
CARBON-ZERO



Carbon Management Plan 2021

Prepared for: **Space Solutions (Scotland) Limited**

Authored by: Brian Johnstone

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1. Executive Summary

This, Space Solutions (Scotland) Limited, Carbon Management Plan, states its commitment to achieve Net Zero carbon emissions by 2050

It outlines the businesses aspiration to achieve reductions in its carbon emissions across operational sites from the 2021 carbon footprint baseline. Numerous factors have made this a challenging target including: the complexity of the carbon management process; demands for new skills within, staffing limitations to carry out the identification, planning, resourcing and tracking of carbon reduction projects/initiatives; a changing legislative and policy framework and the changing nature of estate and building use, increasing energy intensiveness of the building stock.

This Carbon Management Plan (CMP) sets out our ambitions for 2022, and a roadmap for progress. Reducing carbon emissions is not just about our commitment to the environment. the same processes we use to identify carbon emissions reductions will also identify opportunities to generate financial savings through improved efficiency in the procurement and operation of our consumable goods, building materials and transport.

The actions outlined within this Plan form part of a larger energy efficiency plan to reduce energy consumption and carbon emissions associated initially with Scopes 1 and 2 of the Greenhouse Gas protocol (Direct emissions from combustion and Indirect emissions from purchased electricity), followed by Scope 3, other indirect emissions associated with Water use & disposal, materials purchased, third-party freight, business travel and leased assets.

The 2021 Scopes 1 & 2 carbon footprint baseline was calculated to be 60 tonnes of carbon dioxide equivalent (tCO_{2e}) and covered electricity, gas consumption.

Space Solutions have set a target to reduce its total annual Scopes 1 & 2 carbon footprint by 15 tCO_{2e} by the end of financial year 2022; and to also review Scope 3 emissions during 2022 and set appropriate short, medium and long term reduction targets from 2022 onwards.

By 2022, Space Solutions will have reduced its Scope 1 & 2 carbon emissions by 25% on a baseline of 2021. This equates to a figure of 15 tonnes CO_{2e} in 2022

Further reductions during 2022 will be achieved through a comprehensive review of all carbon emissions, opportunities for reduction, practicality and financial investment.

The Project Sponsor for this CM Plan is the Director of Facilities Management, who will be assisted in its delivery by heads of departments of Space Solutions.

This CM Plan is viewed as a 'live' document and it is envisaged that there may be changes on an annual basis as Space Solutions ongoing annual assessments, implemented changes identify or change the opportunities available.

To ensure that it remains 'fit for purpose' to deliver targeted carbon savings, this document will be reviewed on an annual basis. This process will be overseen by the Carbon Management Committee (CMC) and coordinated by the project sponsor.

2. Introduction

2.1 Background to the Organisation

Space Solutions (Scotland) Limited was established 1997 and operates across Scotland from six sites:

Offices	Address	Post Code
Aberdeen 1	Bishop House, 50 Carden Pl	AB10 1UP
Aberdeen 2	4-6 Braehead Centre	AB12 3PG
Dundee	23, Prospect III, Technology Park	DD2 1SW
Edinburgh	2 Lochrin Square, 96 Fountainbridge	EH3 9QA
Glasgow	140 W George St, Glasgow	G2 2HG
Livingston	The Hub, 3 Rankine Square	EH54 8SH

Space Solutions (Scotland) Limited provides workplace consultancy and design, change management, corporate moves, buildings fit-out, and facilities management, delivering projects with commitment, quality, and vision without compromising on value and health and safety.

3. Carbon Management Strategy

3.1 Context for Carbon Management

The organisation faces a complex set of drivers which set the context for carbon management. Crucially, the organisation recognises that these cannot and should not be viewed in isolation from each other or the principal goal of continuously minimising its environmental impact whilst maximising its contribution to society and the economy.

Ultimately, a strong performance with respect to carbon emission reduction should deliver financial benefits to the company by mitigating the risks associated with e.g. increases in energy tariffs and levies.

