





NET ZERO PLAN & ANNUAL REPORT

(PPN06/21 COMPLIANT)

FOR



Period: March 2022 – February 2023

Prepared by:		Powered by:	
Accredited by:		Official Partner Network:	

Report author: **James Napier**

Date: **March 2023**



This report has been produced by CBN Expert on behalf of Bytes Software Services (BSS) to fulfil their annual carbon reporting requirements. It has been produced to UK SECR & PPN06/21 requirements.

Company Overview

Bytes Software Services is part of Bytes Technology Group, a company listed in the UK. BSS's registered address is Bytes House, Randalls Way, Leatherhead, Surrey KT22 7TW.

Year Incorporated	1982
Industry	Software Services
No. of Staff	564
No. of Offices – Owned	1
No. of Offices – Leased	3
No. of Company Vehicles - Owned	0
No. of Company Vehicles - Leased	0

BSS provides software licensing and digital transformation solutions to both Private & Public Sector clients supported by in-house delivery consultants and an ecosystem of partners.

The company has a strong commitment to deliver its services in the most environmentally efficient way.

Reporting Period

March 2022 - February 2023

Quantification & Reporting Methodology

This report has been created using the Environmental Reporting Guidelines, including **Streamlined Energy & Carbon Reporting** guidance issued by the UK Government in April 2019. This report meets the requirements for **Carbon Reduction Plans** required by PPN06/21.

Where they exist, **CBN Expert** uses the UK Government published carbon conversion factors relevant to the reporting period. Where emissions without published conversion factors have been used these have been calculated by **CBN Expert** in consultation with relevant stakeholders and any industry norms or standards that exist. The details of these are included in the Data Declaration section of this report.

Net Zero Date

The company has a Net Zero target of 2040

Organisational Boundary

This report has been constructed using the

- Operational Control Approach

Operational Scopes

Emissions from Scope 1 & 2 have been measured along with certain Scope 3 emissions. The Scope 3 emissions that have been included are fully aligned to the requirements of PPN06/21 & are:

- Waste Disposal
- Business Travel
- Employee Commuting
- Up & Down stream Transport & Distribution

Benchmark Year

The benchmark year was **March 2020 – February 2021**

Net Zero Leadership

BSS is fully committed to achieving Net Zero across its organisation. To support its transition to Net Zero BSS has appointed and communicated publicly senior sponsors. The appointed sponsors are:

Sponsor(s)	Jack Watson
Position	Managing Director
Appointed	March 2021

BSS uses its ISO14001 quarterly review meetings to review its Carbon Action Plan. Ensuring the capture of the reporting data is clear and accurate. The Better Bytes team, which meets every month, provides a minimum of a twice yearly updates to the Managing Director, which is shared within the Senior Management Meetings.

Net Zero Reporting Summary

BSS has the mitigation of GHG emissions as a priority for the business, initially with a focus on Scope 1&2 emissions as well as key Scope 3 categories aligned to the requirements of PPN06/21

The company has implemented a number of initiatives during the year to both mitigate GHG emissions, as well as to expand the company's visibility and understanding of key categories of Scope 3 emissions.

The immediate aims of the company are as follows:

- Reducing our overall waste output whilst increasing the recycling mix.
- Reducing energy usage within our offices with continued investment and upgrading of lighting to LED and the installation of motion sensors.
- Informing and supporting all employees of the business' sustainability activities and to support their own actions within a hybrid working environment.
- Implementing travel policies that allow growth within the business whilst continuing to focus on minimising emissions.
- Continue to review investments in electric vehicle charging infrastructure at our offices to support the transition to low carbon transport.

GHG Emissions Summary

Summary of last 3 years of reporting

BSS

tCO ₂ e	Reporting Year		
	2020/1 Baseline	2021/2	2022/3*
Scope 1	36.2	32.2	73.1
Scope 2	170.9	26.7	0
Scope 3	51.6	63.7	831
Total	258.7	123	903.9

There has been a significant jump in the total number of tonnes of CO₂e reported this year due to the additional work the company has done to fully understand and disclose its emissions in the required Scope 3 categories.

