0%
Purchased cooling	-	0%
Scope 3	1,074,148	**99%**
Purchased Goods and Services/ Capital Goods	673,075	62%
Fuel- and energy-related activities	7,565	1%
Upstream emissions electricity	6,760	1%
Upstream emissions vehicle fleet	32	0%
Upstream emissions heat	774	0%
Upstream emissions cooling	-	0%
Upstream/ Downstream Transportations	2,515	0%
Waste from Operations	3,100	0%
Business travel	64,733	6%
Other Travel-Related Accounts	4,466	0%
Flights	50,925	5%
Hotel nights	5,174	0%
Rental and private vehicles	4,145	0%
Rail	23	0%
Employee commuting	27,022	3%
Employee Commuting	20,006	2%
Home office	7,017	1%
Leased Assets	13,073	1%
Project Vehicles	2,631	0%
Leased Assets (Spend-based activities)	10,442	1%
Investments	283,065	26%
Overall results	**1,079,894**	**100%**
Electricity (Location Based in t CO2e)	22,171	2%

Primary and secondary data available for Scope 1 and Scope 2 emissions allowed for the division of these emissions measurements into specific regions and countries. See Table 6 below. The data available at the time of this reporting period did not allow for Scope 3 emissions to be allocated to specific regions.

Table 6. 2023 Scope 1 and Scope 2 Emissions by Country

	Scope 1 [t CO2e]				Scope 2 [t CO2e]			Scope 1 & Scope 2
	Heating	Fuels/ Vehicles	Cooling	Total	Electricity	District Heating	Total	Total
Americas	**2,676**	**13**	**1,097**	**3,785**	**-**	**-**	**-**	**3,785**
USA	2,676	13	1,097	3,785	-	-	-	3,785
APAC	**1,296**	**2**	**72**	**1,370**	**-**	**-**	**-**	**1,370**
Australia	-	2	61	63	-	-	-	63
China	17	-	3	20	-	-	-	20
India	1,278	-	4	1,283	-	-	-	1,283
Singapore	-	-	3	3	-	-	-	3
South Korea	1	-	0	1	-	-	-	1
EMEA	**389**	**117**	**85**	**591**	**-**	**-**	**-**	**591**
Finland	8	-	1	9	-	-	-	9
Germany	35	-	6	41	-	-	-	41
Oman	-	-	0	0	-	-	-	0
Qatar	-	-	0	0	-	-	-	0
Russia	1	-	-	1	-	-	-	1
Saudi Arabia	-	-	56	56	-	-	-	56
United Kingdom	346	117	10	473	-	-	-	473
UAE	-	-	10	10	-	-	-	10
Total	**4,360**	**132**	**1,254**	**5,746**	**-**	**-**	**-**	**5,746**

Note: The emissions presented above are market-based emissions and reflect the purchase of RECs and use of green electricity and renewable heating gas.

The United States contributes the most significant volume of emissions to KBR's Scope 1 and Scope 2 emissions at nearly 66%. Fifty-nine percent (59%) of locations considered within the 2023 scope of calculation are in the United States, and those locations alone comprised >70% of the global lease area.

Analysis by Scope of Emissions

In 2023, KBR reported operational control over 133 facilities in 17 countries globally. The 2023 calculation followed a different calculation approach for Scope 1 refrigerant leakage, resulting in a 75% reduction in associated emissions when compared to the previous reporting period.

