

Basis of reporting
Sustainability review 2021

INTRODUCTION

The data reported includes BAE Systems' wholly-owned subsidiaries and includes data for our four key markets (i.e. Australia, Kingdom of Saudi Arabia, UK and US).

DIVERSITY

Basis of calculation – for calendar year 2021

Total number of employees, recorded on our HR systems. Data is gathered as an extract from the HRIS and summarised in a dashboarding tool (Tableau) to support simple and consistent data visualisation and reporting.

NUMBER OF EMPLOYEES

Description – for calendar year 2021

Total number of employees, permanent and fixed term, captured on our HR systems. The data does not include temporary workers, sub-contractors and agency staff. Data is captured and pulled from various HR Systems across our four key markets by a nominated point of contact who manages the data.

Unit of Measure – for calendar year 2021

Total number of employees.

AGE DIVERSITY

Description – for calendar year 2021

Total number of employees, permanent and fixed term at 31 December 2021, split across the following age groups:

- 24 years and younger
- 25-34 years
- 35-49 years
- 50-59 years
- 60 years and older

The data does not include sub-contractors, agency staff or temporary workers.

Data is captured and pulled from various HR Systems across our four key markets by a nominated point of contact who manages the data.

Unit of Measure – for calendar year 2021

Total number of employees by age.

GENDER DIVERSITY

Description – for calendar year 2021

Total number of employees, permanent and fixed term at 31 December 2021, split across gender groups of male and female. Gender reporting is also split between number of members of the Board and Senior Managers (Senior Managers are defined as employees (excluding executive directors) who have responsibility for planning, directing or controlling the activities of the Group or a strategically significant part of the Group and/or who are directors of subsidiary companies).

The data does not include sub-contractors, agency staff or temporary workers.

Data is captured and pulled from various HR Systems across our four key markets by a nominated point of contact who manages the data.

Unit of Measure – for calendar year 2021

Total number of employees split by gender.

ETHICS

FORMAL ENQUIRIES ¹

Description – for calendar year 2021

These are the number of enquiries raised as a result of contacts to our Ethics Helpline.

The Ethics Helpline includes contacts made to our Ethics Officers, Ethics Helpline emails, Ethics Helpline web-reports, and Ethics helpline phone.

Any contact that raises a concern or makes an allegation of inappropriate conduct is recorded as a report but may be closed as guidance if appropriately resolved with guidance and advice. All contacts are logged. Contacts which are requests for advice or guidance are either addressed by Ethics or referred onwards, for example to HR.

Contacts can come from any individual, regardless of their affiliation: employees, contractors, customers, suppliers etc. Users of our externally managed Ethics Helplines are given a unique reference number so that they can monitor the progress of their report and, when wishing to remain anonymous, in jurisdictions in which it is legal and appropriate, receive feedback. Feedback is provided to all those making reports or seeking guidance through the various ethics channels.

Ethics Helpline contact details are posted in our facilities, shared via email, posted on our intranets, included in our Code of Conduct and included on our website.

Multiple Contacts

Where, having considered the criteria noted below, we are reasonably persuaded that multiple contacts to our Ethics Office relate to a single matter of concern, then we log this as a single report. *In evaluating whether multiple contacts to our Ethics Office relate to the same matter, we must give consideration to: the severity of the reported issue; internal and external interest in the reported issue (i.e. if heightened internal or external interest is noted in a particular reported issue, these cases will not be aggregated for external reporting); the length of time within which the contacts were made (e.g. contacts made within a brief period on the same minor issue may qualify for reporting purposes as a single contact); and the channel of contact. It is noted that all contacts are followed up with the individual concerned. Any issues which requires reinvestigation are re-entered as a separate contact and investigated further.*

BAE Systems, Inc.

The BAE Systems, Inc. Ethics Helpline includes a 24x7 call centre and a web-based intake form administered by an external service provider, Diligent. The Ethics Office may receive contacts from a variety of avenues including Ethics Officers, Human Resources, management, the Board of Directors and our Ethics Helpline. All contacts are recorded in the BAE Systems, Inc. IncidentManager database. The matter is triaged and escalated as appropriate. The case is assigned to the appropriate Ethics Officer for investigation, documentation, resolution, and case closure. Ethics Officers may partner with the appropriate functional subject matter experts to conduct the investigation.

The day-to-day management of all ethics contacts is the responsibility of the Inc. Ethics Office, Sector Ethics directors and the Ethics Officers assigned, using the IncidentManager case management tool.

Oversight, consistency and quality assurance are provided by the BAE Systems, Inc. Ethics Oversight Committee (EOC), Inc. Ethics Office, Sector Ethics Directors and Sector Ethics Steering Committees. The Ethics Oversight Committee includes: the Chief Executive Officer; Senior Vice President & General Counsel; Senior Vice President, Human Resources & Administration; Senior Vice President, Finance; Vice President, Internal Audit; Vice President and Chief Ethics Officer and an outside Director from the BAE Systems, Inc. Board of Directors. The EOC meets at least twice a year and is responsible for reviewing the Company's overall ethics compliance and awareness program and reviewing any significant ethical issues.

BAE Systems plc (all BAE Systems apart from BAE Systems, Inc.)

The Ethics helpline phone service and web reporting service is run by an external service provider, Safecall, who forward call details to the Ethics central team at Head Office. The Ethics central team at

Head Office also receive contacts made to the Ethics Helpline email, postal letters and by other means. The Ethics central team log a case for each report received, triage the severity of the report and either escalate the report, in accordance with the escalation process or disseminate contacts to the appropriate businesses, via Ethics Officers, for resolution by either providing Guidance or investigation. Ethics Officers across the businesses also receive contacts directly by telephone, email and walk-in (face to face), which they then log on the case management tool.

The day-to-day management of all ethics contacts is the responsibility of the Head of Ethical Business Conduct, their staff and the Ethics Officers, using a centralised case management tool to do so.

Oversight of all ethics contacts is the responsibility of the Ethics Review Committee (ERC), chaired by the Group Director Governance, Conduct & Sustainability with permanent members of Group Audit Director; Chief Counsel, Compliance & Regulation; HR Director, Head Office; Chief People Officer, Geographies; Group Security Director; Chief Counsels for Air, Maritime and Applied Intelligence and Group Head of Ethical Business Conduct. The ERC meets quarterly reviewing contacts management performance, significant trends and actions taken in response to ethical concerns raised, ensuring thoroughness and consistency.

Basis of calculation – for calendar year 2021

The total number of ethics enquiries is based on the number of contacts to our Ethics Helpline. All ethics contacts are reported via our case management tools.

Unit of Measure – for calendar year 2021

Each formal enquiry made to the Ethics Helpline (unless classed as a multiple contact on the same incident – see above description).

TYPES OF CONTACTS TO ETHICS HELPLINE

FORMAL ENQUIRY TYPES

Description – for calendar year 2021

Contacts to Ethics Helpline are categorised using the following primary and secondary enquiry types:

Investigation

Concerns or complaint (that require more than advice or guidance to resolve) relating to:

Accounting Charge Practices

Accounting Charge Practices - Major	Directed or intentional charging of labour or related expenses, including travel expenses, to an improper account; systemic or excessive irregularities or errors in charging; pattern of charging the wrong cost objective; contract cost shifting or allocation not in accordance with disclosure statements, etc.
Accounting Charge Practices – Minor	Inappropriate charging of labour or related expenses, including travel expenses, to an improper account where such charges are not indicative of a significant or consistent pattern of abuse; minor timekeeping infractions or misuse of business unit time where cost accounting adjustments are indicated (i.e., the employee did not make up the time); malingering or sleeping while assigned to work and charging the time on accounting records; infrequent, unauthorised late arrivals or early departures where the time is charged on accounting records; other improper time charging incidents or patterns not indicative of gross mischarging or cost to the customer.
General Accounting Practices	Inaccurate, false, or misleading financial records or statements including, but not limited to, general ledgers, profit and loss statements, cost, schedule and control accounting records; financial planning or budgeting issues; failure to properly account for receivables or payables; improper billing practices; property accounting; actions that are not consistent with the letter or spirit of BAE Systems financial policies.

