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MAY 2025

ANNUAL REPORT FOR 2024

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INTRODUCTION

THE GREEN WAY SOLAR LTD - REPORTING YEAR 2024

This report details the greenhouse gas (GHG) emissions inventory for The Green Way Solar Ltd (TGWS) for the 2024 calendar year. Aligned with internationally recognised GHG accounting standards, the document provides a transparent overview of the company's carbon footprint, enabling stakeholders to assess its environmental impact. The report is prepared in accordance with the GHG Protocol Corporate Accounting and Reporting Standard and ISO 14064-1:2018 (Greenhouse Gases), which provide globally accepted frameworks for quantifying and reporting organisational GHG emissions. Emissions are categorised into three scopes:

Scope 1 (direct emissions)

Scope 2 (indirect emissions from purchased energy)

Scope 3 (other indirect emissions across the value chain)

While this year's inventory has not undergone external verification, TGWS implemented rigorous internal review processes to ensure data quality and consistency. These included cross-checking data sources, verifying calculations, and applying standardised emission factors. Although third-party assurance was not conducted in this cycle, the company acknowledges the value of external assurance in bolstering credibility and plans to explore verification in future cycles to enhance transparency and stakeholder trust.



COMPANY OVERVIEW

Company profile: The Green Way Solar Ltd, with company number 09511813, was incorporated on 26 March 2015. The company's website is kilowatts. UK.

Location: Unit 11, Broughton Grounds Business Park, MK16 0HZ, UK, (Headquarters: Newport Pagnell, UK.)

Sector and operation: TGWS operates within the renewable energy installation sector, specialising in rooftop photovoltaic (PV) and battery storage solutions. Its primary activities encompass the design, installation, operation, and maintenance of solar and battery systems.

Standard Industrial Classification (SIC) code: 43210 (primary) denotes electrical installation activities. Additionally, it operates under SIC code 43910 for roofing activities and 43999 for other specialised construction activities.

Organisational Boundary: For the purpose of this report, the organisational boundary was defined using the operational control approach. This approach dictates that TGWS accounted for all GHG emissions from facilities and operations over which it had the authority to introduce and implement its operating policies in Bedfordshire.

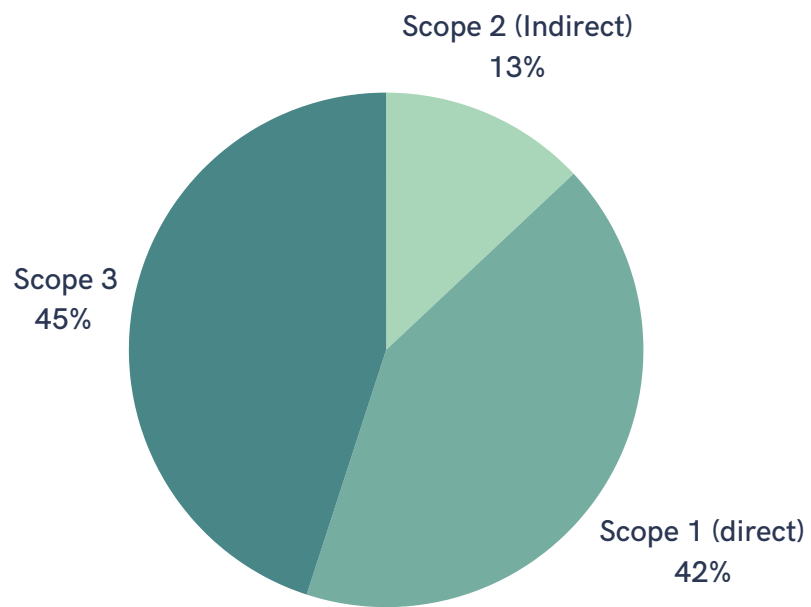


EMISSIONS RESULTS

18.5763 (tCO₂-e)

Total Company Emissions (as of 2024)

Scope	Emissions (tCO ₂ -e)	% of Total
Scope 1 (Direct)	7.88	42%
Scope 2 (Indirect)	2.33	13%
Scope 3 (Business Travel)	8.36	45%
Total	18.57	100%



The emission inventory results indicate that The Green Way Solar Ltd's total GHG emissions for the 2024 reporting period amounted to 18.57 tCO₂-e. A notable observation from this summary is the significant contribution of Scope 1 emissions, accounting for 42% of the total, and Scope 3 emissions from business travel, which make up 45%. Scope 2 emissions represent a smaller portion of the total at 13%. This breakdown suggests that direct emissions from sources owned or controlled by the company and indirect emissions associated with business travel were the primary contributors to TGWS's carbon footprint. These areas may warrant particular attention when considering strategies for emission reduction.