The following represent the key carbon drivers for company:

- Scottish Government targets
- UK & European targets
- Climate of reducing financial allocations
- Rising energy costs
- Principle that investments in carbon reduction are generally associated with commensurate reductions in future expenditure
- The need to eliminate waste of resources and to increase efficiency
- The organisation's own carbon management targets
- Depletion of the world's finite resources
- It's the right thing to do

3.2 Legislative drivers for carbon management

Over the past 20 years there have been many pieces of legislation enacted at an increasing rate in the UK and Scottish Parliaments which aim to address the issue of climate change, carbon dioxide and greenhouse gas emissions, and sustainability. Many of these stem from European Union Directives which in turn were developed in order to meet the obligations of the Kyoto Protocol, adopted in December 1997 and enforced in 2005. Under Kyoto, ratifying countries agreed to commit to reductions in their carbon emissions by, on average, 5.2% below 1990 levels by 2008-12.

The Agreement was supported in the UK by the findings of the Stern Review¹ on the Economics of Climate Change, published in October 2006, which provides compelling economic reasons to address climate change.

The UK share of the collective Kyoto target assumed by the European Union under the Protocol is a 12.5% reduction in emissions below 1990 levels by 2012. Subsequently the UK Climate Change Programme (launched in 2000) set a target of 20% reduction by 2010 and 60% reduction by 2050. The Climate Change (Scotland) Act 2009 pledges to reduce Scotland's greenhouse gas (GHG) emissions by 42% by the year 2020 and by 80% by the year 2050. Scottish Ministers are also committed to the promotion of renewable energy in Scotland. They set a target that 80% of the electricity generated in Scotland (as a proportion of gross consumption) should come from renewable sources by 2020, with an interim target of 31% by 2011.

The UK Government has placed an emphasis on the public sector setting a leading example. Public sector leadership will be critical to the achievement of the Government's climate change objectives. In addition to the EU's Emissions Trading System (EU ETS), a number of legislative instruments such as the Climate Change Levy (CCL) and Carbon Reduction Commitment – Energy Efficiency Scheme (CRC EES) have been introduced by the UK Government, designed to encourage organisations to reduce emissions. The CRC EES introduces carbon trading to energy intensive organisations not part of the EU ETS. The EU Energy Performance of Buildings Directive (EPBD) was transposed into Scottish law in 2008 and has placed an obligation to evaluate energy usage for inclusion in Energy Performance Certificates to be displayed in all public buildings meeting certain criteria.

The 2010 recast Directive also includes provisions include nearly zero energy requirements for new public buildings within 8 years or less while Scottish and UK Sustainable Construction strategies aim for zero energy buildings in the same time-frame. This, allied to recent changes in Buildings Regulations, will require the organisation to be proactive in terms of building design, construction and use.

Legislative drivers for carbon management can take the form of targets (e.g. from UK or Scottish Government), incentive systems, charging schemes, or regulatory compliance requirements.

3.3 Other drivers for carbon management

While reducing the financial and legal risks posed by various legislative requirements is a significant driver behind the company's carbon management program there are other factors supporting the need for improving energy efficiency and reducing carbon emissions.

- **Cost saving:** The case for carbon reduction is strengthened by current financial constraints requiring reduced operating costs whilst maintaining effective service delivery. This provides a strong incentive to cut resource consumption to release this money for frontline services.
- **Reputational benefit:** By delivery of sustained carbon reductions, the company will be viewed as an exemplar enhancing the organisations broader sustainability credentials.
- **Improved staff satisfaction:** Studies have identified a correlation between an organisation with strong environmental performance and high staff satisfaction.
- **Improved engagement with key stakeholders:** Key stakeholders of the business, including the local community, are increasingly focusing on sustainability. Space Solutions (Scotland) Limited engagement and enhanced commitment will enhance the relationship with these stakeholders.

4. EMISSIONS BASELINE AND PROJECTIONS

4.1 Carbon Footprint Baseline, Cost and Projections

This section covers the establishment of the company's carbon footprint.

4.2 Scope and Boundaries of the Carbon Footprint

The resources to be included in a carbon footprint are defined in relation to two boundaries, the organisational and the operational boundary.