Anti-Corruption

Advisors	Issues or enquires relating to Advisors – implementation or exercise of advisor practices
Bribery or Corruption	<p>Providing, or attempting to provide, or offering to provide any kickback; or soliciting, accepting, or attempting to accept any kickback; or including, directly or indirectly, the amount of any kickback: in the contract price charged by a BAE Systems subcontractor to a higher tier subcontractor or to BAE Systems; or in the contract price charged by BAE Systems.</p> <p>A kickback means any money, fee, commission, credit, gift, gratuity, thing of value, loan, entertainment, services, or compensation of any kind which is provided, directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favourable treatment in connection with a prime contract or a subcontract.</p>
Community Investment	Issues or enquires relating to Community Investment – Implementation or exercise of Community Investment practices
Conflict of Interest – Misc.	Because of other activities or relationships, BAE Systems is unable or potentially unable to render impartial assistance or advice to the government or other customer, or where objectivity in performing the contract work is or might be otherwise impaired, or where an unfair competitive advantage exists (i.e., organisational conflict of interest); or other conflicts of interest not described above.
Facilitation Payments	Payment or gift given (usually to a government official) to cause him or her to perform a routine duty or function, or to expedite such performance, other than the payment of a lawful and official fee for such a duty or function.
Former Government Employees	Prohibited employment actions (e.g., hiring, discussions of potential employment, etc.) pertaining to former government employees.
Gifts and Hospitality	Receiving or offering any gift, hospitality, gratuity, or other business courtesy in violation of corporate policy.
Outside Business Activities	Direct or indirect personal interest in a transaction or situation with a supplier, customer, competitor, shareholder or other which might reasonably appear to affect the judgment the employee exercises on behalf of the Company, influence the employee's actions, or lead the employee to neglect the Company's business. This includes dual employment adverse to BAE Systems' interest, certain ownership interests (i.e., securities), and other actions and relationship interests.
Political or Lobbying Activity	BAE Systems funds, property, services, or other items of value, improperly contributed, loaned, or made available, directly or indirectly, to any political party, committee, or candidate, or to the campaign of any candidate; improper activity on the part of an employee or representative to influence the decision making of any executive or legislative branch member or government employee

Data, Technology and Trade Controls

Competitive Sensitive Data	Solicitation, acceptance, use or possession of 1) document(s) containing a legend indicating that such document(s) originated with or belong to another business unit, that such document(s)
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	<p>are of a competitive nature, and the receipt, possession and/or use of the information is prohibited by the legend;</p> <p>2) document(s) (whether or not containing legends) or information which constitute part of, or relate to the contents of, another business unit's proposal at any stage of competition;</p> <p>3) government document(s) of a source selection or procurement planning nature which contain a legend indicating that release outside the government is not authorised;</p> <p>4) government document(s) or extracts there from which contain source selection or procurement planning information not containing a restrictive legend, if there is reason to believe release has not been approved by the government;</p> <p>5) Any information of the government or of a business organisation, whether a competitor or not, where it is clear that release of that information is unauthorised or in circumstances where there is reason to believe that such information cannot lawfully be in BAE Systems' possession.</p>
Data protection or personal data	Accidental or unlawful loss, destruction, alteration, unauthorised disclosure of, or access to Personal Information held by or on behalf of the Company, together with any other Personal Data Protection Incident which falls within the definition of breach under a Local Personal Data Protection Policy.
Propriety Data or Intellectual Property	Mishandling data that are valuable assets either of the company or its collaborators or customers such as proprietary data, intellectual property, patents, trade secrets, "know how," and technical information. Misconduct may include, but is not limited to, misuse of proprietary data, violation of non-disclosure agreements, or improper technology transfer
Securities and Insider Trading	Inappropriate use of inside information. Inside Information is information of a precise nature that has not been made public but which, if made public, would be likely to have a significant effect on the price of the Company's Securities. Inside information includes information that relates directly or indirectly to the Company and is likely to include: Significant information relating to the Company's assets and liabilities, its performance, potential performance or financial condition; Major new developments in the Company's business; and Information that affects information previously disclosed to the markets. Information is precise if it is about circumstances or events which currently exist or which may reasonably be expected to occur and is specific enough to enable a conclusion to be drawn as to the possible effect on the price of the Company's Securities.
Trade controls, export controls, sanctions or ITAR	Violations of export or import rules or regulations; improperly or unlawfully shipping, mailing, hand-carrying, or in any other way exporting or importing any commodity or technical data or causing or permitting any other person to do so; exporting or importing without the appropriate licence or exemption, payment of fees, and/or appropriate documentation.

Employee Conduct

Discrimination	Employment decisions or treatment based on race, sex, age, religion, colour, national origin, disability, veteran status, or on any other unlawful basis; also see Equal Employment Opportunities.
Employee Misconduct - Misc.	Insubordination; violence, fighting; soliciting; unauthorised absence; smoking in prohibited areas; profanity; confidentiality issues and other inappropriate conduct not covered elsewhere.
Gambling	Gambling activities during work hours, or on work premises, or organising gambling activities

Interpersonal Skills	Poor or inadequate communication; rudeness, insensitivity to employee morale.
Intimidating / Threatening Conduct or Harassment	Harassing, frightening, annoying, bullying (if not covered in the Discrimination category), threatening, coercive, discouraging, annoying, or tormenting behaviour (e.g. "nit-picking") of a non-sexual nature; also see Sexual Harassment.
Records Falsification (Non-Finance)	Falsification of personnel or other non-financial records including, but not limited to, resumes, applications, letters of recommendation, disciplinary records, health records, benefit applications or filings, and certain operations records such as manufacturing, quality, engineering drawings, etc.; also see Product Substitution and Accounting and Charging Practices
Relationship Conflicts & Nepotism	Employment decisions based on family or another significant relationship(s); nepotism is the special case of favouritism shown by relatives or close friends in the assignment of work, compensation, training or other work-related decisions.
Retribution or Retaliation	Threats or punishment (i.e., "payback") for utilising the Ethics Help Line or reporting misconduct to management through any means.
Sexual Harassment	Any unwelcome sexual advance(s), request(s) for sexual favours or other unwelcome verbal, physical, or other conduct of a sexual nature. Sexual harassment exists when any one or more of the following occurs; 1) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual; 2) the sexual conduct has the purpose or effect of interfering with a person's work; 3) or the sexual advance/conduct is unwanted or creates an intimidating, hostile, abusive, or offensive work environment.
Substance Abuse	Alcohol; drugs; controlled substances; possessing, selling, or being under the influence on business unit time or premises where the business unit conducts its business

Employee Relations

Access to Training	Unreasonable refusal by a manager or other constraints preventing access to training or training courses which an employee ought to attend or is entitled to attend.
Application of Policy or Procedure	Whimsical, wrong, or inconsistent application of employment-related policy, procedure, or practice.
Compensation, Benefits, and Pay	Salary or wages; overtime; merit; payroll issues; relocation, field service, or foreign allowance compensation; pay for military duty or jury duty; group insurance matters (e.g. medical, dental, life); severance pay; pension; leave of absence provisions; workers' compensation; tuition reimbursement; vacation; bereavement; holidays; COBRA
Hiring or Placement Practices	Matters pertaining to recruiting; hiring; job posting; selection; promotion; demotion; placement; job classification issues; external applicants; recalls
Layoff or Other Terminations	Matters pertaining to reduction in force decisions, layoff or other termination issues
Performance or Capability	Issues relating to the individual's ability to perform their regular work tasks due to skills, capability, performance or absence, or reports concerning how the capability process is being managed.
Reward or Recognition	Inconsistent, unfair, whimsical application of reward and recognition (other than compensation).

