Glanville
ENVIRONMENTAL

FURTHER THAN

ZERO

WORKING TOWARDS A SUSTAINABLE FUTURE.

OUR COMMITMENT TO SUSTAINABILITY

Committed alongside our key partners and supply chain in the water industry, our 'Further Than Zero' campaign looks at bringing carbon emissions down to below zero with the hope of becoming carbon negative by **2030**.

Our focus on sustainability across the company looks at both reducing carbon footprint immediately and providing a comprehensive plan on how we can sustain this for the future.

FURTHER THAN ZERO

2030 CARBON NEGATIVE

2023
Short Term

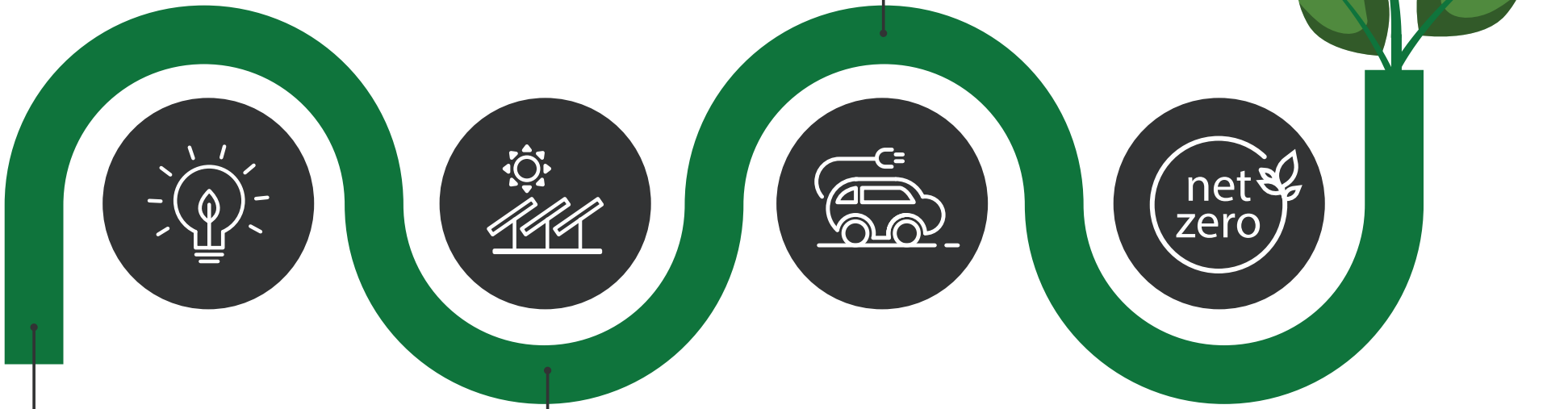
HVO Fuel
Carbon Offsetting
Regular Vehicle Servicing
Sourcing Sustainable Materials
Increased Office Recycling
LED Bulbs

2026
Medium Term

Solar Panels
Combined Heat Power
Flower Turbines

2028
Long Term

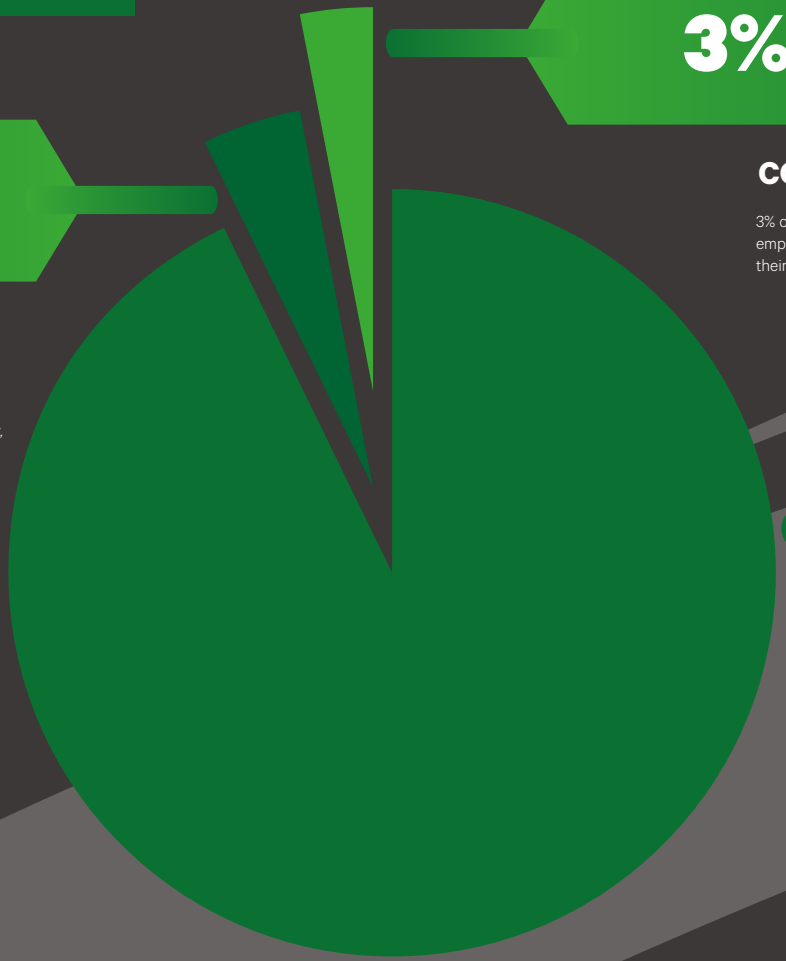
Electric Van & Car Fleet
Reduce to only 10% offsetting