Definition of the boundaries is determined by the extent of the estate, goods and services over which the company has operational control, and the availability of good quality data.

4.3 Organisational Boundary

Organisation boundary: sets out which assets are to be included in the footprint and are shown in the table below.

4.4 Operational Boundary

Operational boundary: essentially sets out the emission sources included in the footprint and is shown in the "emissions" column in Table below.

In keeping with the Greenhouse Gas Protocol² (WRI 2004), the operational boundary should include all Scope 1 and Scope 2 emissions (e.g., on-site fuel combustion, company owned vehicles and purchased electricity consumption). Scope 3 emissions covering Business Travel, Materials, Waste disposal, Third Party Freight and any additional elements identified during 2022 Scope 3 reporting.

² The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard Revised Edition, Worlds Resources Institute; World Business Council for Sustainable Development, 2004.

Table Company Carbon Footprint Boundaries

Offices	Function	Emissions Type
Aberdeen 1	Bishop House, 50 Carden Pl	Direct Fuels, Electricity, Water usage & discharge, Waste, Business travel
Aberdeen 2	4-6 Braehead Centre	Direct Fuels, Electricity, Water usage & discharge, Waste, Business travel, Materials, Third Party Freight
Dundee	23, Prospect III, Technology Park	Direct Fuels, Electricity, Water usage & discharge, Waste, Business travel
Edinburgh	2 Lochrin Square, 96 Fountainbridge	Direct Fuels, Electricity, Water usage & discharge, Waste, Business travel
Glasgow	140 W George St, Glasgow	Direct Fuels, Electricity, Water usage & discharge, Waste, Business travel
Livingston	The Hub, 3 Rankine Square	Direct Fuels, Electricity, Water usage & discharge, Waste, Business travel

4.5 Data Sources

The data sources used in our CMP are based on robust data provided by both internal and external partners.

The main streams of data (consumption and costs) input are as follows:-

Utility provider billing, Vehicle records, Accounts billing, Waste Disposal records

Data will then be collated and converted to a CO₂e tonnage equivalent using GOV.UK BEIS 2021 factors for Company Reportings for the appropriate Reporting Year.

5. Carbon Footprint Baseline

Overall Carbon Footprint for Scopes 1 & 2 emissions for 2021 was 60.4 tonnes CO2e as detailed in the table below.

This provides a business metric of 60 tonnes CO2e per 1000 manhours, to allow baseline comparison on varying levels of business performance.

Electricity and Natural Gas Consumption across sites										
	Aberdeen 1	Aberdeen2	Dundee	Edinburgh	Glasgow	Livingstone	Annual Total	Emissions Factor	kg CO2e	Tonnes CO2e
Electricity kWh	103,056	39,936	29,472	28,880	32,140	34,243	267,727	0.21233	56846.47	56.8
Natural Gas kWh	0	0	0	0		19500	19,500	0.18316	3571.62	3.6
									Total	60.4

Electricity and Gas consumption figures are reported for November 2021 and multiplied x 6 for cold months and 6 x 60% for warmer months.

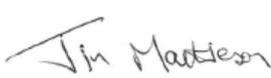
6. Methodology

This Carbon Management Plan, shall measure its emissions utilising the UK government’s annually published BEIS emissions factor database for reporting it Scopes 1, 2 & 3 emissions year on year and shall be documented in alignment with the UK GHG Protocol. The greenhouse gases being measured in this report have been simplified to CO2e (or CO2 equivalent); CO2e is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

Each annual report shall identify the opportunities and practicality of making changes around our buildings, and all areas of our operations.

7. Company Commitment

Space Solutions (Scotland) Limited are committed through careful management through this carbon management plan to achieve net zero carbon by 2050.

Signed..... February 2022.....

Director.....Jim Mathieson...(Managing Director).....

8. Contact Details

Carbon-Zero UK (A division of Data Engineering Projects Limited)

100 Union Street

Aberdeen

AB10 1QR

Email: bjohnstone@carbon-zero.uk

Website: www.carbon-zero.uk

Telephone: 01224 049169