

Sustainability Policy Manual

1. Introduction

1.1. About Structured Designs LTD & it's Directors

Structured Designs is a privately owned UK-based Specialist Building Repair Contractor, operating in the Northwest region since 2005. Structured Designs prides itself on craftsmanship, customer service, and our commitment to sustainability.

Structured Designs' Directors have voluntarily decided to reduce their personal Carbon Footprints related to their private lives and fund Carbon Offsetting to be Carbon Neutral.

1.2. Practical Policy Considerations (Directors Comments)

It is Structured Designs belief that the businesses' environmental impact has for many years been significantly less than the average for the trade sector. However, progression of existing policies and its application in the business is essential to meet both statutory and moral requirements. Many of these changes have created challenges and in instances a reduction in work opportunities, which our business has absorbed.

Over the last 5-years, Structured Designs has actively reduced geographical area of coverage to reduce transport and man hours. There are too many companies attempting to provide national coverage from non-regional bases where staff drive hours each day to undertake routine work tasks. This type of operation is unsustainable for organisations who are serious about minimising their Carbon footprint.

A reduction of man hours for each work project jobs is carbon reducing. Distance travelling to and from a job increases travel time and decreases the availability of productive daily working. Aside from pollution generated by increased travel, distant working inevitably requires more man-days to complete each project. Every labour day has a carbon footprint attached. The daily business-related carbon footprint is quantifiable, but in addition each member of staff has their own carbon footprint attached to their private life, which includes travel to and from work etc. Reducing labour days and staff numbers creates a massive reduction in the overall carbon footprint of a business, which is not often considered when assessing a sustainability. Savings generated by reductions in man hours can assist in offsetting the increased costs associated with carbon neutrality. Whether a large or small business, the broad carbon footprint of the operation will be less if staff numbers are minimised and efficiency is increased. Taking this philosophy further, our business will carefully consider the necessity and the value function of staff, particularly when considering increasing staff numbers.

Structured Designs attempts to achieve max efficiency in staff employment and work programming.

SD has since inception looked to minimise wastage of materials and sorting and reuse of all leftover materials. Materials are sorted and restocked into stores. As a part of ongoing improvements, staff training invigorated by use of 'Toolbox Talks' and policy flow chart structure.

Presently based just over Welsh border the government has already made Law that all businesses collect and separate waste for efficient recycling. However, our business has for many years, fully recycled all packaging of received products by utilising them in a separate business under the control of the business owner.

Structured Designs has for many years maintained a tools and equipment 'repair' not 'replace' policy.

1.3. Purpose of this Policy Manual

This sustainability policy manual outlines the goals, strategies, and procedures that SD has established to reduce our environmental impacts and operate responsibly across social, environmental, and governance factors. These policies and practices go far beyond those imposed by UK Laws. Adhering to these policies will help ensure we meet our sustainability targets while continuing to provide quality products and serve the needs of customers, employees, suppliers, and our responsibility to the planet.

1.4. Our Sustainability Policy Goals

- Achieve net zero carbon emissions for our core operations by 2030 (excluding construction materials)
- Achieve a 50% reduction in carbon emissions for our construction materials by 2030.
- Source 100% renewable electricity by 2025
- Divert a minimum of 99% of non-hazardous waste from landfills through reduction, reuse, recycling, and recovery. (Target 100%)
- Achieve 50% of our van fleet to be electric by 2025.
- Achieve 50% of office PCs be changed or upgraded with low energy use components by 2025 and all new computers thereafter specified to be passive air cooling, not requiring fans.

- Utilise materials produced from or incorporating recycled materials where possible.
- Assess projects with a 'Restore Not Replace' mindset. Repairing or refurbishing existing building fabric where possible, rather than automatic renewal.
- Wherever possible, source materials and services from local manufacturers and suppliers.
- Specify materials with lower carbon footprints and those with energy efficient lifecycles.
- Utilise 100% FSC/PEFC certified timber by 2025
- Reduce supply chain emissions intensity by 50% by 2030
- Seek to encourage clients to 'buy-in' to contributing towards or fully carbon offsetting materials, making the work we provide fully Carbon Neutral.
- Develop circular economy principles across our business model and product designs by 2027
- Develop internal sustainability reporting and verification of key metrics

By successfully implementing the initiatives and practices outlined in this manual, we aim to reduce our environmental footprint, contribute socially, operate transparently, and set an example of responsible business leadership in our industry and community.