Financial Misconduct

Financial Fraud (including fraudulent invoicing)	Defrauding BAE Systems financially, including ghost employee/contractor, fraudulent (or fraudulently increased) invoices, fraudulent expense claims.
Securities and insider trading	Buying or selling stock based on material, non-public information concerning the Company such as transactions in which the Company

	proposes to engage or information about other entities with which the Company does business (i.e., "inside information"); using non-public information for personal gain, supplying others with "inside information" (i.e., "tipping"); other securities violations.
Tax avoidance or evasion	Illegally reducing BAE Systems tax liability; participating in questionable tax reduction procedures; acting so as to allow third party to avoid or evade proper taxation

Management Practices

Favouritism (not Nepotism)	Favouritism generally means preferential treatment without a sound business basis; treating one employee differently from another, in the assignment of work, compensation, training or other work-related decisions.
Management Skills - Misc.	Inadequate or unfair assignment of work duties; failure to monitor work areas; ineffective or poor budgeting, staffing, controlling; inadequate career development of subordinates; whimsical application of discipline.
Other Abuse of position or authority	Use of position or authority to unfairly influence decisions and outcomes (not nepotism).
Performance Appraisals	Unfair, biased, or inadequate performance appraisal practices.

Policy, Process and Trading

Business or Functional Ethical Practices	Issues or enquiries relating to the business or functional policies – Issue with the actual policy rather than implementation.
Company Sales Practices	Issues or enquires relating to Sales Practices policies – Implementation or exercise of sales practices.
International Law	Violation of statutes, regulations, or policies pertinent to the conduct of international business.
Issues relating to company policies	Issues relating to the Company's policies – Implementation or exercise of Company policies or procedures.
Product Trading	Issues or enquiries relating to Responsible Trading Risks: Product and Trading characteristics that may pose unacceptable risk to the Company's reputation. Issues on the type of or nature of business the company engaged in.

SHE

SHE People - Behaviours, Slips, trips and falls	Behaviours likely to place, or that have placed people, business unit, property or the environment at risk of harm or a contravention of a statutory or regulatory safety, health or environmental requirement.
SHE Processes	Unsafe or unhealthy work conditions or practices; placing or failing to protect people from exposure to chemical, physical or biological hazards likely to result in injury or damage to business unit, property or the environment; failing to adhere to statutory or regulatory safety, health or environmental requirements

Sales, Manufacturing and Delivery

Contract Compliance	Violating or failing to meet terms and conditions of a contract, or the spirit of a contract, that are not covered elsewhere in this glossary (e.g., failing to meet schedules, not adhering to management structure or cost commitments, contractual performance matters pertaining to customers or subcontractors'.
Manufacturing Methods or Practices	Improper use of tools; failure to follow work instructions; inadequate, unclear, or ambiguous work instructions; schedule delays; skill or efficiency problems.

Pricing Issues	Submission of a proposal, quotation, or other document or statement that is incomplete or incorrect; improper estimating practices; improper certifications of current cost and pricing.
Product Quality	Physical, non-compliance with contract technical specifications that could impact form, fit or function
Product Safety	Product integrity or product safety issue; delivering materials where required testing/inspection is not performed, is questionable, or without appropriate waiver/deviation.
Quality or Reliability	Excessive scrap or rework; poor workmanship; poor attention to detail; may also apply to administrative work.
Research Practices	Issues related to improper publication and peer-review practices; authorship and credit practices; data collection and research project management; mentoring of trainees. Actions include, but are not limited to, multiple submissions of articles for publication, improper treatment of information acquired during peer review, untimely release of research results, improper assignment of authorship to publications, omission of credit, misrepresentation or omission of citations, refusal to share scientific data on a timely basis, improper retention of data, irresponsible supervision of junior research staff, improper representation of the standards of scientific conduct. Such actions, although generally not directly damaging to the integrity of the research itself or related findings, violate traditional values in research and may be detrimental to the research process.
Scientific Misconduct	Wilful fabrication, falsification of scientific or technical research data or plagiarism in proposing, performing, or reporting research.

Security or Misuse of Assets

Employee Fraud	Non-financial fraud carried out by an employee.
Employee Safety	Risk to personal security of an employee from an external third party.
Government or Customer Security	Violations of procedures pertaining to classified, secret, or otherwise sensitive documents or data; espionage; computer security involving classified data (use in conjunction with Security - Government or Customer).
Insider Threat or Espionage	Employee with authorised access to BAE Systems plc and its Assets, who has malicious intent; or is causing loss, damage or compromise of Company Assets.
IT Security	Actions that undermine IT security measures dedicated to computing and related assets, such as physical safeguards, access authorisation, data encryption, virus prevention/detection, data back-up, and disaster, recovery planning.
Misuse or abuse of Assets	Unauthorised personal use of business unit or customer resources (i.e., phones, computers, equipment, vehicles, etc.); misuse or abuse of business unit or customer facilities; improper use of the Internet or other telecommunications; also see Theft.
Plant or Premises Security	Physical security of facilities - person; traffic and parking control; possession of weapons or firearms on business unit property.
Theft	Unauthorised removal of business unit, customer, or vendor assets or property; stealing

Supplier & Procurement

Boycotting or Trade Restraint	Entering into agreements or practices in restraint of trade; price fixing; boycotts of suppliers or customers; monopoly; tie-in sales; disparaging, misrepresenting, or harassing a competitor
Procurement Issues	Miscellaneous misconduct pertaining to the procurement of goods or services such as favouritism toward a supplier based on personal friendship or other non-business related reason(s); poorly justified sole source decisions; tailoring specifications to favour a single vendor; late

	payments; contracting without a purchase order; failing to follow procurement procedures; issues related to selection of subcontractors and contractors.
Software Licensing	Unauthorised distribution, possession, use or copying of copyrighted software or documentation.
Supplier Contract Compliance	Supplier violating or failing to meet terms and conditions of a contract, or the spirit of a contract, (e.g., failing to meet schedules, not adhering to management structure or financial commitments, contractual performance matters pertaining to supplier or their subcontractors'.
Supplier Fraud - Defrauding the Company	Behaviours of supplier or their agents that could or has resulted in actual, suspected or potential defrauding of the company

GUIDANCE AND ADVICE:

Reports that do not allege misconduct; request is for guidance or clarification on minor concerns; no investigation required; reports that are best resolved through advice or guidance.

Basis of calculation – for calendar year 2021

The total number of ethics enquiries is based on the number of calls to our Ethics Helplines. The Ethics Helpline includes contacts made to our Ethics Officers, Ethics Helpline emails, Ethics Helpline web-reports, and Ethics helpline phone.

All ethics contacts are reported via our case management tool.

Unit of Measure – for calendar year 2021

Each individual Ethics Report (unless classed as a multiple contact on the same incident – see above FORMAL ENQUIRIES description) categorised under global headings.

DISMISSALS – FOR REASONS RELATING TO UNETHICAL BEHAVIOUR

Description – for calendar year 2021

Dismissals are the number of permanent and fixed term employees dismissed from the business for breaches of ethical policies or misconduct on matters covered in the Global Code of Conduct.