Glanville Environmental has established a four-stage plan to align with our Further Than Zero campaign for **sustainability**. This plan is formed in four stages starting with short-term, immediate changes we can make as a business to decarbonise such as transitioning to HVO fuel, sourcing sustainable materials, and investing in carbon offsetting schemes with the view to transition to more environmentally friendly forms of transport including electric vehicles and no carbon offsetting to become carbon negative by **2030**.

OUR CURRENT POSITION

BREAKDOWN OF CARBON FOOTPRINT*



3%

COMMUTING

3% of our emissions is produced through employees commuting to and from work in their own private vehicles.

4.1%

OTHER

4.1% of Glanville Environmental's carbon emissions come from a variety of sources assessed by Carbon Footprint. Those include: Site Electricity, Non-Controlled Electricity, Site Gas & Oil, Water & Wastewater, Waste, Refrigerants and Home-workers.

92.9%

VEHICLE FUEL CONSUMPTION

By far the largest contributor to Glanville Environmental's carbon emissions is vehicle fuel consumption at 92.9% of our total emissions and with a fleet of over 150 vehicles we are aware this must be the first focus point of our plan.

Carbon Footprint Assessed

Carbon Footprint analysed a selection of data from Glanville Environmental, including:

- Electricity usage at depots
- Fuel usage
- Waste produced
- Water used
- Refrigerants e.g. air conditioners

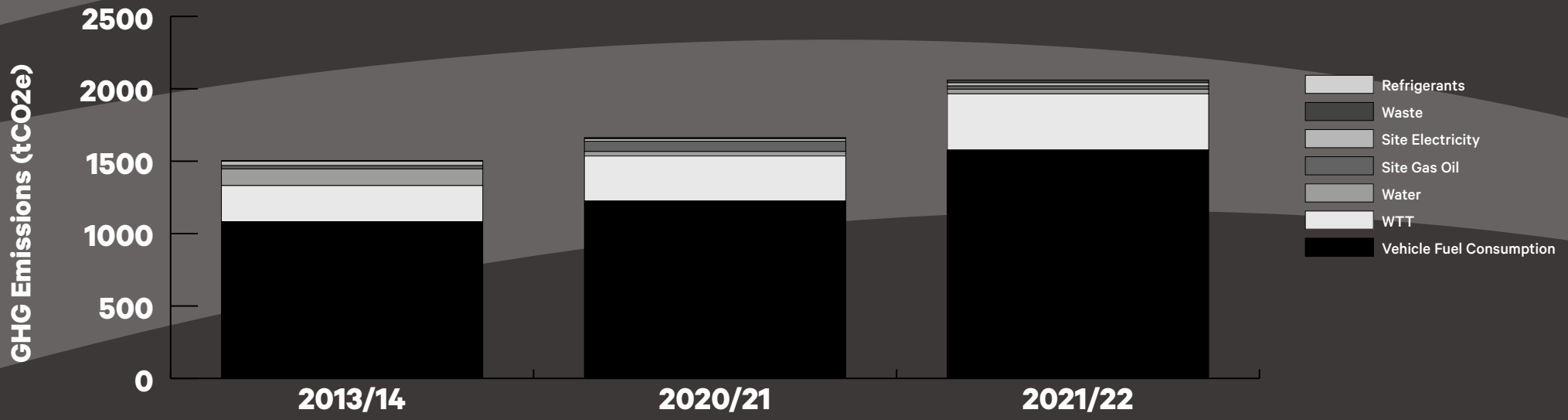
*data based on 2021/2022 carbon emissions

TOTAL GREEN HOUSE GAS EMISSIONS

Key Points from Data

The below graphs show the total emissions produced by Glanville Environmental in 2021/22 compared to previous years and how emissions compare to turnover year on year.

From this data, we can see that as a growing company our emissions are increasing with fuel consumption being the main contributor to the increase. However, we can also see that overall emissions have increased but when compared to per £M of turnover they have reduced.



