



Carbon Reduction Plan

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1. INTRODUCTION

1.1 Context and purpose

Under the Paris Agreement, national governments have committed to limit temperature rise to well-below 2°C and pursue efforts to limit temperature rise to 1.5°C. Beyond 1.5°C, the world will increasingly experience dangerous climate impacts such as sea level rise, flooding and extreme heat.

The UK Government amended the Climate Change Act 2008 in 2019 by introducing a target of at least a 100% reduction in the net UK carbon account by 2050. As part of this net zero target, the UK Government are looking to their supply chain's and are making it mandatory for government suppliers who are bidding for large contracts to provide a Carbon Reduction Plan (CRP) detailing their commitment to achieving net zero by 2050 and how they plan to reach this target.

Blatchford are actively taking steps to reduce carbon emissions to support the UK Government's net zero target. The below CRP underpins Blatchford's commitment to sustainable development and carbon reduction.

1.2 Appointment

Ramboll UK Limited ("Ramboll") was instructed by Blatchford Limited to support the creation of their CRP and undertake an assessment of Blatchford's greenhouse gas (GHG) emissions resulting from business operations for the years 2019 and 2020. This report has been completed in line with the UK Government's Procurement Policy Note (PPN) 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts.

2. COMMITMENT TO ACHIEVING NET ZERO

Blatchford is committed to protecting the environment by demonstrating high standards of environmental responsibility in all our operations and minimising the environmental impacts associated with our activities, products, and services. In particular, we recognise the importance of decarbonising our business and we have set an ambitious goal for Blatchford's operations to achieve net zero by 2050. Our strategy for our operations to achieve net zero carbon emissions is based on actions detailed in our Carbon Neutral Policy. Examples of these actions include:

- monitoring and analysing energy consumption data for premises, processes, and vehicles to establish performance and identify trends and opportunities to further reduce consumption, achieve efficiency improvements and reporting of our carbon emissions
- improving the energy efficiency of our buildings, processes and IT systems and sourcing renewable energy where technically and commercially practicable
- minimise waste, promote recycling and the use of recycled products to help reduce the burden of landfill and therefore methane generation
- establishment and regular review of objectives and targets and publication of our performance against these objectives
- working with our supply chain to improve environmental performance
- advising and working with our clients to achieve aligned carbon neutral goals

We have not yet set interim emissions targets however, we will be looking into this in the near future as set out in our Carbon Neutral Policy. The interim targets will be vital for us to determine our decarbonisation road map and the target setting process will better inform the measures required to achieve our net zero target by 2050. The targets will be set in line with the reduction pathways for limiting global temperature rise to 1.5°C or 2°C.

3. METHODOLOGY

3.1 Reporting Period

The reporting period for this CRP is 1st January 2020 to 31st December 2020 and the baseline year is 1st January 2019 to 31st December 2019.

3.2 Organisational Boundaries

The operation control approach was taken to determine the organisational boundary. This therefore means that any site where Blatchford has full authority to introduce and implement its operating policies, has been included within the reporting boundary.

3.3 Quantification Methodology

This assessment is produced in accordance with the PPN 06/21 and the calculation methodology is in line with the GHG Reporting Protocol corporate standard. The scopes are defined as follows:

- Scope 1 – Direct emissions resulting from the primary combustion of fuels in organisation-controlled premises, vehicles and plant
- Scope 2 – Indirect emissions resulting from the consumption of purchased electricity that has been generated off-site and supplied by the national grid
- Scope 3 – Indirect emissions associated with the consequences of the activities of the organisation but controlled by another entity outside of the corporate structure

The conversion factors published by the UK Government's Department for Business, Energy and Industrial Strategy (BEIS) have been used for the purposes of the greenhouse gas (GHG) calculations.

3.4 Inclusions

GHG emissions have been calculated for scopes 1, 2 and 3. The below sets out the sources of emissions that have been included in the inventory.

