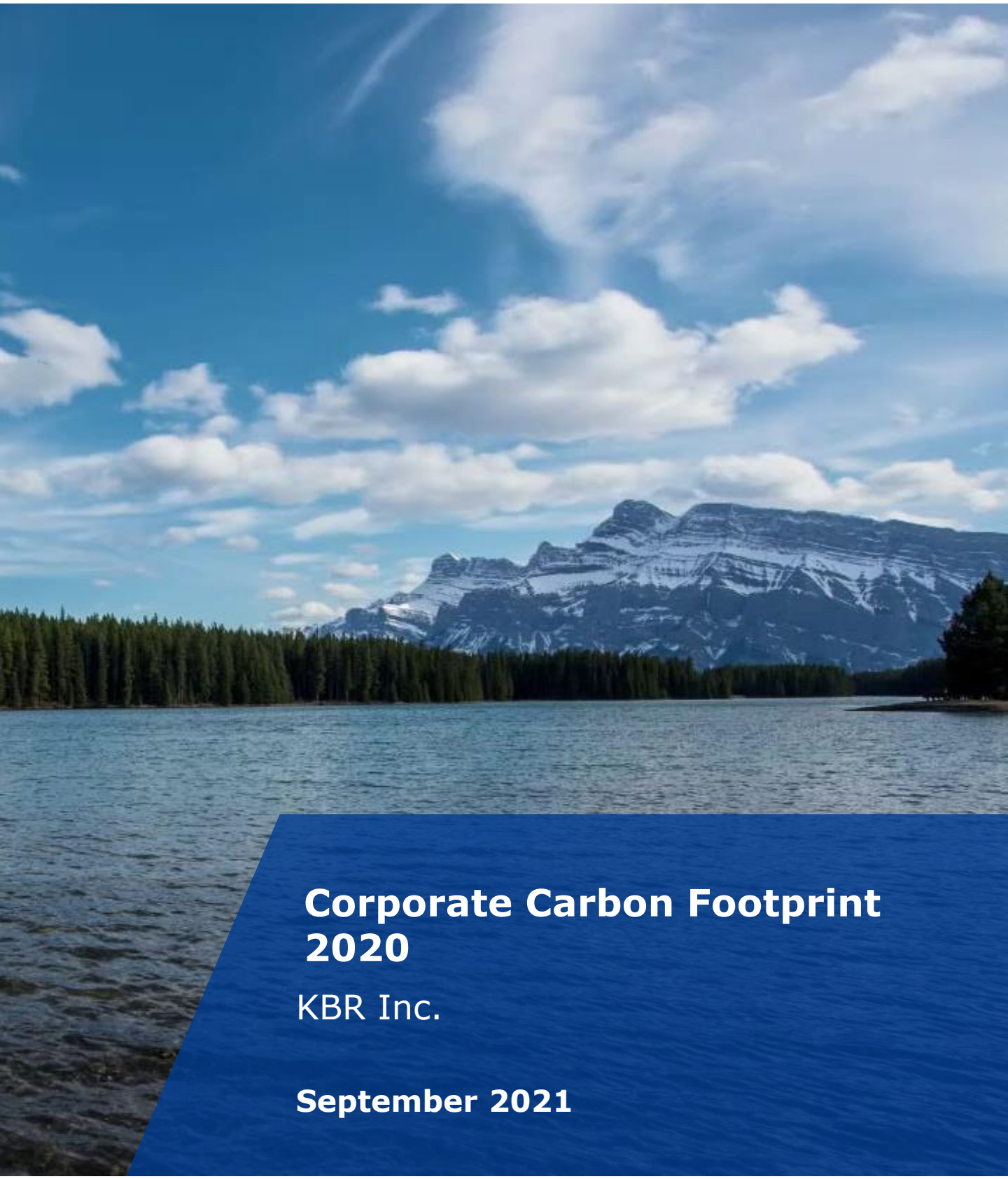
ClimatePartner



Corporate Carbon Footprint 2020

KBR Inc.

September 2021

Summary

ClimatePartner has measured KBR's Corporate Carbon Footprint for 2020 (January - December 2020), based on the world's most widely used greenhouse gas accounting standards for companies: *Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol*).