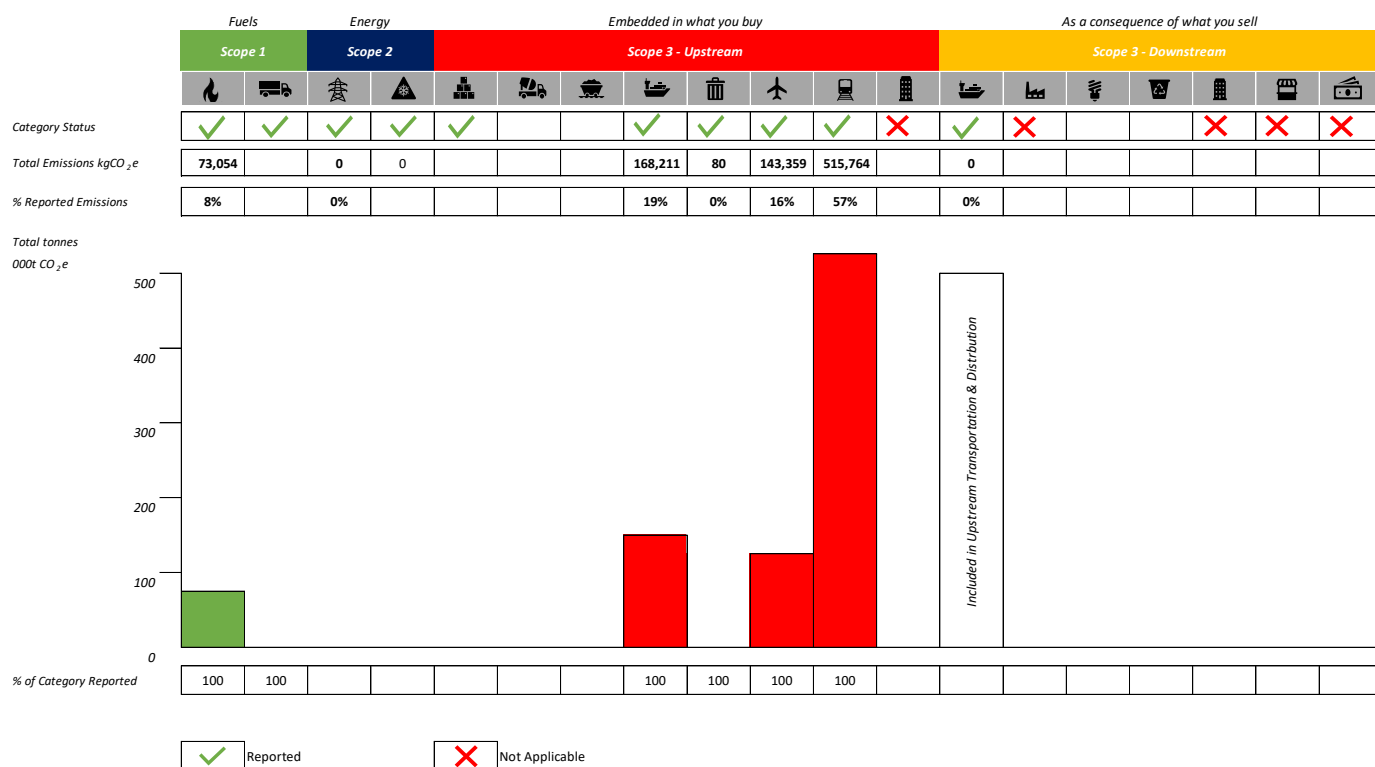
*Scope 3 now includes figures for Upstream Transportation & Distribution and Employee Commuting. The company continues to be committed to reporting, planning and acting to fully disclose and mitigate emissions in all Scope and Categories.

The table below shows the total emissions for Scope 1,2 and the 5 relevant categories of Scope 3 either measured or calculated in the reporting year.

All company deliveries are made directly to clients from the manufacturer/distributor and therefore all emissions are reported in Upstream Transportation & Distribution.