Dismissals are recorded on either HR Information Systems or on HR records.

For the Annual Report, dismissal data was provided by a nominated point of contact that manages the data captured on systems / records.

Basis of calculation – for calendar year 2021

This figure is calculated by totalling the number of employees dismissed for breaches of ethical policy that have been entered on to HR Information Systems or on HR records.

Unit of Measure – for calendar year 2021

The number of dismissed employees on our HR Information systems / HR records.

COMMUNITY

COMMUNITY INVESTMENT FIGURE

Description – for calendar year 2021

Total value of community investment by BAE Systems through its Community Investment and employee fundraising and volunteering programmes.

The figure is based on:

- Donations and charitable sponsorships made through the Community Investment programme globally to local, national and international charities and other not-for-profit organisations. These include financial contributions and in-kind donations - donation/gift of either an asset or service to an organisation or individual, which is not cash. Examples of in-kind contributions may include a product such as a tank to a museum, or our technology and skills in the form of an employee's time working for that organisation.

- Funds raised from employee charitable activities and BAE Systems matched contributions in Australia, India, Kingdom of Saudi Arabia, the UK and the US through the employee fundraising, volunteering and our payroll giving programmes. Data for employee fundraising and volunteering is input into two reporting tools (one US and one for the rest of the world) by nominated points of contact across the business globally, apart from in the US where a separate recording tool is used for volunteering. Employees in the US are able to enter their own volunteering time, using an honour process. The Payroll giving data is provided via our payroll systems, apart from in the US where employees have control to manage their contributions online and the data is reported from the tool directly.

The central reporting tool is based on the Business for Societal Impact (B4SI) methodology for calculating donations and charitable sponsorships, except for the inclusion of payroll giving. Data for company sponsorships and donations is input in to one reporting tool.

Basis of calculation – for calendar year 2021

Employee fundraising – total amount raised from our Australia, India, Kingdom of Saudi Arabia, the UK, the US and other International markets during the 2021 calendar year and recorded through two reporting tools (one for the US and one for the rest of the world).

Company Sponsorships and donations – total amount of donations and charitable sponsorships (which includes payments to non-charitable organisations, but which have a community investment focus e.g. sponsorship to an educational institution) from the 2021 budget from across the business and recorded through the central reporting tool.

Payroll giving – total amount of money donated to charity from our Australia and UK markets via payroll giving during 2021 calendar year and recorded through our payroll systems.

Volunteering – the value of employee time spent during working hours on activities organised or approved by the Company which directly aims to benefit a charitable organisation, calculated using a standard hourly rate of £38.27.

Unit of Measure – for calendar year 2021

Cash (GBP) spot rate as at 31 December 2021 applied retrospectively. This was the last date in the year where rates were available.

HEALTH & SAFETY 4, 5, 6, 7, 8 and 9

FATALITY

Description – for calendar year 2021

A death resulting from any work related injury or occupational illness, regardless of the time intervening between the incident causing the injury or exposure causing illness and the death.

This number includes BAE Systems employees and those individuals who whilst being employed by a third party, are under the direct control of BAE Systems i.e. 'Labour Only Contractors'.

Fatalities are recorded within CR desktop in the calendar year that the fatality occurred.

Basis of calculation – for calendar year 2021

The number of fatalities reported by businesses globally recorded on CR desktop.

Unit of Measurement – for calendar year 2021

Number of occurrences.

MAJOR INJURIES RECORDED

Description – for calendar year 2021

This number includes BAE Systems employees and those individuals who whilst being employed by a third party, are under the direct control of BAE Systems i.e. 'Labour Only Contractors'

Major Injuries are defined as:

- A fracture, other than to fingers, thumbs and toes
- Amputation of an arm, hand, finger, thumb, leg, foot or toe
- Permanent loss of sight or reduction of sight
- Crush injuries leading to internal organ damage
- Serious burns (covering more than 10% of the body, or damaging the eyes, respiratory system or other vital organs).
- Scalpings (separation of skin from the head) which require hospital treatment
- Unconsciousness caused by head injury or asphyxia
- Any other injury arising from working in an enclosed space, which leads to hypothermia, heat-induced illness or requires resuscitation or admittance to hospital for more than 24 hours

Major injury definitions are in line with the UK RIDDOR definition <http://www.hse.gov.uk/riddor/> that came into force in October 2014. This definition came into effect at BAE Systems on 1 January 2017 to give closer alignment to the current Regulations in force.

Causes of major injuries recorded are categorised on our systems as:

- Acts of Violence
- Contact with electricity or electrical discharge
- Contact with moving machinery
- Drowning or asphyxiation
- Exposure to an explosion
- Exposure to fire
- Exposure to, or contact with, a harmful substance
- Falls from height – height not stated
- Falls from height – over two metres
- Falls from height – up to and including two metres
- Injured by an animal
- Injured while handling, lifting and carrying
- Road traffic accident
- Slips, trips and falls on same level
- Strike against something fixed or stationary
- Struck by moving vehicle
- Struck by moving, including flying / falling, object
- Trapped by something collapsing / overturning
- Exposure to hot liquid / surface / materials
- Radiation (ionising or non-ionising)

Safety data is captured on a global system – CR desktop - and data is entered by a nominated point of contact who manages the data at their site or business.

Major injuries are recorded within CR desktop in the calendar year that the work related major injury occurred.

Basis of calculation – for calendar year 2021

The total number of major injuries recorded on CR desktop.

Unit of Measurement – for calendar year 2021

Number of occurrences.

RECORDABLE ACCIDENTS PER 100,000 EMPLOYEES

Description – for calendar year 2021

The definition for employee is as follows:

The total number of BAE Systems employees working at a site / location on behalf of the Organisation Group / Line of Business responsible for the data being submitted.

This number should also include those individuals who whilst being employed by a third party, are under the direct control of BAE Systems i.e. 'Labour Only Contractors'

NOTE: Contract, agency / rental and temporary staff not under direct control of BAE Systems who are employed directly by a contractor should be included in the - Total Non-BAE Systems Employees category e.g. security, catering and cleaning contractors. These incidents are not reported externally, but are monitored internally.

Recordable Accident definition is –

An **Injury** is recordable if it results in one or more of the following:

- Fatality as already defined by BAE Systems
- Days away from work (Lost Work-Day Case) – A work related injury, resulting from a single identifiable event that renders the injured person unable to perform their normal work activities for more than one working day. This does not include the day of the injury but does include all successive days including rest days, weekends, scheduled holidays and public holidays.
- Medical treatment beyond first aid – medical treatment does not include first aid procedures, but would, for example, include the use of sutures (stiches or glue applied by Licensed Health Care Professional (PLHCP) to seal a wound). Any physical therapy, including physiotherapy and chiropractic manipulation is considered medical treatment where performed by a PLHCP. All first, second and third degree burns that require medical treatment are recordable.
- Restricted work or transfer to another job for medical reasons associated with the injury sustained (following medical treatment beyond first aid)
- Loss of consciousness during any work-related activity not already covered by the definition of Major Injury
- Significant injury diagnosed by an Occupational Health Physician or other Licensed Health Care Professional (PLHCP)
- Major Injury as already defined by BAE Systems
- Pre-existing injuries may become recordable if aggravated under certain circumstances.

In each home market data is captured in accordance with national requirements⁷.

This category includes injuries to BAE Systems employees and those individuals who whilst being employed by a third party, are under the direct control of BAE Systems i.e. 'Labour Only Contractors'.

Safety data is captured on a global system – CR desktop – and is entered by a nominated point of contact who manages the data at their site or business.