This report provides an overview of the CO_2 emissions generated by KBR's business activities in 2020, including heating and vehicles (Scope 1), electricity (Scope 2) as well as business travel (air and rail travel) (Scope 3). Operational control approach was used to set organizational boundaries and location-based method followed to measure Scope 2 emissions.

The report provides an overview of Scopes 1 and 2 emissions by regions and countries in which KBR operates. It also includes adjustments to the Corporate Carbon Footprint 2019 assessment and comparison between overall KBR emissions in 2019 and 2020.

The Corporate Carbon Footprint can be used to develop a holistic climate action strategy. It can help to identify carbon emissions hotspots, set carbon reduction targets and define climate action goals. We have provided some initial recommendations based on our findings.

Total (t CO_2)
67,237

This amount corresponds to…

… the melting of
201,713 m²
of Artic ice in summertime

… the annual CO_2 footprint of
8,003
European citizens

… the amount of CO_2 sequestred by
5,379,000
beech trees per year

Company overview

KBR delivers science, technology and engineering solutions to governments and companies around the world. KBR is listed on the New York Stock Exchange and employs approximately 28,000 people worldwide with customers in more than 80 countries and operations in 40 countries.

Since 2020, KBR has operated a 2-segment business model. The Government Solutions (GS) Business Segment provides full life cycle support solutions to defence, space, aviation, intelligence, and other programs and missions for governments around the world. The Technology Solutions (TS) 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.

KBR acquired Centauri LLC (Centauri) in October 2020. Centauri is a provider of solutions for clients in the areas of missile defence, space, and intelligence. This structural change formed the basis of the recalculation of KBR's 2019 corporate carbon footprint (see page 14 for more detail). The GHG Protocol recommends recalculating base year emissions after structural changes, such as mergers and acquisitions, as this allows meaningful comparisons of emissions data to be made over time.

System boundaries

Organizational boundaries

In order to define which of KBR's businesses and operations should be included in the carbon footprint measurement ClimatePartner established organizational boundaries following an operational control approach. Under the operational control approach, a company accounts for 100 percent of the GHG emissions from operations over which it has control, such as sites and vehicles. ClimatePartner has not accounted for GHG emissions from operations in which KBR owns an interest but has no control. For clarity, ClimatePartner has not followed a financial control or an equity-share approach.

Operational control was considered to apply in all cases where KBR was able to employ 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 as part of services provided, it was essential to identify those operations over which KBR had full operational control. All operations that KBR managed as part of their service provision but where client's operational policies and procedures applied, have been considered to fall out of the system boundaries of this assessment.

See Appendix 2 for a full list of legal entities which fall under KBR's organizational boundaries and Appendix 3 for a full list of sites and vehicles included in the assessment.

Operational boundaries

At this stage KBR has chosen to account for Scope 1, Scope 2 and part of Scope 3 emissions. In order to categorize these emissions as direct and indirect, operational boundaries have been set and business operations have been classified as follows:

- Scope 1 (direct emissions): Company facilities (heating and cooling) and company vehicles
- Scope 2 (indirect emissions): Purchased electricity
- Scope 3 (indirect emissions): Business travel (air and rail travel)

Further information on the methodology and process followed to calculate KBR's Corporate Carbon Footprint can be found in Appendix 1.

Data quality and limitations

Exclusions

Due to unavailability of data related to certain assets controlled by KBR, exclusions have been made in the assessment, namely:

- 7 sites out of total of 148 that were reported within the organizational boundaries were excluded from the assessment. Some of the excluded sites were reported as runways or storage units and the associated emissions were assumed to be non-material. Sites for which no consumption or square footage data was provided were also excluded from the assessment, since there was no reasonable basis on which to form assumptions for extrapolation.
- 72 residential leases and one sublease were reported. These have been excluded from this assessment on the basis that they would be included in Category 8: Upstream Leased Assets or Category 13: Downstream Leased Assets in Scope 3. This category was not part of our assessment.
- 71 vehicles out of 855 reported were excluded from the assessment. Since vehicle type, mileage and/or average fuel consumption data for the 71 vehicles could not be provided, a reasonable basis for estimating the associated emissions could not be established. The calculations of the vehicle-related emissions should be updated as soon as the data of the 71 vehicles becomes available. It is noted that the vehicle inventory and associated emissions are subject to change as it, and the basis of each vehicle's inclusion within the system boundaries, is currently under review by KBR.
- Energy used for heating and cooling (air conditioning) have been reported separately. Fuel used for heating is reported as scope 1 direct stationary combustion and cooling is assumed to be covered by purchased electricity in scope 2. Additionally, fugitive emissions associated with cooling agents have been excluded from the assessment. Only 2 sites provided data on the use of coolants in KBR's facilities (no leakages or refills were reported). Due to unavailability of primary data of the equipment used in the remaining sites or secondary data on average coolant consumption in offices and warehouses, a reasonable basis for estimating coolant consumption and the associated emissions could not be established. Given the nature of KBR's services and operations, the use of coolants