EMISSIONS BREAKDOWN

SCOPE 1

Scope 1 emissions for TGWS totalled 7.88 tCO₂-e, representing 42% of the company's overall emissions. Scope 1 emissions are direct GHG emissions from sources owned or controlled by the reporting entity. For TGWS, these emissions primarily arose from diesel fuel consumption in construction machinery and in company-owned vehicles, specifically vans used for transporting materials. The calculation of these emissions was based on the quantity of fuel consumed multiplied by the relevant emission factor. Specifically, the amount of fuel used in litres was multiplied by the DESNZ & DEFRA emission factor for diesel, which is 2.66 kgCO₂e per litre.

The detailed breakdown of diesel consumption and the resulting Scope 1 emissions are presented in the following table 2:

Company's Name	Type	Amount	Unit	Category	tCO2e
TGWS	Diesel (100% mineral diesel)	2964	litres	Fuels	7.8888342

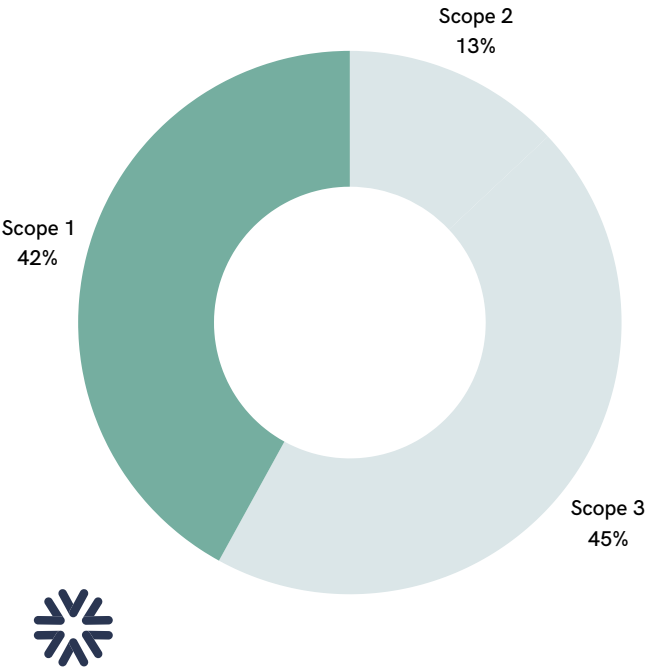


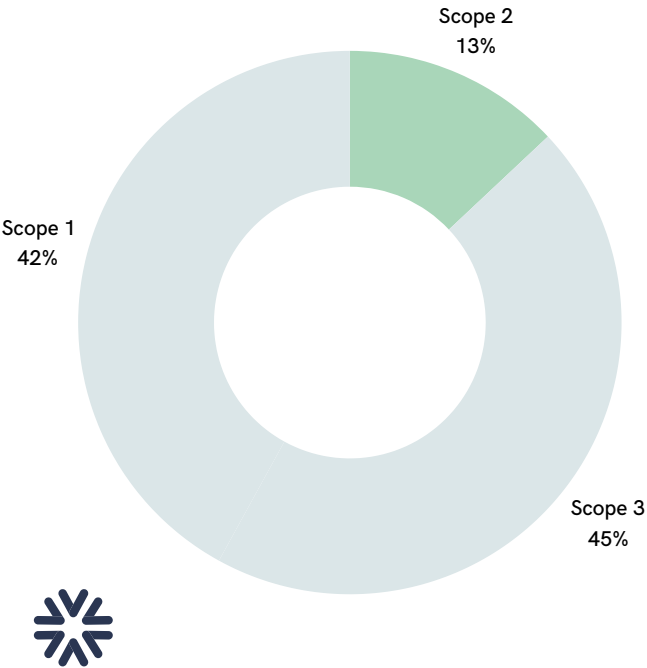
Table 2 above indicates that the total diesel consumption by TGWS during the reporting period was 2964 litres, resulting in 7.88 tCO₂e of direct emissions. The accuracy of this figure is contingent upon the reliability of the fuel consumption data collected.

SCOPE 2

Scope 2 emissions for TGWS Ltd amounted to 2.33 tCO₂-e, constituting 13% of the company's total emissions. These types of emissions are indirect GHG emissions that result from the generation of purchased electricity, heat, steam, and cooling consumed by the company. For TGWS, their scope 2 emissions were particularly associated with the electricity used for temporary site offices and lighting, as well as the natural gas consumed for on-site heating. The calculation of electricity-related emissions involved multiplying the kilowatt-hour (kWh) usage by the UK grid emission factor for 2024, which is 0.207 kgCO₂e/kWh. This emission factor represents the average emissions intensity of electricity generation within the UK.

The detailed breakdown of electricity consumption and the corresponding Scope 2 emissions is provided in the Table 3 below:

Company Name	Type	Amount	Unit	Category	tCO2e
TGWS	Electricity	11237	kWh	Electricity	2.3266208



The data shows that TGWS consumed 11237 kWh of electricity during the reporting period, resulting in 2.33 tCO₂e of indirect emissions. It is important to note that the provided data does not include natural gas consumption for on-site heating. If such data were available, it would be calculated using the appropriate UK natural gas conversion factors and included within Scope 2 emissions.