Recordable accidents are recorded within CR desktop in the month that the work related injury occurred. Work-relatedness is presumed for injuries resulting from events or exposures occurring in the work environment unless an exception specifically applies. A case is presumed work-related if, and only if, an event or exposure in the work environment is a discernible cause of the injury or is a significant aggravation to a pre-existing condition.

Basis of calculation – for calendar year 2021 (as at 31 December 2021)

Recordable accidents recorded on CR desktop.

Calculation:

(Total number of Recordable accidents/total average number of employees⁹) X 100,000.

Unit of Measurement – for calendar year 2021

Rate per 100,000 employees.

ENVIRONMENT – GREENHOUSE GAS (GHG) EMISSIONS

METHOD STATEMENTS

The greenhouse gas emissions data is reported in line with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard 'Operational Control' method. Our reporting boundary for streamlined energy and carbon reporting (SECR) is the same as our reporting boundary for the purposes of our financial statements. Emission factors for fuels and UK electricity are published at www.gov.uk/government/collections/government-conversion-factors-for-company-reporting. Emission factors for US electricity are published at <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-eGRID>. Electricity emission factors for Sweden (SWE), Saudi Arabia (KSA), Australia (AUS) and Rest of World (ROW) are published at <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2021>.

For the 2021 reporting cycle, the 2021 UK Government emissions factors published by the Department for Business, Energy and Industrial Strategy (BEIS) have been used. The most up to date Emissions and Generation Resource Integrated Database (eGRID) factors published by US Environmental Protection Agency (EPA) are used for US electricity. For the 2021 reporting cycle, the most recent US factors are from the year 2019. The US EPA are due to release the updated 2020 figures in quarter one of this year, however they have not been released in time to be used for the current calculations.

The principal record of the Group's worldwide facilities is its legal department's Global Property Database.

Greenhouse gas emissions are primarily calculated from energy consumption records reported via the Group's global environmental database. Where actual usage data is not available for facilities and residences within the Global Property Database, an estimated consumption is used based on the type of building.

Greenhouse gas emissions related to business travel include air travel data for the majority of the global business, rail data for business units operating in the UK and US, and vehicle (including hire car, company car and personal car) data for business units operating in the UK, US and Australia. These data sets are taken from suppliers' procurement records.

Emissions from pension scheme properties not occupied by the Group are not included. Where a business or facility is acquired during a reporting year, it will be included in our reporting in the next full reporting year after the change. If a business or facility has closed during the reporting year, the site will be excluded from the boundary in the next full reporting year after the change. Emissions from subsidiaries are included in the dataset.

The Scope 2 Greenhouse Gas Emissions associated with the GHG Protocol 'Market-Based' method have been calculated as 232,856 tCO₂e. In line with the GHG Protocol Guidance, this figure has been calculated using residual-mix emission factors where available for our UK, US and Swedish operations. In our other significant operating regions, residual mix emission factors are either unavailable or the resulting absolute emissions at group level are within the margin of error and therefore country-specific emissions factors have been used in line with the GHG Protocol Guidance. If sites consume grid electricity backed by REGOs, this has been taken into consideration within the calculations.

The GHG emissions data gathered in line with this methodology is used for preparing the SECR report.

Scope 1 emissions from refrigerant gases have been omitted from the SECR disclosure. These emissions have historically been excluded from the GHG inventory on the basis of materiality i.e. accounting for less than 5% of total emissions. An annual strategic and risk review of refrigerant gas use in 2021 did not indicate that any change in this assumption was required.

DIRECT (SCOPE 1): GREENHOUSE GAS EMISSIONS

Description – for calendar year 2021

Direct (Scope 1) GHG emissions come from sources (physical units or processes that release GHG into the atmosphere) that are owned or controlled by the organisation.

BAE Systems report direct GHG emissions related to the combustion of energy from usage data measured in our Scope 1 fields (Natural Gas, Liquefied Petroleum Gas or Propane Gas, Light Fuel Oil, Petrol, Heavy Fuel Oil, Aviation Fuel), plus:

- Natural Gas usage estimates for facilities at which we have a presence but do not process the utilities – based on known parameters within the BAE Systems Global Property Database for the reporting year (see estimation methodology below)
- Petrol / Diesel – purchased and consumed within BAE Systems controlled road vehicles (i.e. hire cars) where the fuel does not come from stores at the facility
- Aviation fuel – purchased and consumed within BAE Systems controlled aircraft (i.e. Corporate Air Travel aircraft) where the fuel does not come from stores at the facility
- Renewable electricity – generated by on-site renewable technologies such as solar panels and where BAE Systems use 100% of the electricity generated on-site. The emissions from this source are disclosed as 0tCO_{2e}.

Basis of Calculation – Converting to CO₂ Equivalent (CO_{2e}) – for calendar year 2021

BAE Systems direct GHG emissions are derived by calculation and expressed as CO₂ equivalent using the BEIS (previously DEFRA) Scope 1 GHG emission factors as listed in **Fig 1** below which represent the latest factors available for the majority of the reporting period.

Where the Scope 1 emissions are associated with BAE Systems-controlled vehicles, **Fig 2** shows the BEIS conversion factors that are used if vehicle-specific emissions factors for the make and model cannot be used.

Activity	CR Desktop Name	BEIS Fuel	Unit	Energy - Gross CV kg CO _{2e}
Gaseous fuels	LPG or Propane Gas	LPG	kWh	0.21449
	Natural Gas	Natural gas	kWh	0.18316
Liquid fuels	Aviation Fuel	Aviation turbine fuel	kWh	0.24782
	Heavy Fuel Oil	Fuel oil	kWh	0.26815
	Light Fuel Oil	Gas oil	kWh	0.25679
	Petrol	Petrol (100% mineral petrol)	kWh	0.24158
Heat and steam	Steam	Heat and steam	kWh	0.17073

Figure 1 - Table showing factors used to convert CR Desktop energy data into tCO_{2e} (Conversion factors from Gov.UK published July 2021)

Activity	Type	Unit	Diesel	Petrol	Hybrid	LPG	Unknown
			kg CO _{2e}	kg CO _{2e}	kg CO _{2e}	kg CO _{2e}	kg CO _{2e}
Cars (by size)	Small car	km	0.13758	0.14946	0.10494	-	0.14549
		miles	0.22143	0.24052	0.16889	-	0.23414
	Medium car	km	0.16496	0.18785	0.10957	0.15935	0.17562
		miles	0.26549	0.30231	0.17635	0.25645	0.28263
	Large car	km	0.20721	0.27909	0.15151	0.23680	0.22597
		miles	0.33348	0.44914	0.24382	0.38109	0.36366
		km	0.16843	0.17431	0.11952	0.19754	0.17148

	Average car	miles	0.27108	0.28053	0.19234	0.3179	0.27596
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Figure 2 - Table showing factors used to convert hire car and executive-lease car mileage data to tCO₂e (Conversion factors from Gov.UK published July 2021)

Method of Calculation – for calendar year 2021

For facilities where we process the utilities, direct energy emissions are calculated from the actual or estimated energy data recorded within CR Desktop in kWh multiplied by the corresponding CO₂e emissions factor, as listed in the Table in **Fig 1**. For instructions on how to request and process the CR Desktop data, please see Sections 2 and 3 of The Greenhouse Gas Calculation Manual.

For facilities at which we have a presence but do not process the utilities (and therefore which are not recorded within CR Desktop), an estimate of the Natural Gas usage in kWh is made using the building type for that facility within the Global Property Database (GPD) and the look up estimate values in the table in **Fig 3** below. The kWh value is then multiplied by the corresponding CO₂e emissions factor, as listed in **Fig 1** above. For instructions on how to request and process the GPD data and complete the estimation calculations please see Section 4 of The Greenhouse Gas Calculation Manual. To note, the estimation calculations are for Scope 1 and 2 emissions. Scope 2 emissions are discussed in more detail in the next section.