was assumed not to be significant, however the assessment should be updated as soon as the data becomes available.

- Heating and cooling-related emissions in sites located in India, China, Indonesia, Republic of Korea and Azerbaijan have been excluded due to unavailability of both primary and secondary data.

A full list of sites and vehicles considered in the assessment is provided in Appendix 3.

Data gaps

Primary data is key for a comprehensive and complete carbon footprint assessment. Where primary energy and/or fuel consumption data was not available, secondary data was used instead. 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** includes industry-average data (e.g., from published databases, government statistics, literature studies, and industry associations), financial data, proxy data, and other generic data.

Table 1 provides ratios of the primary and secondary data used in the assessment.

Table 1. Table 1. Ratio of primary and secondary data used

Scope, activity	Primary data	Secondary data
Scope 1		
Heating	3%	97%
Vehicle fleet	100%	0%
Scope 2		
Electricity	64%	36%
Scope 3		
Business travel (air)	100%	0%
Business travel (rail)	100%	0%

Scope 2 emission calculation methods

Scope 2 emissions in this assessment were calculated using the location-based approach, except for the UK sites where the market-based approach was used. As required by the GHG protocol, both emission values (using the market-based and location-based approaches) were reported.

Assumptions

Due to the incomplete nature or unavailability of the data mentioned above ClimatePartner has made several assumptions with regards to the following categories.

- **Scope 1: Vehicle fleet**

  Emissions related to vehicles controlled by KBR (both owned and leased) were calculated using fuel consumption data. Where this data was unavailable, it was estimated using primary mileage and average fuel consumption data per kilometer, based on the vehicle type. Where only the vehicle type, total mileage and operation period was known, the emission calculations were based on the estimated average mileage per day, which was then extrapolated across the number of days that the vehicle was in operation in 2020.

- **Scope 1: Heating**

  Only 3% of KBR's sites reported annual heating energy consumption data. The data gaps for the remaining 97% were filled using secondary data:

  - **US locations.** In order to ascertain a proxy for fuel usage across the US to support our assumptions we reviewed the *Commercial Buildings Energy Consumption Survey (CBECS) and published by the U.S. Energy Information Administration*. According to this survey, in all census regions except South, most buildings used natural gas as the energy source for primary space heating:
    - Northeast - Natural Gas
    - Midwest - Natural gas
    - South - Electricity
    - West - Natural gas

    Where electricity was considered the main heating energy source, it was assumed that heating was included in the electricity consumption data and reported under Scope 2.

    To estimate the consumption of natural gas in sites where it was considered the main energy source for heating, we used average energy intensity ratios for the respective regions, and space area size.

    The survey also supports our assumption that electricity is far more often used for

cooling purposes over natural gas. Buildings in hotter climates use more electricity than natural gas.

- **Australia.** Electricity was considered as the primary energy source for heating and cooling based on the statistics provided in the publication *Baseline Energy Consumption and Greenhouse Gas Emissions - In Commercial Buildings in Australia* published by the Australian Government. It was assumed that the related consumption was provided with the total electricity consumption and reported under Scope 2.
- **Finland and Russia.** District heating was considered the primary heating energy source based on the *Analysis of the Russian Market for Building Energy Efficiency* published by the U.S. Department of Energy. Space area size and average energy intensity provided in the same study was used to estimate the total heating energy consumption in KBR's locations in Finland and Russia.
- **Germany.** District heating was considered the primary heating energy source based on the study *Energieeffizienz bei Büroimmobilien. dena-Analyse über den Gebäudebestand und seine energetische Situation*. Space area size and average energy intensity provided in the same study was used to estimate the total heating energy consumption in KBR's locations in Germany.
- **Middle East (Oman, Saudi Arabia and United Arab Emirates).** Electricity was considered as the primary energy source for heating and cooling in the United Arab Emirates based on the statistics provided by the *International Renewable Energy Agency*. It was assumed that the related consumption was provided with the total electricity consumption and reported under Scope 2.