Figure 3. Total Emissions Comparison Year over Year

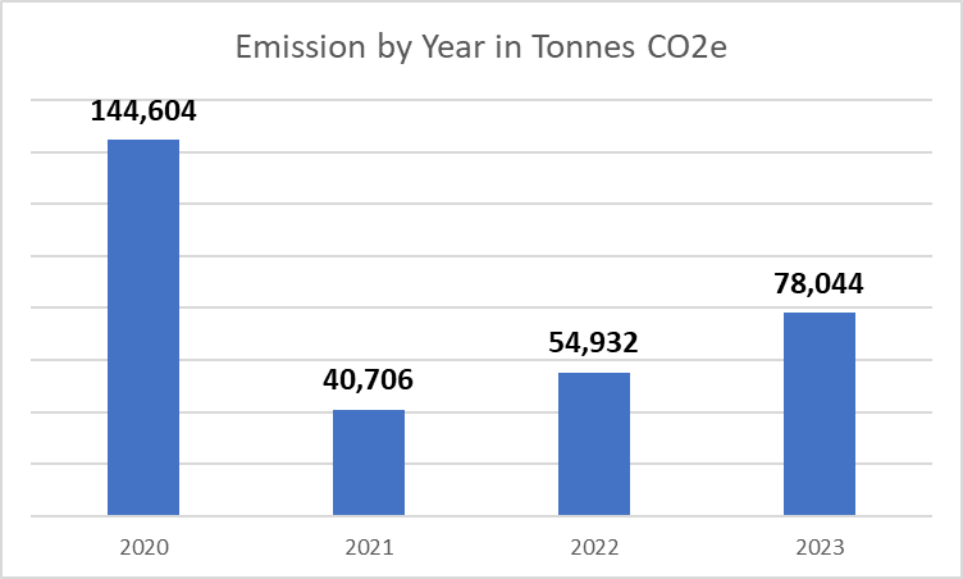

Figure 3 data is limited to only those emissions scopes and categories assessed in previous years.

Facility-related consumption (heating, cooling and electricity use) has generally remained consistent over the previous reporting periods. The combined heat and electricity energy consumption per leased area was 13.3 kwh per square foot in 2023 whereas the same calculated ratio was 11.5 in 2022. In 2023, KBR decided to purchase renewable energy certificates (RECs; also known as energy attribute certificates (EACs)) to cover all purchased electricity consumption globally. The retirement of RECs negated 21,567 tonnes CO2e of Scope 2 market-based emissions from KBR's corporate carbon footprint. 2023 is the first year in which KBR has committed to having 100% renewable energy. In 2021 and 2022, RECs were purchased only for select countries – United States, United Kingdom, Australia, Saudi Arabia and UAE – to cover >90% of electricity consumption.

See Insert A for more details on the global emissions breakdown per category and changes year over year.