2. Energy and Emissions Policy

2.1. Overview

The Construction Sector is recognised as an industry which consumes considerable energy, particularly in the production and transportation of materials. Structured Designs recognises our responsibility to reduce energy consumption and associated greenhouse gas (GHG) emissions from our operations. This policy provides a roadmap for continuously improving energy efficiency, procuring renewable energy, and achieving net zero emissions while maintaining profitability and growth.

2.2. Goals

- Reduce scope 1 and 2 GHG emissions by 50% by 2025 below the 2015 baseline.
- Achieve net zero operations by 2030, in line with UK climate goals
- Source 100% renewable electricity by 2025

2.3. Strategies

A. Energy Efficiency:

- Review insulation and other heat loss elements from our operation building. By Dec 2024.
- Review and upgrade heating and ventilation systems to achieve optimum efficiency. By Dec 2024.
- Upgrade ageing equipment - target 15% efficiency saving in renewal of inefficient office equipment. By Dec 2024.
- Review and update heating system controls to provide increased efficiency. By Dec 2024
- Complete transition to LED lighting and install occupancy sensors. By Dec 2024
- Install air source heat pump heating to office and trial as a comparison with existing heating. By Dec 2024.

B. Renewable Power:

- The existing premises of Structured Designs are restricted from the installation of solar PV electric generation. Consideration to Solar generation will be a factor when considering future premises moves.
- Procure energy products from certified 'carbon offset' suppliers. Presently Octopus Energy. 2025

C. Electrification:

- Replace 50% of vans fleet with electric models. By Dec 2024.
- Install EV charging infrastructure onsite. By Dec 2024

D. Employee Engagement:

- Provide energy conservation training for all staff by 2025
- Implement department-level energy savings competitions and 'suggestion' rewards programs

E. Tracking & Reporting:

- Conduct emissions inventory and audit tracking Carbon footprint.
- Benchmark usage and report quarterly to leadership

F. 2024-2030 Implementation Plan:

- 2024: EMS, equipment upgrades, renewable credits, LEDs, EV fleet transition, 100% renewable electricity. EV chargers, solar procurement, staff training.
- 2025: Seek local manufacturers of materials. Encourage Clients to contribute to their project being Carbon Neutral.
- 2028: Transition to new energy efficient premises. Achieve 100% solar generation for our core operation (excluding materials). Achieve a minimum of 50% clients who will offset the carbon footprint of all materials used on their projects.
- 2030: 100% electric or renewable energy van fleet (providing manufacturers provide suitable vehicles). Achieve 125% solar generation of our core operation and on-site storage batteries to reduce reliance on energy utility companies. Make good any energy deficiencies by purchasing carbon offsets credits. Include a 2.5% element of each project value to be invested on carbon reduction. Achieve a minimum of 75% clients who will offset the carbon footprint of all materials used on their projects.

Key Performance Indicators:

- Tonnes CO₂e in scopes 1 and 2
- Total energy consumption annually (kWh)
- Energy intensity per product output (kWh/unit)
- Annual energy spending (£)
- Renewable energy percentage (%)
- Emissions per £ turnover (normalised yearly emissions/revenue)

3. Materials and Waste Policy

3.1. Overview

Structured Designs takes a circular economy approach to materials use and waste management. This policy outlines our commitments to responsible sourcing, waste reduction, and material value retention through reduction, reuse, recycling, and repurposing.

3.2. Goals

- Source 100% certified sustainable timber by Dec 2024
- Achieve minimum 99% landfill diversion of non-hazardous waste by Dec 2024.
- Reduce raw material inputs per product by 15% by 2030

3.3. Strategies

A. Sustainable Materials:

- Require FSC/PEFC CoC certification from all timber suppliers by 2024
- Work with suppliers to calculate and reduce embodied carbon
- Prioritise recycled content and develop closed-loop material flows

B. Waste Prevention:

- Conduct annual waste stream analyses and identify targeted reduction opportunities
- Switch to reusable protective materials and phase out single materials by 2025
- Improve Digitised documentation processes to further reduce paper waste.