  Due to unavailability of reliable statistics on heating/cooling energy consumption in Saudi Arabia and Oman, UAE statistical data was assumed to be representative for the whole region.
- **Mexico.** Due to unavailability of reliable statistical data for heating/cooling energy consumption in offices and warehouses in Mexico, the statistical data for the US Southern regions was assumed to be representative for Mexico due to similarities in their climatic conditions.
- **Singapore.** Electricity was considered as the primary energy source for heating and

cooling in Singapore based on the statistics provided in *the BCA Building Energy Benchmarking Report 2014* published by the Building and Construction Authority (BCA) of Singapore. It was assumed that the related consumption was provided with the total electricity consumption and reported under Scope 2.

- **Sweden and The Netherlands.** Since reliable secondary data to estimate heating energy consumption in Sweden and The Netherlands could not be obtained, the statistics used to estimate average energy consumption at the sites in Finland and Germany were respectively used instead.
- **India, China, Republic of Korea, Azerbaijan, Indonesia.** Due to unavailability of reliable secondary data, we could not make a credible estimate of the heating/cooling energy consumption in sites located in these countries (9 sites in total) and therefore they were excluded from the assessment. KBR should aim to collect primary data for these locations and include the related emissions in the assessment.

- **Scope 2: Electricity**

Where primary electricity consumption data was unavailable, we used the primary data provided as a proxy for extrapolation. The following criteria was applied when estimating average energy intensity on various sites:

- Size of space area, its primary use and proximity (e.g. a site for which primary data was provided was located within the same country/state/region);
- Where no sites of the same primary use or similar space area could be identified, an average energy intensity was calculated based on the data available from all the sites within the country or state.
- Where not enough primary data was available to estimate an average energy intensity within a country/state, we used statistics from secondary data sources instead including:
  - Germany: *Durchschnittliche Heizverbräuche ausgewählter Gewerbeobjekte in kWh/m² published by IB Cornelson, Hamburg*
  - Arizona, Hawaii and Illinois, North Carolina, Nevada and Ohio, US: *Commercial Buildings Energy Consumption Survey (CBECS) and published by the U.S. Energy Information Administration*.

Four sites reported using 100% renewable energy (all in the UK).

- **Scope 3: Business travel (air travel)**

  Flight class (economy, premium economy, business and first) have been considered when calculating the associated emissions of air travel. Specific flight distances (e.g. long-haul vs. short-haul) have not been considered. Emission Factors based on flight distance averages were used.

  The emission factors provided by Department for Environment, Food & Rural Affairs (DEFRA) were used in the calculations.

  Radiative forcing has been considered in the emission calculations related to commercial air travel.

  Due to the high altitude that airplanes reach during cruising phase, emissions occur in very different parts of the earth's atmosphere compared to all other human made carbon emissions. In this context radiative forcing describes the additional indirect effect that the combustion of kerosene at high altitudes has on global warming due to the disbalance between the energy absorbed by the Earth and energy radiated back to space that it causes.

  The so-called radiative forcing index (RFI) attempts to account for this additional impact on global warming. The Intergovernmental Panel on Climate Change (IPCC) recommends a factor between 1.9 and 4.7. ClimatePartner uses an RFI of 3.

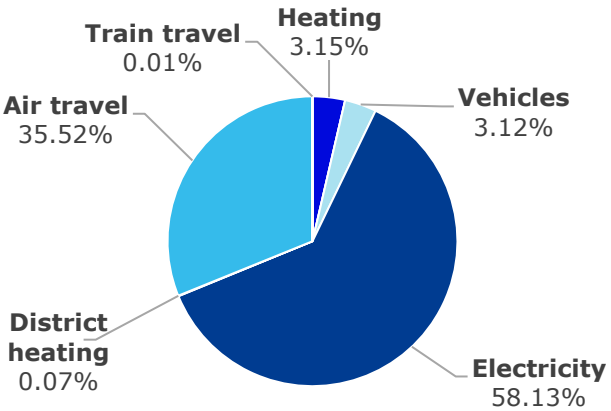
Results
Carbon footprint 2020

In 2020, KBR's business activities generated a total of 67,237.5 tonnes of CO_2, 6.3% of which were Scope 1 emissions, 58.2% Scope 2 emissions and 35.5% Scope 3 emissions. Electricity was the most emission-intensive activity and represents the largest share of the company's carbon footprint.