For petrol / diesel / electricity (from hybrids) associated with BAE Systems-controlled road vehicles, data is gathered centrally where available for three regions (UK, US and Australia) for hire cars. In both the UK and Australia, mileage data is provided directly from the hire car supplier (Avis). Trip distances are multiplied by the relevant emissions factor to create a value of tCO₂e for all journeys. Mileage or kilometer data is provided and is then converted to tCO₂e using the emissions factor for an 'average car', as listed in **Fig 2** above. For hybrid vehicles the tCO₂e for the electricity portion is disclosed in scope 2.

For aviation fuel associated with BAE Systems-controlled aircraft in the UK and US, data is gathered centrally to understand the amount of aviation fuel consumed that is not purchased or stored on site (i.e. that has been consumed at 3rd party airfields). These totals are gathered, processed into a kWh value and then converted to tCO₂e using the aviation fuel conversion factors in **Fig 1** above. This data will be within the CR Desktop for all sites except Warton, for which data is requested from BP. For instructions on how to convert the activity data into tCO₂e please see Section 7 of The Greenhouse Gas Calculation Manual. However, for ease of calculation, the final tCO₂e figures and the creation of the final GHG Location Based Calculator should be calculated once all Scope 1, 2 and 3 activity data has been collated. Corporate Air Travel (CAT) is estimated based on number of trips between two known locations and estimated fuel usage per trip for each aircraft type.

GPD Planning Category	Gas (kWh / m ² / year)	Average Floor area (m ²)	Estimated Annual Gas (kWh)	Source of Estimate(s)
Airfield	-	-	1,000,000	Same as 'Hangar'
Car Parking	-	-	-	LightingDirectory
Hangar	100	10,000	1,000,000	ECON 75 - MOD Benchmarks (Cat 4 Hanger: very low heating or store with low activity)
Industrial	-	50,000	10,000,000	Same as 'Manufacturing'
Laboratory	-	-	615,000	Same as 'Test Site'
Land	-	-	-	Assume no consumption as surplus land
Surplus Land	-	-	-	Assume no consumption as surplus land
Manufacturing	-	50,000	10,000,000	Average of UK medium manufacturing sites (i.e. except Barrow, Samsbury & Warton)
Mixed	148	26,500	5,142,500	Average of an office and manufacturing
Mixed Use	148	26,500	5,142,500	Average of an office and manufacturing

GPD Planning Category	Gas (kWh / m² / year)	Average Floor area (m²)	Estimated Annual Gas (kWh)	Source of Estimate(s)
Offices	95	3,000	285,000	ECON 75 - MOD Benchmarks (Cat 2 Office: naturally ventilated open plan) & BAE UK average office size
Offices US	288	3,000	864,000	The Climate Registry 2020 default Emission Factors - Office (source specific to US sites)
Other	-	-	392,773	Same as 'Unknown'
Playing fields	-	-	-	Assume no consumption
Recreational use	-	-	-	Assume no consumption
Residential	-	-	12,000	Ofgem typical medium household (class 2) consumption figures 2019
Shipyards	-	-	545,000	Average of known Aus Shipyards
Social Clubs	-	-	369,000	Same as 'Training Centre'
Storage	54	5,000	270,000	ECON 75 - MOD Benchmarks (Category 2: Unoccupied Storage)
Support	-	-	20,000	Estimate based on 10 employees
Test Site	123	5,000	615,000	ECON 75 - MOD Benchmarks (Category 3 - Training Facility) & Estimated Floor Area
Training Centre	123	3,000	369,000	ECON 75 - MOD Benchmarks (Category 3 - Training Facility) & Estimated Floor Area
Unknown	-	-	392,773	Average of all types (except manufacturing)
Workshop	-	-	392,773	Same as 'Unknown'

Figure 3 - Benchmark Estimate Values for Gas Usage

Unit of Measure – for calendar year 2021

tCO_{2e}

ENERGY INDIRECT (SCOPE 2) GREENHOUSE GAS EMISSIONS – LOCATION-BASED METHOD

Description – for calendar year 2021

An organisation's energy indirect (Scope 2) GHG emissions result from the generation of the electricity, heating, cooling, and steam which it purchased from other organisations for its own consumption.

The GHG Protocol's 'Location-Based' Method requires the calculation of emissions associated with Scope 2 GHGs using data related to 'grid average emissions profiles' for the locations where the energy is consumed.

BAE Systems reported Scope 2 'Location-Based' emissions relate to the data in our Scope 2 fields (grid electricity, steam and grid electricity used by EVs), plus electricity usage estimates for facilities at which we have a presence but do not process the utilities - based on known parameters within the BAE Systems GPD for the reporting year (see estimation methodology below).

Scope 2 electricity emissions for the UK are calculated by multiplying the kWh of electricity by the BEIS conversion factor, as per the basis of calculation below. Scope 2 electricity and steam emissions for the UK, Sweden, Kingdom of Saudi Arabia, Australia, and for sites within the Rest of World category are calculated by multiplying the relevant IEA conversion factor by the kWh of electricity, as per the basis of calculation below.

Scope 2 electricity emissions for the US are derived by using US EPA’s eGRID factors applied to electricity kWh, as per the basis of calculation below.

Scope 2 electricity emissions for UK hybrid vehicles are calculated by multiplying the miles travelled by the relevant conversion factor published by BEIS.

Note that in most cases, BAE Systems is using the location-based approach to calculate Scope 2 emissions. For regions where supplier-specific or residual mix emissions factors are available, the GHG Protocol ‘Market-Based’ Method will be applied. Additionally, if sites have grid electricity backed by REGOs then the ‘Market-Based’ Method will be applied. Please refer to the Energy Indirect (Scope 2) Greenhouse Gas Emissions – Market-Based Method section below.

Basis of Calculation – Converting to CO₂ Equivalent (CO₂e) – for calendar year 2021

BAE Systems indirect ‘Location-Based’ GHG emissions for the UK are calculated using the BEIS Scope 2 GHG emissions factor for Grid Electricity, as listed in **Fig 4** below. Indirect ‘Location-Based’ GHG emissions for Sweden, Kingdom of Saudi Arabia and Australia are calculated using the IEA GHG emission factors for Grid Electricity for the country in which the facility is located. For ROW sites, the IEA ‘Memo: IEA Total’ emission factor is used as this is deemed the most appropriate factor based on the countries within the ROW category and the countries used within the ‘Memo: IEA Total’ factor. The emission factors are listed in **Fig 5** below.

BAE Systems indirect ‘Location-Based’ GHG emissions for the US are derived by calculations using emission factors that are specific to each eGRID region. The US sites are categorised into an eGRID region based on the state, which determines the relevant eGRID factor to use. This method takes into consideration the different fuel mixes and plant-specific data across the whole of the US which varies considerably. The eGRID emission factors can be downloaded from the following location <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid>. The eGRID emission factors that are required each year will depend on the locations of the US sites and may vary from year to year. The current factors are based on eGRID2019.