Insert A – Year over Year Net Difference and Relative Change Analysis

	2020 Baseline Recalculation		2021 CCF		2022 CCF		2023 CCF		Change Y22/Y23		Change Y20/Y23	
	[kg CO2e]	[% of Overall]	[kg CO2e]	[% of Overall]	[kg CO2e]	[% of Overall]	[kg CO2e]	[% of Overall]	Net Difference [kg CO2e]	Relative Change [%]	Net Difference [kg CO2e]	Relative Change [%]
Scope 1	**6,514,308**	**5%**	**6,426,444**	**16%**	**8,601,789**	**16%**	**5,745,804**	**1%**	**(2,855,985)**	**-33%**	**(768,504)**	**-12%**
Direct emissions from company facilities	6,481,402	4%	6,383,025	16%	8,035,771	15%	5,613,856	1%	(2,421,916)	-30%	(867,546)	-13%
Refrigerant leakage	2,287,057	2%	2,104,860	5%	5,026,522	9%	1,253,548	0%	(3,772,974)	-75%	(1,033,509)	-45%
Heat (self-generated)	4,194,345	3%	4,278,165	11%	3,009,249	5%	4,360,308	0%	1,351,058	45%	165,963	4%
Direct emissions from company vehicles	32,906	0%	43,419	0%	566,017	1%	131,948	0%	(434,070)	-77%	99,042	301%
Vehicle fleet	32,906	0%	43,419	0%	566,017	1%	131,948	0%	(434,070)	-77%	99,042	301%
Scope 2 (Market-based)	**33,014,232**	**23%**	**1,114,971**	**3%**	**1,353,247**	**2%**	**-**	**0%**	**(1,353,247)**	**-100%**	**(33,014,232)**	**-100%**
Purchased electricity for own use (market-	32,972,716	23%	1,047,810	3%	1,349,202	2%	-	0%	(1,349,202)	-100%	(32,972,716)	-100%
Electricity (sites)	32,972,716	23%	1,047,810	3%	1,349,202	2%	-	0%	(1,349,202)	-100%	(32,972,716)	-100%
Electricity (vehicle fleet)	-	0%	-	0%	-	0%	-	0%	0	-	0	-
Purchased heating, steam, and cooling for	41,516	0%	67,161	0%	4,045	0%	-	0%	(4,045)	-100%	(41,516)	-100%
Purchased heat	41,516	0%	67,161	0%	4,045	0%	-	0%	(4,045)	-100%	(41,516)	-100%
Purchased cooling	-	0%	-	0%	-	0%	-	0%	0	-	0	-
Scope 3	**105,075,238**	**73%**	**33,164,187**	**81%**	**44,976,428**	**82%**	**1,074,148,072**	**99%**	**1,029,171,644**	**2288%**	**969,072,834**	**922%**
Purchased Goods and Services/ Capital Go	-	0%	-	0%	-	0%	673,074,995	62%	673,074,995	-	673,074,995	-
Fuel- and energy-related activities	8,877,578	6%	3,470,424	9%	1,497,075	3%	7,564,854	1%	6,067,779	405%	(1,312,724)	-15%
Upstream emissions electricity	8,449,421	6%	3,058,063	8%	1,214,097	2%	6,759,509	1%	5,545,412	457%	(1,689,912)	-20%
Upstream emissions heat	411,268	0%	392,370	1%	236,643	0%	773,629	0	536,986	227%	362,361	1
Upstream emissions vehicle fleet	16,888	0%	19,991	0%	46,335	0%	31,716	0%	(14,619)	-32%	14,827	88%
Upstream/ Downstream Transportations	-	0%	94,190	0%	-	0%	2,515,002	0%	2,515,002	-	2,515,002	-
Waste from Operations	-	0%	374	0%	-	0%	3,100,045	0%	3,100,045	-	3,100,045	-
Business travel	96,197,661	67%	27,680,319	68%	43,479,353	79%	64,733,029	6%	21,253,675	49%	(31,464,632)	-33%
Other Travel-Related Accounts	-	0%	-	0%	-	0%	4,466,325	0%	4,466,325	-	4,466,325	-
Flights	87,312,644	60%	20,365,633	50%	30,733,399	56%	50,924,518	5%	20,191,119	66%	(36,388,126)	-42%
Hotel nights	4,325,944	3%	4,785,121	12%	4,698,560	9%	5,174,349	0%	475,789	10%	848,405	20%
Rental and private vehicles	4,553,046	3%	2,526,201	6%	8,022,588	15%	4,145,192	0%	(3,877,395)	-48%	(407,854)	-9%
Rail	6,027	0%	3,364	0%	24,808	0%	22,646	0%	(2,162)	-9%	16,619	276%
Employee commuting	-	0%	1,918,880	5%	-	0%	27,022,285	3%	27,022,285	-	27,022,285	-
Employee Commuting	-	0%	1,918,880	5%	-	0%	20,005,649	2%	20,005,649	-	20,005,649	-
Home office	-	0%	-	0%	-	0%	7,016,636	1%	7,016,636	-	7,016,636	-
Downstream Leased Assets	-	0%	-	0%	-	0%	13,073,274	1%	13,073,274	-	13,073,274	-
Project Vehicles	-	0%	-	0%	-	0%	2,631,420	0%	2,631,420	-	2,631,420	-
Other Leased Assets	-	0%	-	0%	-	0%	10,441,853	1%	10,441,853	-	10,441,853	-
Investments	-	0%	-	0%	-	0%	283,064,589	26%	283,064,589	-	283,064,589	-
Overall results	**144,603,779**	**100%**	**40,705,602**	**100%**	**54,931,464**	**100%**	**1,079,893,876**	**100%**	**1,024,962,412**	**1866%**	**935,290,097**	**647%**
									0	-	0	-
Electricity (Location Based in kg CO2)	32,056,283		26,367,091		20,704,267		22,170,964		1,466,697	7%	(9,885,319)	-31%

1- Upstream emissions for fuel and energy related activities are calculated based on factors specific to indirect energy emissions and losses.

2- Employee commuting and operational waste were only calculated for the United Kingdom prior to 2023

3- Rental car use and business travel by car were consolidated into one reporting category for 2022. The values for 2020 and 2021 have be updated similarly for comparability.

Scope 1

Heating

Scope 1 heating related emissions in 2023 were 45% higher when compared to the 2022 reporting year.

The increase in heating related emissions can be attributed to several possible factors:

1. Increased primary data - In 2023, 55% of facilities deemed to have natural gas heating reported consumption values. Those primary data points are applied as a proxy on an area basis for certain geographies.
2. Less omitted locations – The 2023 facility inventory saw an increase in geographies where natural gas heating is assumed to be used, and a decrease in those geographies assumed to not have natural gas heating.