Scope 1 – Direct Combustible Fuels

- Emissions from combustion of gas (tCO₂e)
- Emissions from combustion of fuel for transport purposes (tCO₂e)

Scope 2 – Indirect Combustible Fuels

- Emissions from purchased electricity, location based (tCO₂e)

Scope 3 – Other Indirect Emissions

- Emissions from business travel via air and rail (tCO₂e)
- Emissions from employee commuting (tCO₂e)

3.5 Justifications of exclusions

Blatchford are in the progress of obtaining data and engaging with the supply chain in order to quantity further sources within the scope 3 category. We have outlined these actions within our Carbon Neutral policy as we understand it is vital to understand our GHG footprint as a whole in order to reduce our emissions accordingly. We will be focusing on obtaining data for a further four scope 3 categories initially, including business travel from vehicles, waste generation, upstream transportation, and downstream transportation. We have not reported all of these scope 3 emissions sources previously as not all are included under existing government GHG reporting guidance and requirements such as ESOS and SECR.

3.6 Data Completeness and Verification

Blatchford Limited have reported on all UK sites that we have operational control. This represents 100% coverage of our UK operations' energy consumption. Greenhouse gas emissions are primarily calculated from energy consumption records reported from verifiable primary evidence (invoices, meter readings and supplier

statements). Where actual usage data is not available for UK sites, an estimated consumption is calculated using benchmark data.

3.7 Assumptions, Estimations and Uncertainties

Assumptions, estimations and uncertainties within the GHG assertion are detailed below:

- Ramboll has completed a high-level verification exercise on the energy consumption data supplied by Blatchford and a sample of source data was reviewed against the reported figures.
- The employee commuting figure has been estimated using the Quantis Scope 3 Evaluator Tool (as recommended by GHG Protocol), and therefore has a high level of uncertainty.
- Company car data has been estimated from fuel usage against contracted mileage.
- If electricity or natural gas data (i.e. invoices, meter readings) are not available for a site, benchmark figures issued by CIBSE TM46 (2008) have been used. These benchmark figures do not represent the improvements in the efficiency of technologies since 2008 so the reported figures are likely to represent a worst-case scenario.

4. GREENHOUSE GAS EMISSIONS

4.1 Emissions Footprint

GHG emissions associated with Blatchford's operations during baseline year 2019 and reporting year 2020 have been calculated and are detailed in Table 1 below. Figure 1 represents the breakdown of emission sources per scope.

Emission Source	Baseline 2019 (tCO ₂ e)	2020 (tCO ₂ e)
Scope 1		
Emissions from combustion of gas	438	430
Emissions from combustion of fuel for transport purposes	135	133
Scope 2		
Emissions from purchased electricity (location based)	859	685
Scope 3		
Emissions from business travel via rail	1	0.4
Emissions from business travel via air	235	56
Emissions from employee commuting	1,020	1,020
Total	2,688	2,324