Activity	CR Desktop Name	Country	Unit	kg CO ₂ e
Electricity generated	Grid Electricity	Electricity: UK	kWh	0.21233

Figure 4 - UK Grid Electricity Emissions Factor (Conversion factors from Gov.UK published July 2021)

Activity	CR Desktop Name	Country	Unit	kg CO ₂ e
Electricity generated	Grid Electricity	Electricity: Australia	kWh	0.6878
		Electricity: Saudi Arabia	kWh	0.617
		Electricity: Sweden	kWh	0.0128
		Electricity: ROW Average (Memo: IEA Total)	kWh	0.3473

Figure 5 -IEA Grid Electricity Emissions Factors 2021

Method of Calculation – for calendar year 2021

For facilities where we process the utilities, grid electricity emissions are calculated from the actual or estimated energy data recorded within CR Desktop in kWh multiplied by the corresponding CO₂e emissions factor according to the country, as listed in **Figs 4 and 5** above, or by using the correct eGRID factor. For instructions on how to calculate the US Scope 2 emissions please see Section 5 of The Greenhouse Gas Calculation Manual.

For instructions on how to convert the Scope 2 activity data into tCO₂e please see Section 7 of the Greenhouse Gas Calculation Manual. However, for ease of calculation, the final tCO₂e figures and the creation of the final GHG Location Based calculator should be calculated once all Scope 1, 2 and 3 activity data has been collated.

For facilities at which we have a presence but do not process the utilities (and therefore which are not recorded within CR Desktop), an estimate of the electricity usage in kWh is made using

parameters of Planning Category held for that facility within the GPD to the look up estimate values in the table in **Fig 6** below. The kWh value is then multiplied by the corresponding CO₂e emissions factor as listed in **Figs 4 and 5** above. The electricity and gas estimations are calculated within the same spreadsheet (see Section 5 of The Greenhouse Gas Calculation Manual for reference).

GPD Planning Category	Electricity (kWh / m² / year)	Average Floor area (m²)	Estimated Annual Elec (kWh)	Source of Estimate(s)
Airfield	-	-	90,000	Same as 'Hangar'
Car Parking	-	-	500,000	LightingDirectory
Hangar	9	10,000	90,000	ECON 75 - MOD Benchmarks (Cat 4 Hanger: very low heating or store with low activity)
Industrial	-	50,000	5,000,000	Same as 'Manufacturing'
Laboratory	-	-	180,000	Same as 'Test Site'
Land	-	-	-	Assume no consumption as surplus land
Surplus Land	-	-	-	Assume no consumption as surplus land
Manufacturing	100	50,000	5,000,000	Average of UK medium manufacturing sites (i.e. except Barrow, Samsbury & Warton)
Mixed	100	26,500	2,650,000	Average of an office and manufacturing
Mixed Use	100	26,500	2,650,000	Average of an office and manufacturing
Offices	100	3,000	300,000	ECON 75 - MOD Benchmarks (Cat 2 Office: naturally ventilated open plan) & BAE UK average office size
Offices US	171	3,000	513,000	The Climate Registry 2020 default Emission Factors - Office (source specific to US sites)
Other	-	-	182,000	Same as 'Unknown'
Playing fields	-	-	-	Assume no consumption
Recreational use	-	-	-	Assume no consumption
Residential	-	-	4,200	Ofgem typical medium household (class 2) consumption figures 2019
Shipyard	-	-	306,000	Average of known Aus Shipyards
Social Clubs	-	-	108,000	Same as 'Training Centre'
Storage	3	5,000	15,000	ECON 75 - MOD Benchmarks (Category 2: Unoccupied Storage)
Support	-	-	10,000	Estimate based on 10 employees
Test Site	36	5,000	180,000	ECON 75 - MOD Benchmarks (Category 3 - Training Facility) & Estimated Floor Area

GPD Planning Category	Electricity (kWh / m2 / year)	Average Floor area (m2)	Estimated Annual Elec (kWh)	Source of Estimate(s)
Training Centre	36	3,000	108,000	ECON 75 - MOD Benchmarks (Category 3 - Training Facility) & Estimated Floor Area
Unknown	-	-	182,000	Average of all types (except manufacturing)
Workshop	-	-	182,000	Same as 'Unknown'

Figure 6 - Benchmark Estimate Values for Electricity Usage

Unit of measure – for calendar year 2021

tCO_{2e}

ENERGY INDIRECT (SCOPE 2) GREENHOUSE GAS EMISSIONS – MARKET-BASED METHOD

Description – for calendar year 2021

An organisation's energy indirect (Scope 2) GHG emissions result from the generation of the electricity, heating, cooling, and steam which it purchased from other organisations for its own consumption.

The GHG Protocol's 'Market-Based' method requires the calculation of emissions associated with Scope 2 GHGs using data provided by relevant energy suppliers that is specific to their supplies. If relevant supplier information is not available, then residual mix factors can be used for the calculation as per the GHG Protocol.

BAE Systems reported Scope 2 'Market-Based' emissions related to the data in our Scope 2 fields (grid electricity, steam), plus

- Electricity usage estimates for facilities at which we have a presence but do not process the utilities – based on known parameters within the BAE Systems Global Property Database for the reporting year (see estimation methodology below).

Basis of Calculation – Converting to CO₂ Equivalent (CO_{2e})

For the current year the BAE Systems indirect 'Market-Based' GHG emissions are derived using residual mix conversion factors for the UK, US and SWE, and green tariff/renewable attribute certification information. **Fig 7** below denotes the residual mix factors used for the current year. The supplier emissions data from previous years are also listed in **Fig 7**. For the regions KSA, AUS and Rest of World, 'location based' emissions factors are used as supplier emissions factors or residual mix factors are not currently available. In these scenarios the method statements associated with the 'Energy Indirect (Scope 2) Greenhouse Gas Emissions – Location Based' apply, and therefore the resulting GHG values will not differ from those published for that category.

Region / Supply Type	Relevant Supplier (s)	Fuel Mix	Emissions Factor to Apply	Emissions Factor Applies to
UK / Purchased Electricity	Unknown	N/A	Supplier specific emissions not available for all UK sites. REGOS certificates cover majority of UK emissions and grid electricity backed by REGOs has 0tCO _{2e} . All kWh grid electricity not backed by REGOs has been multiplied by the 'residual mix' emissions factor for the UK published by Association of Issuing Bodies of 0.316. Source:	All UK electricity (CRD + Estimates)

			European Residual Mixes 2020, Association of Issuing Bodies https://www.aib-net.org/facts/european-residual-mix	
US / Purchased Electricity	Several	NA	Supplier specific emission factors not available for US sites. In line with the GHG Protocol Guidance, we have used the Green-e Residual mix Emission rates published for the US (https://www.green-e.org/2021-residual-mix). Due to a highly dispersed electricity supply across our US operations (as noted in the Relevant Suppliers section) we have used the average of the residual mix values published, resulting in an emissions factor of 0.3077. The figure used this year is from the 2021 published residual mix figures which are based off 2019 data.	All US electricity (CRD + estimates)
SWE/ Purchased Electricity	Övik Energi AB	NA	In line with the GHG Protocol Guidance, we have used the 'residual mix' emissions factor for Sweden published by the European Union of 0.02.	All SWE electricity (CRD + Estimates)
KSA / Purchased Electricity	Saudi Electricity Company (SEC) are a monopoly supplier in KSA. This has not been checked for the FY21 calculations.	As KSA grid-average (only electricity supplier in the country)	No residual mix factors provided for KSA, therefore in line with the GHG Protocol, the location based factor has been used - 0.617kgCO ₂ /kWh	NA – 'Location Based Method Used'
Australia / Purchased Electricity	Multiple suppliers, no 'GreenPower' contracts	Suppliers in Australia use the government's 'location-based' emissions factor, unless formally supplying 'GreenPower'	Residual Mix emissions factor should apply, but Australian government advises that this factor is within the uncertainty range associated with the standard 'location-based' emissions factor in Australia, and therefore the latter should apply.	NA – 'Location-Based Method Used'

Figure 7 – Supplier Emissions Data for deriving our Scope 2 'Market-Based' GHG emissions

Method of Calculation

For facilities where we process utility data, grid electricity emissions are calculated from the actual or estimated energy data recorded within CR Desktop in kWh multiplied by the corresponding CO_{2e} emissions factor according to the suppliers green energy tariff, REGOS, residual mix factor or location based factor as listed in **Fig 7** above. Instructions on how to calculate the 'Market Based' GHG emissions please see Section 8 of The Greenhouse Gas Calculation Manual.