- Improve job scoping to accurately identify the minimum material requirements and eliminate over purchase.

- Improve sorting and storage of any surplus materials from a project to enable a higher probability of re-use on future projects.

C. Improved Sorting & Recycling:

- Provide waste sorting guidelines, training, and signage for all staff
- Prioritise waste recycling suppliers in favour of those who guarantee 100% landfill diversion.

D. Resource Recovery:

- Grade and reuse scrap wood, offcuts, materials, and protections
- Compost food waste and landscaping materials for onsite use
- Explore partnerships to up-cycle retired equipment and waste material

E. Tracking & Reporting:

- Monitor recycling rates, waste generation
- Report waste and material efficiency data quarterly to leadership

F. 2023 Implementation Plans:

- Conduct FSC/PEFC certified timber requirements communicated to suppliers
- New bins, signage, and enhanced sorting procedures
- Training for staff on Circular Economy and waste minimisation

Key Performance Indicators:

- Recycling rate (% waste diverted from landfill). Target 100%.
- Total waste generated annually (tonnes) assessed against turnover.
- Non-hazardous waste per unit of product (kg/unit)
- Percentage of sustainably sourced materials.

4. Sustainable Products and Services Policy

4.1. Overview

Structured Designs will design processes and offerings to reduce the lifecycle environmental impacts of our products and services. This policy guides innovating for sustainability across operations, product design, and business models.

4.2. Goals

- Incorporate circular design principles for all products by 2027
- Enable 50% lower product lifecycle emissions by 2030

4.3. Strategies

A. Sustainable Design:

- Optimise services processes for energy, waste, water, and chemical use
- Design products for durability, standardisation, disassembly, ease of servicing, longevity, and reuse
- Use FSC timber, recycled materials, and low-impact alternatives

B. Circular Business Models:

- Offer materials refurbishment, and remanufacturing in lieu of replacement.
- Provide services to customers to enhance sustainability best practices
- Develop partnerships to reuse materials, up-cycle waste
- Develop partnerships to hire and share equipment to reduce machinery and equipment stocks.

C. Customer Engagement:

- Train sales and on-site staff on communicating sustainability benefits
- Conduct annual customer surveys on product sustainability needs
- Offer carbon offsetting of materials used on client projects.

D. Tracking & Reporting:

- Review product lifecycle assessments every 3 years
- Review product carbon footprints against competitors
- Review circular activities and partnerships annually

E. 2023 Implementation Plans:

- Impact Assessment and areas for improvement identified
- Product lifecycle analysis of top-selling services
- Evaluate current product design, refurbishment and re manufacturing programs to establish success improvement and circular baseline
- Staff training on communicating sustainability credentials and evaluate Client enthusiasm.

Key Performance Indicators:

- Product carbon footprints (kgCO₂e/unit)
- Percentage of products designed for circularity
- Customer sustainability satisfaction (survey)
- B Corp certification status

5. Sustainability Reporting and Governance Policy

5.1. Overview

Structured Designs will implement robust sustainability monitoring, reporting, and verification processes. This policy outlines our approach to transparency, governance, stakeholder engagement, and accountability across our sustainability initiatives.

5.2. Goals

- Review annual sustainability reporting on key metrics
- Achieve net zero by 2030.
- Embed sustainability accountability across the organisation

5.3. Strategies

A. Disclosure Frameworks:

- Respond annually to CDP Climate Change and Forests questionnaires

B. Verification & Audit Processes:

- Verify net zero progress through recognised standards like the Carbon Neutral Protocol

C. Governance & Accountability:

- Director oversight of sustainability strategy and performance
- Company to make good deficiencies in targets by Carbon Offsetting funded from company profits.
- Incorporate sustainability goals into staff performance reviews

D. Tracking & Reporting:

- Quarterly internal reviews of progress toward goals
- Annual internal sustainability report and results benchmarking

6. Suppliers and Procurement Policy

6.1. Overview

Structured Designs will reduce supply chain impacts through sustainable purchasing practices and collaborating with suppliers to improve environmental performance. This policy outlines our approach.