Table 1: Summary of Absolute GHG Emissions

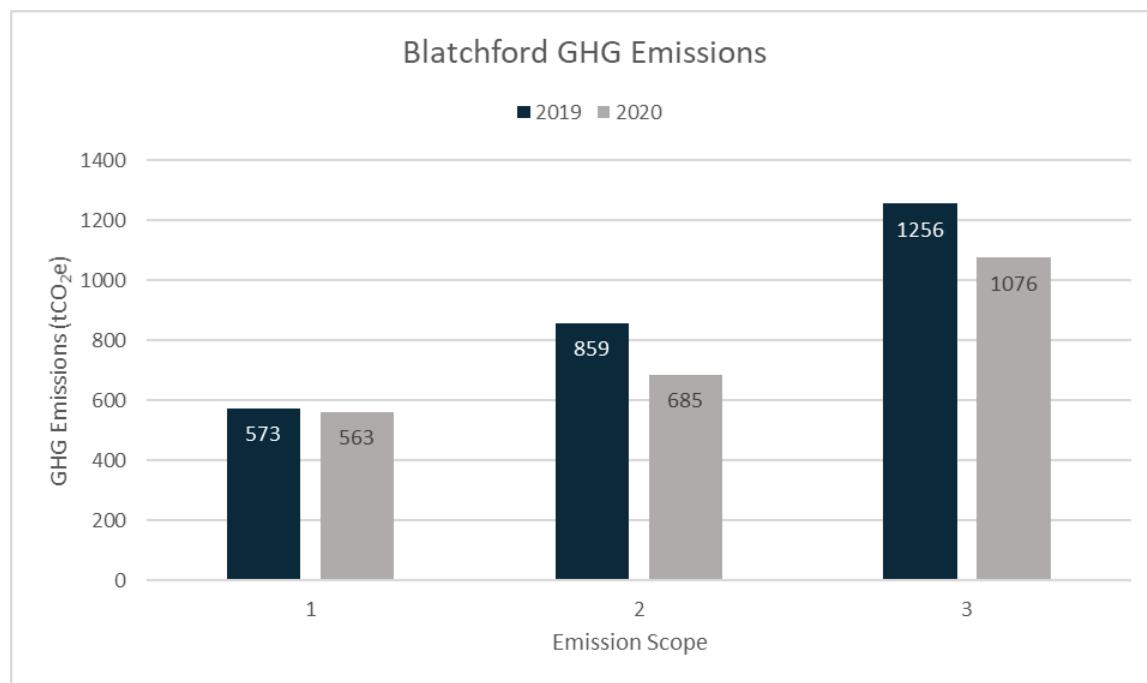


Figure 1: GHG Emissions per scope

In 2020, scope 3 emissions accounted for the largest proportion of the total GHG footprint at 46%. Scope 2 emissions represented 30% of the total emissions and scope 1 emissions are currently the smallest emission source accounting for 24%. The proportion of the scope 3 emissions will likely increase as more scope 3 data is available in the future.

Compared to the baseline year 2019, total emissions in 2020 have decreased by 14%. This decrease can be attributed to two main factors:

- The implementation of multiple energy efficiency projects (Scope 1 and 2)
- Significant reductions in travel due to the global pandemic (Scope 3)

5. CARBON REDUCTION PROJECTS

Blatchford continuously work to reduce the energy consumed by the company and improve energy efficiency. The following environmental management measures and projects have been completed, or implementation has commenced since the 2019 baseline. The carbon emission reductions achieved by these schemes have not yet been calculated, however, we look to quantify these savings in future years as this will be paramount for monitoring our progress against interim targets and our main goal of achieving net zero by 2050. The below measures will be in effect when performing the contract.

5.1 Completed Environmental Management Measures and Projects

The below list outlines the measures and projects that have been completed.

No	Emission Reduction Opportunity	Action	Completion Date
1	Building Facilities- Energy Reduction	Lister Road- QC room fully insulated	2020
2	Building Facilities- Energy Reduction	Wella Road- gas heating boiler upgrade	2020
3	Travel- Energy Reduction	Bond Close- Installed additional electric car charging points	2020
4	Building Facilities- Energy Reduction	Bond Close- Warehouse high bay lights replaced with LED	2020
5	Building Facilities- Energy Reduction	Lister Road- Heat reflecting paint applied on Lister building roof	2021
6	Building Facilities- Energy Reduction	Sheffield (Unit 30)- envelope air tightness test – no loss of heat or cooling Passed	2020
7	Building Facilities- Energy Reduction	Sheffield (Unit 11)- LEV systems upgraded with a more efficient one	2020
8	Building Facilities- Energy Reduction	Lister Road- PIR's installed in numerous offices	2020
9	Building Facilities- Energy Reduction	Wella Road- PIR's installed in numerous offices	2020
10	Building Facilities- Energy Reduction	Sheffield (Unit 11 & 30)- PIR's installed in numerous offices	2020
11	Building Facilities- Energy Reduction	Sheffield (Unit 30)- High bay lights replaced with LED	2020
12	Building Facilities- Energy Reduction	Sheffield (Unit 30)- LEV system upgraded with a more efficient one	2020
13	Building Facilities- Energy Reduction	Sheffield (Unit 11)- High bay lights replaced with LED	2020
14	Building Facilities- Energy Reduction	Lister & Wella Road- TRVs in water systems	2019
15	Building Facilities- Energy Reduction	Bond Close- TRVs installed in water systems	2019
16	Staff Training and Engagement	Blatchford- General environmental awareness training via 'MyLearning' portal. Content covers energy/waste/water reductions and impacts on climate	2020
17	Building Facilities- Energy Reduction	Blatchford- Where applicable, all HVAC systems taken offline during COVID and buildings/areas unoccupied	2020