Bytes Software Services - Emissions Mapping by Scope & Category for PPN06/21

Year: **March 2022 - Feb 2023**



BSS continues to evaluate all options to minimise GHG Emissions, as well as to minimise overall consumption, even where there is a minimal impact on GHG Emissions (e.g. energy efficiency with 100% renewable electricity). During the reporting year, the company completed a number of energy projects the details of which are listed below:

Site	Countr y	Project		
BSS Head Office	UK	Improved recycling bins & signage in the office		Landfill
BSS Head Office	UK	Added lanyard recycling - employee led initiative		Landfill
BSS Head Office	UK	Exploring options for EV charging at the office	FY24	
BSS Head Office	UK	Revisiting the viability of solar PV panels	FY24	
BSS Head Office	UK	Ongoing migration of data services to low carbon data centres from group servers	Ongoing	

Scope 1 & 2 Emissions

	Scope 1 – Direct Emissions	73.1/CO₂e
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The Company's Scope 1 emissions consist of fugitive HVAC emissions at its office in Leatherhead and gas consumption at its Reading office. During the reporting year, the HVAC system had some performance issues which resulted in a significantly higher use of refrigerant gases and their associated emissions. These issues have now been rectified and emissions going forward are expected to be in line with a normal year.

	Scope 2 – Indirect Emissions	0t/CO₂e
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The Company's Scope 2 emissions have been zero since November 2021 with the company purchasing 100% renewable electricity from its energy supplier. The company continues to look at ways to minimise the overall consumption of electricity and is actively revisiting the feasibility of installing Solar PV panels at its Head Office.

Scope 3 Emissions – Analysis by Reporting Category

	Scope 3 – Category 4: Up Stream Transport & Distribution	168.2t/CO₂e
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As part of the delivery of its core software services, BSS also sells a limited amount of supporting IT hardware. These products are sourced either directly from the manufacturer or via their distributors. In all cases, the products are delivered directly to BSS customers and do not, at any point, enter any facilities occupied or operated by the company.

Therefore, for the purposes of GHG Emissions reporting the company's calculation of its Transport & Distribution emissions covers both Up & Down Stream Scope 3 emissions categories.

Basis of emissions calculation:

Bytes Software Services													Total
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	
Pallets	7	5	30	0	8	4	4	2	2	0	4	3	62
Parcels	815	337	550	13	264	296	243	489	309	462	479	346	4,603
Total Miles	49,656	28,469	46,970	719	25,251	31,333	25,132	47,444	24,041	45,075	48,655	37,426	410,171
kg/CO ₂ e	20,364	11,675	19,262	295	10,355	12,850	10,307	19,457	9,859	18,485	19,953	15,348	168,211
t/CO ₂ e													168.21

The company does not have access to the exact vehicles used to deliver each order. Therefore an assumption has been made that all deliveries are made by a Class III van with a 2022 BEIS/DEFRA Carbon Conversion factor of 0.4101 kgCO₂e / mile.

The company continues to work with product manufacturers and their distributors to maximise the opportunity for deliveries to be made using low carbon (hybrid, PHEV or BEV) vehicles. Progress will be reported as part of the company's overall annual carbon reporting.


Scope 3 – Category 5: Waste Generated from Operations
0.01t/CO₂e

Type of Waste	Unit	Total	CF	kg/CO ₂ e
General Waste (annual total)	kg			
Dry Mixed Recycling (annual total)	kg	2,695	21.28019	57.35
Paper	kg	712	21.28019	15.15
WEEE - mixed	kg	0.36	21.28019	7.72
Total				80.23

The company is committed to exploring all opportunities to decrease waste from its operations. The nature of the business operations means that waste streams are, largely, limited to General Commercial Waste, Dry Mixed Recycling and WEEE.

During the reporting year the company completed two projects to reduce or divert waste:

1. Improved the recycling bins and signage within the office
2. Implemented an employee led initiative to recycle used lanyards

General Waste figures were not available for the reporting year but measures have been implemented to record and report these going forward.