6.2. Goals

- Ensure suppliers meet sustainability criteria by 2027
- Source 60% of materials from local independent businesses by 2027
- Reduce supply chain emissions intensity by 50% by 2030
- Map the upstream and downstream supply chain and transportation impacts by end of 2027
- Use collected data to set an emissions reduction goal for transportation

6.3. Strategies

A. Sustainable Selection:

- Integrate sustainability factors into supplier selection criteria by Q2 2026
- Require sustainability reporting from core suppliers by 2027
- Provide training and resources to help suppliers improve

B. Local Sourcing:

- Identify local substitution opportunities
- Prioritise purchasing from Northwest England/Wales based suppliers

C. Collaboration & Innovation:

- Develop joint pilot projects with key clients and suppliers to test low-carbon solutions

D. Performance Tracking:

- Where possible, collect energy, water, and waste data from the top 10 suppliers annually by 2026
- Estimate supply chain carbon footprint through EEIO modelling by 2030.

E. Communication & Training

- Train procurement staff on sustainable sourcing best practices. 2026
- Provide staff with knowledge of carbon footprint data for commonly used products, 2026. Especially high rated products and introduce low footprint options which may be suitable substitutes.

F. 2026 Implementation Priorities:

- A sustainability section to be added to supplier assessments
- Initial estimates of supply chain carbon footprint
- Local sourcing opportunities analysis
- Assess supplier relationships and capacities as part of the supply chain mapping exercise

Key Performance Indicators:

- Local procurement spend (%)
- Supply chain emissions per £ output (kgCO₂e/£)
- Core suppliers reporting sustainability data (#)

7. Transportation and Travel Policy

7.1. Overview

Structured Designs will minimise carbon emissions associated with fleet vehicles, employee commuting, and business travel. This policy outlines our commitments and procedures for reducing environmental impacts from transportation.

7.2. Goals

- Reduce absolute fleet emissions by 50% by 2026 below the 2020 baseline
- Reduce employee commute emissions per turnover by 25% by 2026
- Achieve 25% employee sustainable commuting by 2026
- Require justification for any necessary business distance travel or air travel.
- Reduce business mileage travel by 35% by 2025 below 2019 baseline.

7.3. Strategies

A. Sustainable Fleet Transition:

- Replace 50% diesel vans with EVs in 2024
- Install EV charging infrastructure onsite by Q2 2024
- Calculate and monitor the minimum number of vehicle visits to complete each work contract.
- Regularly review routes and contract locations to reduce mileage

B. Employee Commuting & Travel:

- Provide ride-share incentives
- Support bike commuting through onsite storage.
- Require Director approval for any essential business air travel and fund full carbon offsetting for the flights direct with carrier. Flights to be economy and EasyJet to be preferential airline.

C. Tracking & Reduction:

- Use telematics to monitor vehicle use.
- Offer remote work and flexible scheduling to reduce commuting
- Use virtual meeting technology to reduce travel needs

D. 2024/25 Implementation Plans:

- Electric vans (were) purchased for the fleet
- Employee transportation survey conducted
- Telephone & Virtual meeting technology upgraded
- Conduct employee transportation survey to collect commuting data and estimate emissions baseline

Key Performance Indicators:

- Fleet emissions per kilometre (kgCO₂e/km)
- Percentage of EV vehicles in fleet
- Employee sustainable commuting rate (%)
- Business air miles travelled annually

8. Implementation Guidance

8.1. Recommended Rollout Sequence

To effectively implement these sustainability policies, Crystal Doors has proposed the following sequence:

1. 2023:

- Focus on data collection, audits, and reporting procedures.
- Implement sub-metering, EV chargers, and solar procurement.
- Ensure FSC timber compliance and enhance recycling systems.
- Integrate sustainability into supplier assessments.
- Conduct an employee transportation survey.

2. 2024:

- Implement efficiency projects.
- Expand renewables and transition to biofuels.
- Initiate circular design and lifecycle analysis.

3. 2025:

- Achieve ambitious targets: 50% emissions reduction, 100% renewable electricity, 50% EV fleet, 100% FSC timber.