Vehicle fleet

There was a 77% reduction in Scope 1 vehicle fleet emissions from 2022 to 2023. This is primarily due to KBR's flight service membership being accounted for in 2022 as a corporate vehicle. As noted in the methodology, the approach was revisited where it was determined that since KBR's ownership stake is in the service and not a specific vehicle, emissions from the flight service membership were accounted for as Business Travel in 2023.

When adjusting 2022 Scope 1 vehicle fleet emissions to omit the flight service contribution, there is a 278% increase in emissions from the ground vehicle fleet from 2022 to 2023. This increase is primarily due to the inclusion of Aspire Defense and Heavy Equipment Transport (HET) company-owned and operated vehicles added to the 2023 inventory.

Refrigerant

The methodology to determine the Scope 1 refrigerant leakage emissions was revised for the KBR's 2023 corporate carbon footprint. The 2023 methodology was based on area occupied and a consistent leakage rate assumption for all facilities.

The revised methodology resulted in a 75% decrease in emissions as compared to the previous reporting period. The revised calculation approach is considered to be most reasonable scenario model in absence of increased primary data.

Scope 2

Electricity

The global electricity consumption in 2023 was 52,381 megawatt hours (MWH). This is a 15% increase from 2021 consumption (45,707 MWH) and a 46% increase from 2022 consumption levels (35,741 MWH). For the 2022 and 2023 reporting periods, there are 60 locations which 1) maintained consistent leased areas, 2) had consistent operational periods and 3) reported primary electricity consumption. There was an average increase in consumption of 36.8% across these locations, where other variables remained consistent. As noted in the calculation

methodology, primary data collected is used to generate secondary data proxies for a given reporting year, and consequently, the increase in primary consumption would also translate to an increase in calculated proxies.

Lastly, in 2023, four (4) locations reported use of chilled water as the source of cooling. The electricity needed to cool water for circulation is accounted for under Scope 2, whereas this data was not available in previous reporting years. Energy for chilled water consumption amounts to <3% of total electricity consumption.

As noted previously, KBR committed to have 100% of purchased electricity consumption in 2023 be sourced via renewable energy – whether through green PPAs, on site renewable power generation or retirement of RECs. This resulted in '0' emissions globally for the Scope 2 purchased electricity market-based emissions.

Scope 3

Spend-Based Calculations

Scope 3 emissions derived through spend-based calculations - excluding investments – contributed 64% of Scope 3 emissions and overall emissions. Investment-related emissions separately accounted for another 26% of the overall emissions. Spend-based emissions collectively comprise 90% of KBR's 2023 corporate carbon footprint.

Financial activities were allocated to a corresponding Scope 3 emissions category. Nearly 98% of financial activity – excluding investments – was determined to be attributed to Purchased Goods and Services or Capital Goods expenditures. For the purposes of this reporting period, these subcategories were reported collectively. Financial activity for Leased Assets accounted for approximately 2% of spend-based Scope 3 emissions.

Trends in spend-based emissions will be assessed in subsequent reporting periods.

Business Travel

Emissions from business travel accounted for 6% of Scope 3 and overall emissions. 79% of Business Travel emissions are due to flight related emissions.

As noted in the calculation methodology, KBR's use of a flight service membership was reallocated to Scope 3 Business Travel for the 2023 reporting period. However, use of the flight service membership contributed <1% of flight related emissions.

Flight related emissions – excluding the flight service membership - increased by approximately 150% from 2022 to 2023. This is levelized to account for an RFI of 2 being applied in 2023, whereas an RFI of 3 was used in the 2022 reporting period. Gross flight-related emissions increased year over year by 66%.

While the predominant ticket class remained 'economy' in 2023, at approximately 80% of tickets purchased, the total distance of annual air travel increased by 154% when compared to the previous reporting period.

Use of rail travel saw a significant decrease in 2023 as compared to the previous reporting year. Rail travel-related emissions decreased by nearly 50%.

Employee Commuting

Employee commuting emissions amounted to 3% of overall emissions. Employee travel to and from an office represented 74% of the Scope 3 Employee Commuting emissions, with the remainder being those emissions from remote working.