Scope 3 – Category 6: Business Travel
145.9t/CO₂e

Cars (Grey Fleet)	Unit	CF	Total	kg/CO ₂ e
Average Car	miles	0.27465	275,406	75,640
Petrol (bio-blend)	litres	2.16185	3,785	8,183
Diesel (bio-blend)	litres	2.55784	523	1,338
Total Cars			4,308	85,161
Other Business Travel	Unit	CF	Total	kg/CO ₂ e
Plane - Domestic	km	0.24587	26,732	6,573
Plane - Short Haul	km	0.15102	15,554	2,349
Plane - Long Haul	km	0.14063	12,798	1,800
Total Planes			55,084	10,721
Trains	£*		142,014	42,001
Taxis	£*		61,839	5,476
Hotels	Nights	10.4	245	2,548
Total Trains & Taxis			204,098	50,025
Total Business Travel	kg/CO ₂ e			145,907

The majority of the Company's business travel is incurred by the sales team visiting clients in non-company owned (grey fleet) vehicles. Whilst it will remain important for the sales team to visit customers, the Company is committed to exploring options to encourage individuals to transition to lower carbon vehicles as part of the normal vehicle replacement cycle.

Train travel will continue to be a priority travel method for business travel and employees will be encouraged to utilise trains as much as possible in the course of their commercial activities.

Air travel is already minimised as much as possible, and will be, on an ongoing basis.


Scope 3 – Category 7: Employee Commuting
515.8t/CO₂e

The reported data for Employee Commuting is based on a Q1 Employee Commuting survey representing c30% of the total employees of the Group. We have used these figures to calculate a full Employee Commuting emissions for BSS of 343.8t/CO₂e for the reporting year.

The company has begun communicating employee commuting emissions across the business and is committed to supporting ongoing actions that enable employees to reduce the emissions associated with travel to work. This includes the ongoing ability for some employees to work from home for a number of days per week, free to use Electric Vehicle chargers at Head Office and a cycle-to-work scheme, with bike lockers and showers, to support this endeavour.



Scope 3 – Category 9: Down Stream Transport & Distribution

n/a

All deliveries of hardware to BSS customers, are delivered directly from the manufacturers or their distributors. BSS do not, in any cases, take delivery of these products and then onward ship them to customers. Therefore, all Transportation & Distribution emissions have been accounted for in Category 4: Upstream Transportation & Distribution.

Immediate Carbon Reduction Priorities

The need for taking immediate and bold action on climate change is being increasingly recognised by businesses, government, and the general population. **BSS** recognises that its activities have an impact on the environment and are committed to minimising any adverse impact wherever practical.

BSS have aligned their Carbon Reduction Plan with Science Based Targets and are aiming to submit an application to the Science Based Targets initiative (SBTi) within their current Financial Year.

BSS have identified several areas which will contribute to achieving their Net Zero pledge:

1. Engagement of Team:

The entire **BSS** team is engaged with the Company's plans to mitigate carbon emissions, and this is now a topic at their regular team meetings. A regular employee commuting survey will be undertaken, and the results communicated back to employees to encourage them to look at alternative modes of transport.

2. Other Actions being taken:

Fleet emissions – the company continues to promote its Cycle to Work Scheme as well as exploring ways to increase the uptake of Electric Vehicles, including installing free to use car chargers at the Head Office.

Electricity – the company now buys 100% renewable energy.

Transport & Distribution - the company will look at how it can influence its Tier 1 suppliers to utilise low carbon transport options for the deliveries they make on its behalf.

Non-reported emissions – whilst the company's focus is on mitigating the emissions it currently reports it will also build in future plans to report key additional categories in Scope 3 – Category 1 – Purchased Goods and Services.

3. Carbon Emissions Leadership:

BSS has made the commitment to measure and report its GHG emissions on a regular basis and review these as part of the Company's ongoing management and reporting. This is overseen by a member of the Senior Management Team and shared with the wider team on a regular basis. To support these efforts, the Group has appointed a full time Sustainability Manager with effect from 1st March 2023.