8.2. Rollout Summary

- Year 1: Focus on data collection, reporting procedures, audits, and target setting
- Year 2: Implement reduction initiatives around waste, energy, fleet emissions
- Year 3: Engage suppliers, expand renewables, circular design projects
- Year 4: Enhance recycled content use, sustainable purchasing, and product innovations
- Year 5: Achieve ambitious stretch targets; re-evaluate for the next phase

8.3. Potential Barriers

- Funding constraints for major capital projects
- Supplier engagement and coordination
- Staff culture changes take time
- Changes in Government Policies
- Changes in UK and world economic fortune

8.4. Strategy for Overcoming Challenges

- Pursue financing options for key initiatives
- Identify suppliers progressing on their sustainability journey
- Continuous training, communication, and commitment from Structured Designs
- Provide supplier training or mentorship on sustainability

8.2. Annual Review

- These policies should be reviewed each year and updated to reflect achievements, new best practices, technologies, stakeholder feedback, and evolving sustainability priorities for Structured Designs

Key Performance Indicators:

- 2023: FSC timber compliance
- 2025: Start supply chain mapping exercise,
- 2025: 50% EV fleet adoption, EV chargers and vehicles, 100% renewable electricity
- 2028: 25% supply chain emissions reduction, 50% sustainable procurement spend
- 2030: Net zero operations, 50% lower supply chain emission intensity

9. Glossary of Terms and Abbreviations

- **Carbon Footprint** - total greenhouse gas emissions caused directly or indirectly by a person, organisation, event, or product, typically expressed as a carbon dioxide equivalent.
- **Net Zero**: Long-term reduction of greenhouse gas emissions to near zero, then removing residual emissions.
- **Carbon Neutral**: Balancing emitted CO₂ with offsets (e.g., energy efficiency projects).
- **CO₂e**: Carbon dioxide equivalent, covering six greenhouse gases.
- **Paris Agreement (COP21)**: Limit global temperature rise to well below 2°C.
- **UK Climate Change Act**: Legally binding net zero by 2050 (2045 for Scotland); 78% reduction by 2035.
- **ISO 14068 (formally PAS 2060)** for carbon neutrality.
- **Circular Economy** - an economic system aimed at eliminating waste through the continual use of resources. Reduces resource inputs, repurposes waste, and recycles at the end of life. The core environmental principles of a circular economy are to design out waste and pollution, keep products and materials in use at their highest value, and regenerate natural systems, fundamentally shifting from a linear "take-make-dispose" model to one that conserves resources and enhances biodiversity. This leads to reduced greenhouse gas emissions, less resource depletion, decreased pollution, and improved ecosystem health.
- **CoC** - Chain of custody, a tracking system to ensure the sustainability of materials and products.
- **CO₂e** - Carbon dioxide equivalent, a standard unit for measuring carbon footprints.
- **Embodied Carbon** - total greenhouse gas emissions generated to produce a product or material, including resource extraction, manufacturing, transport, and disposal.
- **EMS** - Energy management system, used to monitor, measure, and control energy consumption.

- **FSC** - Forest Stewardship Council, provides certification of sustainable forest products.
- **GHG** - Greenhouse Gas Emissions, released into the atmosphere and responsible for climate change.
- **GRI** - Global Reporting Initiative provides sustainability reporting standards and guidance.
- **HVAC** - Heating, ventilation, and air conditioning systems
- **ISO** - International Organisation for Standardisation provides management system standards.
- **KPI** - Key performance indicator used to track progress on goals.
- **kW** - Kilowatt, a unit of power equal to 1,000 Watts
- **kWh** - Kilowatt-hour, a unit of energy consumption
- **LED** - Light emitting diode, an energy-efficient lighting technology
- **MPG** - Miles per gallon, a measure of vehicle fuel efficiency
- **MT** - Metric tonne, a unit of mass equal to 1,000 kg
- **Net Zero** - achieving an overall balance between greenhouse gas emissions produced and emissions taken out of the atmosphere, through reduction measures and offsets.
- **PV** - Photovoltaic, relating to solar panel electricity generation.
- **SASB** - Sustainability Accounting Standards Board provides reporting standard.
- **Scope 1 Emissions** - direct greenhouse gas emissions from owned or controlled sources like vehicles and equipment
- **Scope 2 Emissions** - indirect greenhouse gas emissions from purchased energy generation.
- **Scope 3 Emissions** - other indirect greenhouse gas emissions across the value chain including materials, transportation, waste disposal etc.
- **SME** - Small-to-medium enterprise, typically businesses with <500 employees