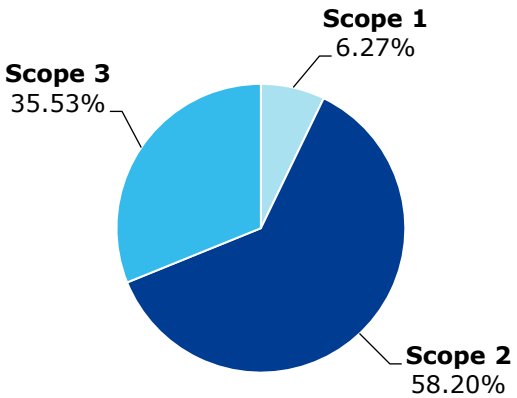
When offsetting the emissions, a safety margin of 10% is typically added to a Corporate Carbon Footprint to account for any discrepancies that might have resulted from assumptions and estimates taken.

Emmission source	Emissions [t CO_2]	Share, %
Scope 1	**4,212.2**	**6.27**
Heating	2,119.1	3.15
Vehicles	2,093.1	3.12
Scope 2*	**39,133.6**	**58.20**
Electricity	39,085.0	58.13
District heating	48.6	0.07
Scope 3	**23,891.7**	**35.53**
Air travel	23,883.7	35.52
Train travel	8.0	0.01
Total	**67,237.5**	**100.00**
Total incl. 10% safety margin	**73,961.3**	

Emissions per category



Emissions per scope



** - Scope 2 emissions were calculated using the location-based method, except for the UK where market-based method was used. UK location-based emissions amount to 1,435.1t CO_2. Market-based emissions equal 0t CO_2.*

Primary data available for Scope 1 and 2 emission measurement allowed us to break down these emissions by specific regions and countries. Table 2 provides an overview of this breakdown.

Table 2. Scope 1 and 2 emissions by region and country

	Scope 1 [t CO2]				Scope 2 [t CO2]			Scope 1 and 2
	Heating	Fuels / vehicles	Cooling	TOTAL	Electrcity	District heating	TOTAL	TOTAL
Americas	**1,627.10**	**436.40**	**-**	**2,063.50**	**31,737.60**	**-**	**31,737.60**	**33,801.10**
Mexico	No data	-	No data	-	321.40	-	321.40	321.40
USA	1,627.10	436.40	No data	2,063.50	31,416.20	-	31,416.20	33,479.70
APAC	**-**	**1.80**	**-**	**1.80**	**3,117.40**	**-**	**3,117.40**	**3,119.20**
Australia	-	-	No data	-	1,875.00	-	1,875.00	1,875.00
China	No data	-	No data	-	67.30	No data	67.30	67.30
India	No data	1.80	No data	1.80	597.80	No data	597.80	599.60
Indonesia	No data	-	No data	-	6.00	No data	6.00	6.00
Singapore	-	-	No data	-	68.70	-	68.70	68.70
South Korea	No data	-	No data	-	502.60	No data	502.60	502.60
EMEA	**489.50**	**1,654.90**	**-**	**2,144.40**	**4,166.20**	**43.60**	**4,209.80**	**6,354.20**
Azerbaijan	No data	-	No data	-	33.30	No data	33.30	33.30
Bahrain	-	2.80	No data	2.80	-	-	-	2.80
Finland	-	-	No data	-	5.30	17.20	22.50	22.50
Germany	39.20	11.70	No data	50.90	47.60	-	47.60	98.50
Oman	-	-	No data	-	1.90		1.90	1.90
Poland	-	272.10	No data	272.10	-	-	-	272.10
Qatar	-	32.00	No data	32.00	-	-	-	32.00
Russia		-	No data	-	26.90	26.40	53.30	53.30
Saudi Arabia	-	536.40	No data	536.40	3,164.70	-	3,164.70	3,701.10
UK	450.30	598.80	-	1,049.10	4.80	-	4.80	1,053.90
UAE	-	201.10	No data	201.10	881.70	-	881.70	1,082.80
Leases <1K sq ft (global)	2.50	-	No data	2.50	63.80	5.00	68.80	71.30
TOTAL	**2,119.10**	**2,093.10**	**-**	**4,212.20**	**39,085.00**	**48.60**	**39,133.60**	**43,345.80**