Data Declarations

Standard and Methodology Used

BSS categorises its Greenhouse Gas (GHG) Emissions as Scope 1,2 or 3 as referred to in the WBCSD – WRI Greenhouse Gas Protocol (revised edition, dated March 2014). Emissions in Carbon Dioxide equivalent (CO₂e) for all scopes are calculated using the conversion factors listed in BEIS Greenhouse Gas Conversion Factors for the relevant 12 month period over which the Carbon emissions are calculated. Procured renewable electricity and gas is calculated in accordance with the WBCSD – WSI Scope 2 Guidance on procured renewable energy (2015).

Data Quality / Confidence

The data used to generate this report has been collected from various sources from both within the company. All assumptions have been verified by **CBN Expert**. These emissions have been converted to CO₂e using the Conversion Factors published by BEIS/DEFRA for the relevant period.

Scope 3 Emissions

BSS is committed to measure and act to reduce its emissions in all 3 Scopes. This report reflects the

Offset Schemes

We have verified offsets using Ecologi. www.ecologi.com- schemes noted below:

Scheme Name	Details (including weblinks)	Volume (tCO ₂ e)
Wind Power in Sri Lanka	Small-Scale Onshore Wind Power in Sri Lanka https://ecologi.com/projects/small-scale-onshore-wind-power-in-sri-lanka	300
Biodiverse Forest Protection (REDD+)	Protection of the Matavén Forest in Eastern Colombia (REDD+) https://ecologi.com/projects/mataven-colombia	744
Total Offsets		1044

amount of Scope 3 emissions that it has been technically feasible and cost effective to measure and act against. **BSS** remains committed to work with its entire supply chain to ensure as much of its Scope 3 emissions can be accurately measured and to develop actions that target long term reductions in this emissions category.

Carbon Removals & Offsets

As part of the commitment of **BSS** to target reductions in its GHG emissions and, ultimately, attain Net Zero the company will review and report all carbon removals and offsetting that it uses. All offsetting options will be considered and reported included, formally certificated schemes (e.g., Gold Standard) as well as more informal schemes. Where offsetting is done against informal schemes, details of the calculation logic will be reported.

Third Party Verification

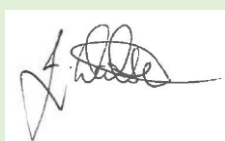
The data in this report has been produced using the **CBN Expert** dashboard and the figures have been certified by **CBN Expert**.

Signed on behalf of Bytes Software Services

Name: **Jack Watson**

Position: **Managing Director**

Signed:

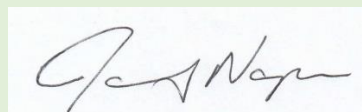


Signed on behalf of CBN Expert




















Name: **James Napier**

Position: **Director**

Signed:



Data Source & Quality Analysis

		Category Description	Data Source Description
Scope 1		Company Facilities	Actual consumption provided by the company
		Company Vehicles	The company has no owned fleet
Scope 2		Electricity	Actual consumption provided by the company
		Other Purchased Energy	None
Scope 3 - Upstream		Purchased Goods & Services	Paper & Water consumption provided by the company. Waste water was calculated as 100% of Water supply
		Capital Goods	Not Reported
		Fuel & Energy Related Activities	Not Reported
		Transportation & Distribution	Individual delivery data provided by suppliers. All deliveries are directly from manufacturer/distributors to BSS clients. No exact vehicle data provided but all deliveries assumed to be by Class III van
		Waste Generated from Operations	Measured amount of waste provided by the company. General waste data was not available for the reporting year but will be included in future.
		Business Travel	Car mileage provided by the company. Flight, Taxi & Train trips provided by the company with mileage calculated based on distances (Air Travel & Train) or converting spend into distances (Taxi)
		Employee Commuting	Based on a Q1 survey of employees with a 78% response rate. This data was then used to calculate a full year, all employee, commuting emissions figure
		Leased Assets	n/a
		Transport & Distribution	All deliveries are sent from the manufacturer/distributor directly to clients. Therefore all Transportation & Distribution emissions have been accounted for in Upstream
Scope 3 - Downstream		Processing of Sold Products	n/a
		Use of Sold Products	Not Reported
		End-of-Life Treatment of Sold Products	Not Reported
		Leased Assets	n/a
		Franchises	n/a
		Investments	n/a