Unit of measure – for calendar year 2021

tCO₂e

OTHER INDIRECT (SCOPE 3): GREENHOUSE GAS EMISSIONS

Description – for calendar year 2021

Other indirect (Scope 3) emissions are a consequence of the activities of the organisation, but occur from sources not owned or controlled by the organisation. Some examples of Scope 3 activities are the extraction and production of purchased materials; the transportation of purchased fuels in vehicles not owned or controlled by the organisation; and the end use of products and services.

BAE Systems reported Scope 3 emissions currently relate to business travel and include data related to commercial flights, rail, and grey fleet vehicle travel (as described as company car and personal car vehicle travel within the data calculations).

Scope 3 emissions are derived by using published (BEIS) conversion factors and the data related to distance travelled (and also class of the flights for the flight data).

Basis of Calculation – Converting to CO₂ Equivalent (CO₂e) – for calendar year 2021

BAE Systems Scope 3 (Other Indirect) GHG emissions are derived by calculation and expressed as CO₂ equivalent using the BEIS tables in **Fig 8, 9 and 10** below that show conversion factors for commercial flights, rail and grey fleet travel, which represent the latest factors available at the start of the reporting year.

Activity	Haul	Class	Unit	With RF
				kg CO ₂ e
Flights	Domestic	Average passenger	passenger.km	0.24587
		Short-haul	Average passenger	passenger.km
	Long-haul	Economy class	passenger.km	0.15102
		Business class	passenger.km	0.22652
		Average passenger	passenger.km	0.19309
		Economy class	passenger.km	0.14787
		Premium economy class	passenger.km	0.23659
		Business class	passenger.km	0.42882
First class	passenger.km	0.59147		

Figure 8 - Air Travel Emissions Factors (Conversion factors from Gov.UK published July 2021)

Activity	Type	Unit	kg CO ₂ e
Rail	National rail	passenger.km	0.03549
	International rail	passenger.km	0.00446
	Light rail and tram	passenger.km	0.02813
	London Underground	passenger.km	0.02781

Figure 9 - Rail Travel Emissions Factors (Conversion factors from Gov.UK published July 2021)

Activity	Type	Unit	Diesel	Petrol	Hybrid	LPG	Battery Electric Vehicle	Unknown
			kg CO ₂ e	kg CO ₂ e	kg CO ₂ e	kg CO ₂ e	kg CO ₂ e	kg CO ₂ e
Cars (by size)	Small car	km	0.13758	0.14946	0.10494		0.04565	0.14549
		miles	0.22143	0.24052	0.16889		0.07348	0.23414
	Medium car	km	0.16496	0.18785	0.10957	0.17927	0.05254	0.17562
		miles	0.26549	0.30231	0.17635	0.28849	0.08455	0.28263
	Large car	km	0.20721	0.27909	0.15151	0.26643	0.06066	0.22597
		miles	0.33348	0.44914	0.24382	0.42876	0.09762	0.36366
	Average car	km	0.16843	0.17431	0.11952	0.19828	0.05477	0.17148
		miles	0.27108	0.28053	0.19234	0.31909	0.08814	0.27596

Figure 10 – Vehicle Travel Emission Factors (Conversion factors from Gov.UK published July 2021)

Method of Calculation – for calendar year 2021

Business travel data is collected for commercial flights, rail travel and grey fleet across our four main regions (UK, US, Australia, Saudi Arabia) where available.

Commercial flight data is gathered from the flight booking partner in the UK and US about the distances and flight class associated with each individual journey. Similar flight data is gathered from local BAE Systems contacts in Australia and Saudi Arabia. The distances and classes associated with each journey are then processed into 'Short Haul'; 'Medium Haul'; and 'Long Haul' flights so that the conversion factors in **Fig 7** can be applied. To note, the Domestic conversions are used for 'Short Haul' BAE flights, Short Haul conversions are used for 'Medium Haul' BAE flights and Long Haul conversions for 'Long Haul' BAE flights. The MH and LH distance thresholds have been taken from UK BEIS conversion factors. The SH (also known as 'domestic') distance threshold has been verified against the GHG Protocol and US Environmental Protection Agency distance thresholds.

Rail travel data is available in the UK and US. In the UK, data is gathered from the rail booking partner in relation to the distances associated with each individual journey. In the US, data is gathered direct from Amtrak in relation to the distances associated with each individual journey. These distances are then categorised according to the 'type' of rail travel in **Fig 8** and converted to tCO₂e appropriately.

Grey fleet travel data is available for the UK and AUS and is gathered internally. Contact information of the internal contact who is responsible for this data can be found in Section 1 in Appendix 1 of the Greenhouse Gas Calculation Manual. The data is provided in separate company car and personal car mileage spreadsheets. These distances are then categorised into fuel type and converted to tCO₂e using the conversion factors in **Fig 9**.

For instructions on how to calculate and process the Scope 3 travel data please see Section 6 of the Greenhouse Gas Calculation Manual.

Unit of measure – for calendar year 2021

tCO₂e

Footnotes:

1. In countries where there are no legal restrictions on the implementation of our helpline.
2. All reports prior to 2014 were previously called accounting charging practices.
3. Headcount is based on the number of employees including those individuals who whilst being employed by a third party, are under the direct management control of BAE Systems.
4. Since the 2009 data capture, the definitions relating to data points for safety have been reviewed and changes made to add clarity to the collection process. The definition of Major Injury changed for the 2017 reporting year to more closely reflect the definitions of major injuries within the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2014. Prior year figures have not been restated to meet the new definition.
5. Sites which have less than 150 personnel, and are considered a low risk e.g. office environments, are not required to submit safety data on a site by site basis. This data can be aggregated into a 'miscellaneous section' should the parent business wish to do this.
6. The method of data collection at a site level is not mandated. In some home markets, national legislation requires data to be recorded in prescribed formats which prevents the use of a standard BAE Systems format across the whole of the Company.
7. Data is collected locally at a site level, entered onto the CR Desktop database and is then validated by a manager within the parent business who is responsible for the accuracy of the data. At a corporate level, the Corporate Responsibility Department carry out further checks of data entered using previous data sets as a guide so that potential 'rogue' data can be captured and queried with the source site.
8. Data is captured in each home market and other countries of business and where required presented to the following legislative bodies:

- Home market or country of business Legislative body - safety
 - UK (plc) Health and Safety Executive
 - US (Inc.) OSHA
 - Australia - Commonwealth Australian Safety and Compensation Council (ASCC) and Comcare
 - Australia - Australian Capital Territory ACT Workcover
 - Australia - New South Wales NSW Workcover
 - Australia - Northern Territory NT Worksafe
 - Australia - South Australia Worksafe SA
 - Australia - Queensland Queensland Workplace Health and Safety
 - Australia - Victoria Worksafe Victoria
 - Australia - Western Australia Worksafe WA
 - Saudi Arabia (KSA) 'Labour Law' issued by the Ministry of Labour under royal decree
 - South Africa (RSA) South African Department of Labour
 - Sweden Swedish Work Environment Authority
 - India Ministry of Labour supported by Directorate General, Factory Advice Service & Labour Institutes (DGFASLI)
9. The total number of employees here is an average over the last twelve months from CR Desktop.