Adjustments to Corporate Carbon Footprint 2019

Due to availability of new primary and better secondary data as well as to reflect new acquisitions that occurred in 2020, the following adjustments were made to the Corporate Carbon Footprint 2019. This update will allow for more accurate tracking of KBR's emissions changes over time:

- **Centauri acquisition.** In 2020 KBR acquired Centauri LLC which was considered a significant acquisition. We therefore recalculated 2019 base-year emissions using the fixed base year recalculation approach. KBR assumed operational control of Centauri's four sites in the United States which were added to the 2019 assessment. Since primary energy consumption data from 2019 was not available, the data provided for 2020 was used as a proxy. No vehicles controlled by the entity were reported in 2020 and consequently it was assumed that there were no emissions associated with vehicle use.

- **Heating-related emissions.** Due to unavailability of primary heating/cooling energy consumption data for most sites in 2019, secondary data using the U.S. official statistics was used to make conservative estimates.

  Primary data for one additional site MI02 was reported and included in the recalculation of the 2019 footprint. A more comprehensive secondary data research and analysis of average energy consumption in office buildings/warehouses was conducted for Corporate Carbon Footprint 2020 (see pages 8-10). To allow for a more accurate comparison of the two assessments, the methodologies were aligned by replacing the energy consumption estimation approach used in 2019 with the new approach used in the 2020 assessment.

- **Vehicle-related emissions.** The emission factors for fuel consumption were updated in 2020 with more up-to-date values which significantly increased the 2019 emissions associated with vehicle use. Emission factor values change and/or are improved over time and usually do not have a significant impact over the previous calculations. Due to the level of significance of this change, however, it was decided to recalculate the associated emissions accordingly to provide more comprehensive insights into the emission changes between the reporting years of 2019 and 2020. It is noted that the vehicle inventory and associated emissions are subject to change as it, and the basis of each vehicle's inclusion within the system boundaries, is currently under review by KBR.

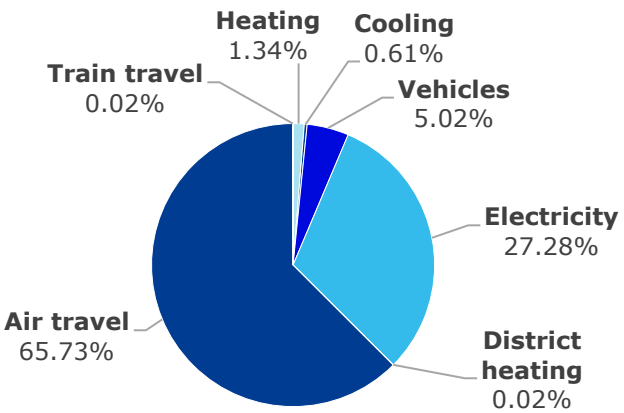
Results: Corporate Carbon Footprint 2019

The updated results of Corporate Carbon Footprint 2019 are provided on the following page. See KBR's *Corporate Carbon Footprint 2019 Report* for the results of the original assessment and the methodology used.

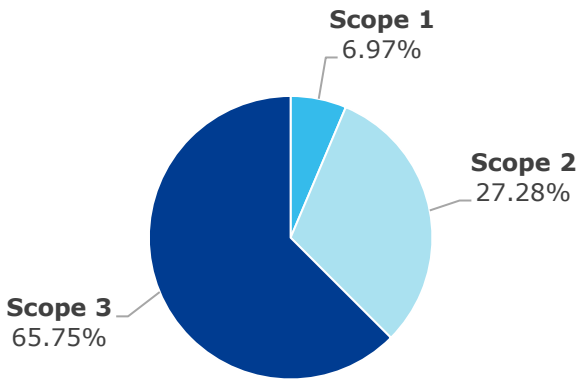
After incorporating the above-mentioned updates to the Corporate Carbon Footprint 2019, the results were adjusted as follows:

Emmission source	Emissions [t CO_2]	Share, %
Scope 1	**8,041.2**	**6.97**
Heating	1,545.6	1.34
Cooling	702.9	0.61
Vehicles	5,792.7	5.02
Scope 2*	**31,452.9**	**27.28**
Electricity	31,432.7	27.26
District heating	20.2	0.02
Scope 3	**75,812.4**	**65.75**
Air travel	75,794.3	65.73
Train travel	18.1	0.02
Total	**115,306.5**	**100.00**

Emissions per category



Emissions per scope



** - Scope 2 emissions were calculated using the location-based method, except for the UK where market-based method was used. UK location-based emissions amount to 1,914.2t CO_2. Market-based emissions equal 423.5t CO_2.*

Carbon footprint 2019 and 2020 comparison

Significant changes have been observed between the 2019 and 2020 carbon footprint results, however due to insufficient primary data certain emission reductions/increases reported should be interpreted with caution. The following conclusions have been made after analysing the changes in KBR's emissions between 2019 and 2020:

Scope 1

Heating

Energy consumption in 103 sites was reported in 2019 vs. 141 sites reported in 2020. Although heating-related emissions appear to have increased, more information is needed in order to assess whether there was a change in actual associated emissions. For example, much of the 2020 calculations was based on secondary data which did not factor in the impact of the Covid-19 Pandemic. The Pandemic might have significantly influenced the actual heating/cooling energy consumption at KBR's sites (no specific reliable research to address the energy use during the 2020's pandemic could be found). It is strongly advised to collect more primary energy consumption data from sites to allow a comprehensive comparison between the 2019 and 2020 carbon footprint results.

Vehicle fleet

334 vehicles were reported in 2019 vs 784 vehicles reported in 2020. However, the associated fuel consumption emissions decreased by 64%. While exclusions were made in both 2019 and 2020 assessments due to unavailability of data, we assume the reduction to be caused by the decreased use of vehicles/fuel throughout the reporting period of 2020 and noted discrepancies in the data provided. Improving primary vehicle data quality is strongly recommended to allow for better insights into the actual changes of the emissions associated with vehicle use.

Cooling

Due to significant gaps in primary data associated with the coolants use, no credible comparison between the 2019 and 2020 was possible.

Scope 2

Electricity

Electricity consumption in 103 sited was reported in 2019 vs. 141 sites reported in 2020. The related emissions decreased by 4% and we assume this was influenced by the reduced energy consumption in 2020 due to national quarantines. Four sites in the UK were also reported to have switched to 100% renewable energy in 2020 which helped to reduce the 2020 overall Scope 2 emissions. We were made aware after completion of 2019's assessment that the UK sites were also procuring renewable energy for part of 2019, specifically April 2019 to December 2019. As such, Scope 2 for 2019 was recalculated to account for this accordingly.

Scope 3

Business travel

The change in emissions related to business travel (air travel in particular) was the most significant and resulted in 70% drop due to a significant reduction in air miles flown in 2020 (265 million kilometers in 2019 vs 79.5 kilometers miles in 2020).

While the emission from rail travel decreased by two and a half times (from 18 to 8t CO2), it did not have a significant reduction of the overall Corporate Carbon Footprint 2020.

Recommendations

Based on the Corporate Carbon Footprint assessment, we recommend the following initiatives and actions to improve your footprint:

Data quality

Primary data is key for comprehensive and complete carbon footprint measurement. It allows the corporation to accurately track the emissions overtime and draw insightful conclusions to facilitate the development of climate action and carbon reduction strategies. The following actions are recommended to improve the primary data quality:

- Primary energy consumption and coolant use data collection from sites: Inform facilities managers and/or energy providers of the annual collection of consumption data. Enable data to be reported in a standardized format, utilizing a user-friendly data collection and management tool. Continue to communicate with and gain cooperation from non-disclosing facilities.
- Primary vehicle use data collection: Install a global centralized inventory of vehicles, including ownership details, the type and model of vehicle, type of fuel and quarterly/annual fuel consumption.
- Centralised data collection process: A centralized tool for collecting and managing data across regions and business segments would improve the efficiency of the data collection process.
- Dedicated resources: a resource dedicated to implementing and administering a data collection and management tool would improve the efficiency of the data collection process.
- Employee engagement: communicating the importance and goal of the carbon footprinting process to all employee stakeholders at least annually may help to improve engagement in the process of data collection.

Scope 1

Heating

Further analysis is required to provide site-specific heating recommendations, however some of these general recommendations do apply. Implementing a lower average temperature in your offices could allow you to reduce emissions rapidly. On average you reduce 6 percent CO_2 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.