No	Emission Reduction Opportunity	Action	Completion Date
18	Building Facilities- Energy Reduction	Blatchford- Review of building Energy Performance Certificates (EPC)	2021
19	Operational/Process-Energy Reduction	Lister Road & Wella Road- Motors and drives replaced with variable speeds where possible	2020
20	Travel-Energy Reduction	Blatchford- Significant reduction in business travel (internal and international)	2022
21	Env. Management and Compliance	Blatchford- ESOS Phase 2 reporting	2019
22	Env. Management and Compliance	Sheffield- ISO 14001 Initial Certification	2020
23	Env. Management and Compliance	Basingstoke- ISO 14001 continuing assessment	2021

5.2 Existing Environmental Management Measures and Projects

The below list outlines the measures and projects where implementation has been initiated, but not yet completed.

No	Emission Reduction Opportunity	Action	Completion Date
1	Building Facilities- Energy Reduction	Lister Road- office fluorescent tube lighting replacement with LED	2022
2	Building Facilities- Energy Reduction	Wella Road- office fluorescent tube lighting replacement with LED	2022
3	Building Facilities- Energy Reduction	Lister Road- FMU and FPU factory area fluorescent tube lighting replacement with LED	2022
4	Building Facilities- Energy Reduction	Bond Close- office fluorescent tube lighting replacement with LED	2022
5	Building Facilities- Energy Reduction	Sheffield (Unit 11)- office fluorescent tube lighting replacement with LED	2022
6	Building Facilities- Energy Reduction	Sheffield (Unit 30)- office fluorescent tube lighting replacement with LED	2022
7	Building Facilities- Energy Reduction	Sheffield (Unit 11)- Production/Factory fluorescent tube lighting replacement with LED	2022
8	Travel-Energy Reduction	Wella Road- Installation of Water Jet Cutting machine. Remove the need to outsource work and shipping impacts	2021

5.3 Future Environmental Management Measures and Projects

The below table outlines the emission reduction opportunities that have been identified and implementation has not yet commenced.

No	Emission Reduction Opportunity	Action
1	Building Facilities- Energy Reduction	Lister Road- Replace all air compressors with more efficient, variable speed units
2	Building Facilities- Energy Reduction	Wella Road- Replace all air compressors with more efficient, variable speed units
3	Building Facilities- Energy Reduction	Lister Road- Install solar panels on roof
4	Building Facilities- Energy Reduction	Lister Road- Replace the HVAC system with improved energy efficient units
5	Building Facilities- Energy Reduction	Wella Road- Replace the HVAC system with improved energy efficient units
6	Building Facilities- Energy Reduction	Lister Road- Insulate ceilings for thermal efficiency (summer and winter)
7	Building Facilities- Energy Reduction	Wella Road- Insulate ceilings for thermal efficiency (summer and winter)
8	Building Facilities- Energy Reduction	Sheffield (Unit 11 & 30)- Install Solar panels on both Atlas Way buildings
9	Building Facilities- Energy Reduction	Sheffield (Unit 11 & 30)- Replace the HVAC system with improved energy efficient units
10	Building Facilities- Energy Reduction	Sheffield (Unit 11 & 30)- Replace all air compressors with more efficient, variable speed units
11	Building Facilities- Energy Reduction	Sheffield (Unit 11)- Air tighten building for improved thermal efficiency
12	Travel- Energy Reduction	Blatchford- Replace Blatchford pool cars with fully electric vehicles
13	Travel- Energy Reduction	Blatchford- Consolidation of shipments to EU and US through UPS Courier
14	Travel- Energy Reduction	Blatchford- Improve data reporting on vehicle usage (couriers, Blatchford Fleet and Grey Fleet)
15	Env. Management and Compliance	Blatchford- ESOS Phase 3 reporting and identification of energy reduction opportunities
16	Env. Management and Compliance	USA- Implementation of ISO-14001
17	Staff Training and Engagement	Blatchford- Increase awareness utilising Intranet and communicate performance data, campaigns, events and updates on sustainability
18	Operational/Process- Energy Reduction	Lister and Wella Road- Improve energy monitoring and targeting and sub-metering on machines

6. DECLARATION AND SIGN OFF

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the publishing reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emissions conversion factors for greenhouse gas company reporting.

Scope 1 and 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of Blatchford Limited:



Name: Zoe Stephens

Job Title: HR Director

Date: August 2021