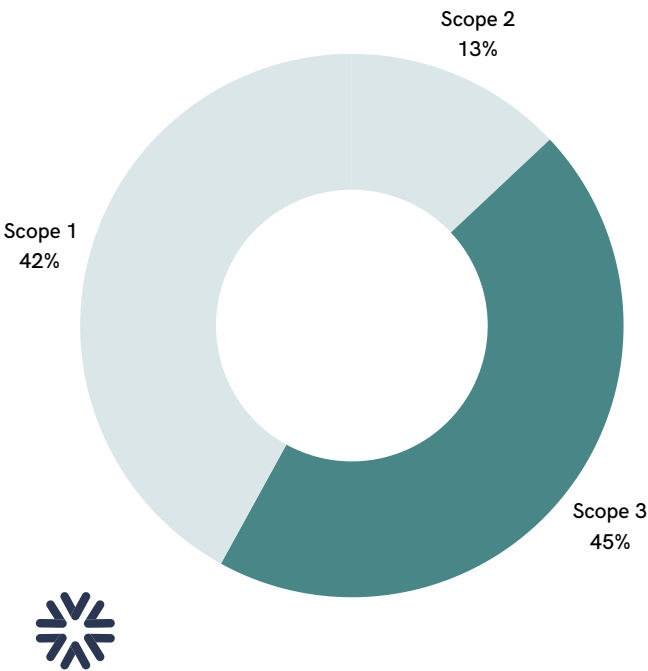
SCOPE 3

Scope 3 emissions for TGWS Ltd totalled 8.36 tCO₂-e, accounting for the largest portion of the company's emissions at 45%. Scope 3 emissions encompass all indirect GHG emissions that occur in the value chain of the reporting company from sources not owned or controlled by the organisation. In this report, the included category under Scope 3 is business travel by car, specifically employee commuting. It is noted that supply chain emissions were not included in this initial assessment. The calculation method for these emissions involved multiplying the activity data (miles travelled) by the relevant emission conversion factor. Employee commuting is often a significant source of Scope 3 emissions for many organisations.

The detailed breakdown of business travel by car type and the associated emissions are presented in the following table 4:

Company's Name	Type	Amount	Unit	Category	tCO2e
TGWS	Average car/Petrol	3454	miles	Business car	0.9143774
TGWS	Average car/Diesel	25000	miles	Business car	6.8335
TGWS	Average car/Battery Electric Vehicle	8000	miles	Business car	0.61088

Table 4 above indicates that the majority of emissions from business travel were attributed to the use of diesel cars for commuting.



While this report focuses solely on employee commuting within Scope 3, it is essential to recognise that other categories, such as purchased goods and services, could be substantial for a construction-related company like TGWS. Expanding the Scope 3 inventory in future reporting cycles would provide a more comprehensive understanding of the company's value chain emissions. The accuracy of the current Scope 3 emissions calculation is heavily reliant on the assumptions made regarding average commute distances and the types of vehicles used by employees.

REDUCTION OPPORTUNITIES

The Green Way Solar Ltd has several opportunities to reduce its greenhouse gas emissions across its operations.

Electrify Machinery: Replacing diesel-powered vehicles with electric alternatives presents a significant opportunity to decrease Scope 1 emissions. This transition could reduce Scope 1 emissions by approximately 40%. While the initial cost of electric machinery, estimated between £50,000 and £80,000, is substantial, the Bedfordshire Green Construction Grant could help offset this investment. Research into the specific eligibility criteria, application process, and benefits of this grant is recommended to assess the feasibility and potential cost savings associated with electrifying TGWS's machinery.

Solar-Powered Site Offices: Installing portable solar panels at temporary site offices to replace electricity drawn from the grid could lead to a significant reduction in Scope 2 emissions, potentially by as much as 50%. As a solar installation company, adopting solar power for its own operational needs is a logical step that not only reduces its environmental impact but also demonstrates its commitment to renewable energy solutions. A detailed cost-benefit analysis, including the payback period for the investment in portable solar panels, would be required to assess the financial viability of this opportunity.



In addition to these sector-specific recommendations, The Green Way Solar Ltd should explore available local incentives to support its emission reduction efforts. The Bedfordshire Net Zero Fund, which offers grants up to £20,000 for SMEs adopting renewable energy, could provide financial assistance for projects such as the installation of solar panels or the purchase of electric machinery. Comprehensive details regarding the eligibility criteria, the types of projects supported, the maximum grant amount, and the application procedure for SMEs in Central Bedfordshire should be gathered from the fund's official website. Furthermore, the UK government's VAT reduction to 5% on energy-efficient renovations could provide cost savings for any upgrades to TGWS's permanent facilities aimed at improving energy efficiency. Actively pursuing these local and national incentives can significantly facilitate the implementation of emission reduction measures and improve the financial case for sustainability investments.