Secondly, for owned buildings or where you have strong relationships with landlords, looking at retro-fitting and insulation of the buildings will be essential. Old buildings can be retrofitted by thermal renovation.

Thirdly, we recommend implementing lower carbon energy sources: for instance, natural gas, wood pellets and biogas all typically produce less CO_2 than oil – these options should be evaluated on a case-by-case basis. In locations where you already source renewable electricity, looking at air and water-source heat pumps can also drive substantial emission reductions.

Vehicles

For your vehicles we recommend assessing the feasibility and implementation of greening KBR's fleet. This can be done by increasing the ownership/use of electric, hybrid or hydrogen powered vehicles, ensuring any new vehicle purchases are green.

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 reduction of emissions. KBR could also provide eco-driving training for staff, to improve the efficiency of journeys made by car.

Scope 2

There are several energy efficiency measures that can be implemented, such as installing LED lighting, replacing old equipment, switching appliances and lights off completely when not in use, making energy saving settings a standard, e.g. for laptops and computers, and using the power saving settings on relevant equipment. Network printers can be automatically set to sleep mode when not in use and sensors or automatic light switch-off functions are most effective.

Energy emissions can be easily reduced by switching to a renewable energy service provider. Consider implementing a holistic renewable energy procurement strategy, especially key for the offices and facilities that you own. This could mean investing directly in renewable energy projects, developing your own projects (e.g. solar panels on the roof), entering into long-term Power Purchase agreements or buying Renewable Energy Credits (RECs). ClimatePartner provides green energy advisory and procurement services.

If KBR procures 100% renewable electricity across its estate this would reduce Scope 2 emissions to zero, reducing the carbon footprint by 30-60%.

Scope 3 (Business Travel)

Air travel is by far the largest sub-category within Business Travel. Ultimately, the easiest way to reduce your footprint here is avoid travel in the first place as there are no sustainable options when it comes to flying. Covid-19 has shown the world that we are capable of conducting most business activities through video conferencing and calls.

When flying cannot be avoided, 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.

Secondly, where possible, opt for train travel instead even if this means longer travel times. Travelling by train virtually always comes out better than by air, and often by a lot.

Finally, consider expanding your climate leadership by incentivizing employees to reduce air travel in their personal lives too. One way to do this is by implementing a policy to provide extra holidays to those who travel by train instead of by plane.

Appendix 1

Climate action and carbon neutrality

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 are considered as carbon neutral when all their carbon emissions are measured and offset through 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.

By offsetting the calculated emissions, KBR Inc. can become a carbon neutral company.

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 carbon 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 carbon 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 carbon 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.

Appendix 2

Legal entities within the organizational boundaries

See enclosed as a separate document.

Appendix 3

Overview of sites and vehicles

Table 1. Overview of all reported sites

Included/ excluded in the assessment	No of sites
Excluded	7
Included	141
Grand Total	**148**

Table 2. Overview of sites considered in the assessment

Region/country	No of sites
Americas	**91**
Mexico	1
United States	90
Asia Pacific	**21**
Australia	10
China	3
India	4
Indonesia	1
Korea, Republic of	1
Singapore	2
Europe	**8**
Finland	1
Germany	2
Russian Federation	1
United Kingdom	4
Middle East	**20**
Azerbaijan	1
Iraq	4
Kuwait	1
The Netherlands	1
Oman	1
Saudi Arabia	8
Sweden	1
United Arab Emirates	4
Grand Total	**141**

Table 3. Overview of all reported vehicles

Included/ excluded in the assessment	No of vehicles
Excluded	71
Included	784
Grand Total	**855**

Table 4. Overview of vehicles considered in the assessment

Region/country	No of vehicles
Americas	**317**
United States	317
Asia Pacific	**0**
-	0
Europe	**403**
Germany	3
India	1
Poland	49
UK	350
Middle East	**64**
Qatar	24
Saudi Arabia	34
UAE	6
TOTAL	**784**

See full lists of sites and vehicles enclosed as a separate documents.

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 carbon 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 120 employees across offices in Munich, Berlin, Essen, Cologne, Vienna, Milan, Zürich, London, The Hague and Yerevan, and works with more than 3,000 companies in over 35 countries.

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