Employee travel in the United States was 57% of commuting related emissions, whereas U.S.-based employees were 45% of global employee headcount. As noted in the methodology, employee commuting emissions predominantly relied on an assumption-based model of activity data. The external data used to devise assumptions showed the average U.S. commute was a longer distance, when compared to other countries. Public transport and other shared commuting methods were used more frequently in international countries, whereas personal vehicle use was the most common mode of transport in the United States. Emissions generated from personal vehicles are significantly greater than those created when the same distance is travelled via train or other public transport.

Recommendations

Based on the Corporate Carbon Footprint assessment, ClimatePartner recommends the following initiatives and actions to improve KBR's carbon footprint:

Data Quality

As stated in previous assessments, primary data is key for comprehensive and complete carbon footprint measurement. It allows you to accurately track the emissions over time and draw insightful conclusions to develop effective climate action and carbon reduction strategies. The following actions are recommended to improve primary data quality:

- **Primary energy consumption and coolant use data collection from sites:** Continue to educate facility managers and/or inform energy providers of the annual collection of consumption data. Continue to communicate with and gain cooperation from non-disclosing facilities.
- **Employee engagement:** Continue and enhance communication of the importance and goal of the carbon foot printing process to all employee stakeholders frequently to help to improve engagement in the data collection process.
- **Limit reliance on spend-based data:** Spend-based calculations determined 90% of KBR's 2023 corporate carbon footprint. Spend-based methods are broad and imprecise. As availability and quality of data collection processes improve, using activity data to the extent feasible instead of spend data will better refine the emissions data.
- **Global commuting surveys:** Except for the United Kingdom, employee commuting relied upon external research and an assumption-based activity model. Increasing primary data for employee commuting can refine future insights and recommendations.

Recommendations for reducing emissions impacts across different KBR activities are provided below:

Electricity

- **Energy efficiency measures:** KBR can also focus on implementing energy efficiency measures such as installing LED lighting, replacing old equipment, or switching appliances.

Heating

- **Office average temperatures:** Implementing a lower average temperature in your offices allows you to reduce emissions rapidly. On average you reduce 6 percent of CO2e emissions per degree. Pairing this policy with staff training on better behaviors, e.g., "windows open = heating off" can be effective. Installation of Smart thermostats and timers for your central heating system to regulate the heating during non-working hours is another useful method to decreasing unnecessary usage.
- **Building insulation:** For buildings you own or where you have strong relationships with landlords, inquire about the insulation of the buildings. Old buildings can be retrofitted by thermal renovation.
- **Low carbon energy:** Implementing lower carbon energy sources will reduce emissions. Wood pellets and biogas are lower emitting alternatives to natural gas. In

locations where you already source renewable electricity, looking at air and ground-source heat pumps can also drive substantial emission reductions.

Vehicles

- **Green fleet:** Increase the ownership/use of electric, or hydrogen powered vehicles and ensuring that any new vehicle purchases are green.
- **Infrastructure:** Consider installing infrastructure onsite to encourage the charging of company cars at KBR facilities so that KBR has control over the type of electricity used and resulting emissions. KBR could also provide eco-driving training for staff to improve the efficiency of journeys made by car.

Employee Commuting

- **Incentivize public transit:** Implementing employee commuting programs to encourage use of public transit, where available, will reduce reliance on personal vehicles and reduce contributing emissions.
- **Virtual work policy:** Instituting a remote-work policy and/or virtual meeting policy so an in-person presence is required under certain guidelines can limit employee commuting and associated emissions.

Business Travel

- **Opt for rail:** Continue to encourage employees to travel by train even if this means longer travel times. Travelling by train virtually always comes out better than by air, and often by a lot.
- **Flight type choices:** Consider choosing economy class over business or first class (for example, one passenger's flight on business class might have an impact that is 2-3 times higher than that of an economy class flight). Direct flights, even if more expensive, should be preferred over flights with many connections as these often have a much higher carbon footprint.

Appendix

Climate action

A holistic climate action approach is based on the following principle: avoid unnecessary emissions, reduce existing emissions, and offset unavoidable emissions. Therefore, a Corporate Carbon Footprint, updated on a yearly basis, is an important tool for companies and organizations that seek to identify their emission mitigation and reduction potentials as well as track the effectiveness of their climate action measures over time.

Companies, processes, or products can contribute to climate action through financing international carbon offset projects. Since greenhouse gases are evenly distributed throughout the atmosphere, it is considered that their concentration across the world is the same. Therefore, those emissions that cannot be avoided locally, can mathematically be offset through emission reduction activities in another part of the world. This offset is rendered possible by carbon offset projects.

Methodology

Reporting standard

The GHG Protocol is the internationally recognized standard for greenhouse gas accounting at the corporate level. It was developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

It defines five fundamental principles for carbon footprint measurement:

- **Relevance.** The principle of relevance requires that all major emission sources are taken into consideration when measuring corporate carbon footprint. The report should be informative and useful in internal and external decision making.
- **Completeness.** The principle of completeness requires that all relevant emission sources within the boundaries are addressed and included.
- **Consistency.** To facilitate the comparison of the results over time, accounting methods and boundaries must be documented and kept for the record. Any changes in the methodology and/or boundaries must be reported, explained and justified.
- **Accuracy.** Discrepancies and uncertainties that may occur during the calculation and measurement process should be reduced as much as possible to make sure that the results are accurate and provide solid data for stakeholder decisions.
- **Transparency.** The results should be presented in a transparent and comprehensible manner.

Process

The following steps define the carbon footprint measurement process:

- Definition of goals
- Definition of boundaries
- Data collection
- Carbon footprint calculation

- Documentation of results

Goals. Corporate carbon footprint helps to identify the largest emission sources within the company and along the upstream and downstream value chain. Thus, it may form a basis when developing a climate action strategy in which targets, measures and responsibilities for the reduction of greenhouse gas emissions are defined. It is advised to track the progress regularly and revise (as well as adjust, if needed) the goals set.

Definition of boundaries. Carbon accounting requires a clear definition of the inventory boundaries, including both organizational and operational boundaries.

The organizational boundaries describe the organizational unit and the timeframe which the Corporate Carbon Footprint applies to. System boundaries can be defined based on the company's operational or financial control or according to its equity share (for most companies, the system boundaries based on either operational or financial control are identical).

Greenhouse Gas Protocol defined three categories ("Scopes") to classify various emission sources. They form the basis of every corporate carbon footprint:

- **Scope 1.** Scope 1 includes all CO_2e emissions that the company can control (direct carbon emissions): emissions generated by the combustion of fossil fuels (mobile and stationary), chemical and physical processes, and use of refrigerators and/or air conditioning equipment.
- **Scope 2.** Scope 2 represents indirect carbon emissions from purchased electricity, steam, district heating and cooling. All emissions that are generated by fossil fuel combustion controlled by external energy providers fall under this category as well. A separate category for these emissions allows us to avoid double counting when comparing CO_2 emissions from different companies.
- **Scope 3.** All remaining CO_2 emissions that cannot be directly managed by the company are included in Scope 3 (other indirect carbon emissions). These are all CO_2 emissions that are related to products and services used or processed by the company. The emissions directly generated through the use of sold products and services are also included in this scope.

According to the Greenhouse Gas Protocol, the calculation of CO_2 emissions is mandatory for Scope 1 and Scope 2 but voluntary for Scope 3.

Data collection and emission calculation

Generated emissions are calculated using scientifically determined emission factors. The data collected for carbon footprint measurement is classified as primary and secondary. Primary data is collected at the source and applies to a specific object researched. Secondary data is obtained by processing and modelling the primary data (e.g., using lifecycle analysis databases such as ecoInvent or GEMIS). For example, when calculating CO_2 emissions of energy consumption, both primary and secondary data is used.

Greenhouse Gases disclosure

Corporate Carbon Footprints report the emissions in CO_2 equivalents (CO_2e). It means that in addition to CO_2, the calculations also address the other six greenhouse gases regulated by the Kyoto Protocol: methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and nitrogen trifluoride (NF_3). These gases are converted to the global warming potential value of CO_2 and represent CO_2 equivalents (CO_2 e). These equivalents are usually referred to as carbon emissions or CO_2.

Improving Lives

About ClimatePartner

ClimatePartner is a solution provider for climate action: it combines tailored consulting services with a software-as-a-service (SaaS) platform for company and product carbon footprints. ClimatePartner helps companies calculate and reduce their CO_2 emissions, as well as offset unavoidable emissions, enabling them to become carbon neutral. This is then communicated through interactive digital labelling.

ClimatePartner was founded in Munich in 2006. Today, it has over 500 employees across offices in Munich, Boston, Barcelona, Berlin, Essen, Vienna, Milan, Zürich, London, The Hague and Stockholm, and works with more than 3,000 companies in over 35 countries.

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