METRIC	2013/14 (Location Based)	2020/21 (Location Based)	2021/22 (Location Based)	2021/22 (Market Based)	*Baseline Year (%) Change	*Previous Year (%) Change
Total Tonnes CO2e	1503.98	2060.48	2344.03	2348.14	55.9%	13.8%
Tonnes of CO2e per employee	18.80	12.88	13.24	13.27	-29.6%	2.8%
Tonnes of CO2e per £1M Turnover	236.66	109.02	104.70	104.89	-55.8%	-4.0%

*Location Based Footprint % change

*data based on 2021/2022 carbon emissions

SCOPES

WHAT ARE THE SCOPES?

SCOPE 1 - covers the Green House Gas (GHG) emissions that we produce directly

SCOPE 2 - covers the Green House Gas (GHG) emissions produced indirectly but owned

SCOPE 3 - covers the Green House Gas (GHG) emissions produced indirectly but owned, this includes the emissions of our supply chain

SCOPE	ACTIVITY	LOCATION BASED	MARKET BASED
1	VEHICLE FUEL USAGE	1750.51	1750.51
	SITE GAS OIL	28.33	28.33
	REFRIGERANTS	6.06	6.06
		1784.90	**1784.90**
2	ELECTRICITY GENERATION	16.66	21.28
		16.66	**21.28**
3	WELL-TO-TANK	455.51	455.51
	COMMUTING	55.64	55.64
	WATER & WASTEWATER	11.53	11.53
	NON-CONTROLLED SITE ELECTRICITY	10.36	8.95
	WASTE	6.95	6.95
	ELECTRICITY TRANSMISSION & DISTRIBUTION	1.47	2.37
	HOMEWORKERS	1.01	1.01
		542.47	**541.96**
TOTAL TONNES OF CO2e		**2344.03**	**2348.14**
TONNES OF CO2e p/employee		**13.24**	**13.26**
TONNES OF CO2e p/£m turnover		**104.70**	**104.89**

*data based on 2021/2022 carbon emissions

HOW WE'LL ACHIEVE THIS?

FUEL CONSUMPTION

Operating across six depots and hundreds of remote locations across the South West requires significant travel for our teams, and we recognise the negative impact this is having on the environment. With 92% of carbon emissions produced by Glanville Environmental arising from vehicle fuel consumption, it is the top contributor to our carbon footprint as a company, and we must tackle this quickly.

Switching to an all-electric vehicle fleet is an option we are exploring however having assessed the remote locations our teams work in across Devon and Cornwall alongside the lack of infrastructure for charging points in the region, it currently isn't an operationally feasible option.

To combat this issue, we have explored a variety of options to significantly reduce our emissions, with HVO fuel being the most viable and effective solution.

Operationally, Glanville Environmental's fleet of vehicles runs 100% on diesel, and therefore by transitioning to HVO fuel as an alternative to standard diesel we can reduce our carbon emissions significantly and pave the path to Net Zero.

WHAT IS HVO FUEL?

Hydrotreated Vegetable Oil (HVO) is also known as renewable diesel and is a fossil-free alternative. Biodiesel is a non-toxic, biodegradable liquid fuel produced from renewable sources, such as new and used vegetable oils and animal fats, and is a cleaner-burning replacement for petroleum-based diesel fuel. Compared to standard diesel, using HVO results in a 90% reduction in Greenhouse Gas emissions.

HVO can be used interchangeably with standard diesel and does not require any changes to the engine or system of a vehicle and can be used in both on-road vehicles such as sprinters, tippers, and box vans, as well as plant machinery on the sites we work on that also rely on diesel to function.

A benefit of using HVO fuel is that it combusts better than standard diesel and is more stable in cold temperatures. Due to cleaner combustion, the volume of air pollution being emitted from vehicles using HVO fuel is less than that of standard fuel, resulting in improved air quality at depots and sites, this will benefit employees, clients, and the communities we work in.

VEHICLE SERVICING

Regular vehicle servicing is essential to lowering carbon emissions, and with over 150 vehicles across the fleet, we have a demanding programme of servicing from HGVs to vans, company cars, plant machinery, and assets.

Ensuring that Glanville Environmental's fleet of cars, vans, and HGVs are well maintained will decrease the negative effect the fleet has on the environment while ensuring cost efficiency is maximised.

Changing engine oil and air filters and maintaining good tyre pressure are a few ways to significantly reduce the carbon emissions of a vehicle by improving its efficiency.

For example, if the tyre pressure is lower than required for the vehicle, the engine will be using more fuel to move the vehicle due to the increased resistance on the tyres. On top of this, the state of a vehicle's engine will determine the type of emissions given off; older engines can leak acid and therefore reduce energy efficiency, which in turn costs more and pollutes the environment.

As well as battery acid, poorly maintained vehicles can release several different liquids into the environment that result in pollution and potentially hefty Environment Agency fines. Examples of liquids vehicles can lose if poorly maintained:

- Fuel
- Brake fluid
- Transmission fluid
- Oil
- Powering steering fluid
- Coolant

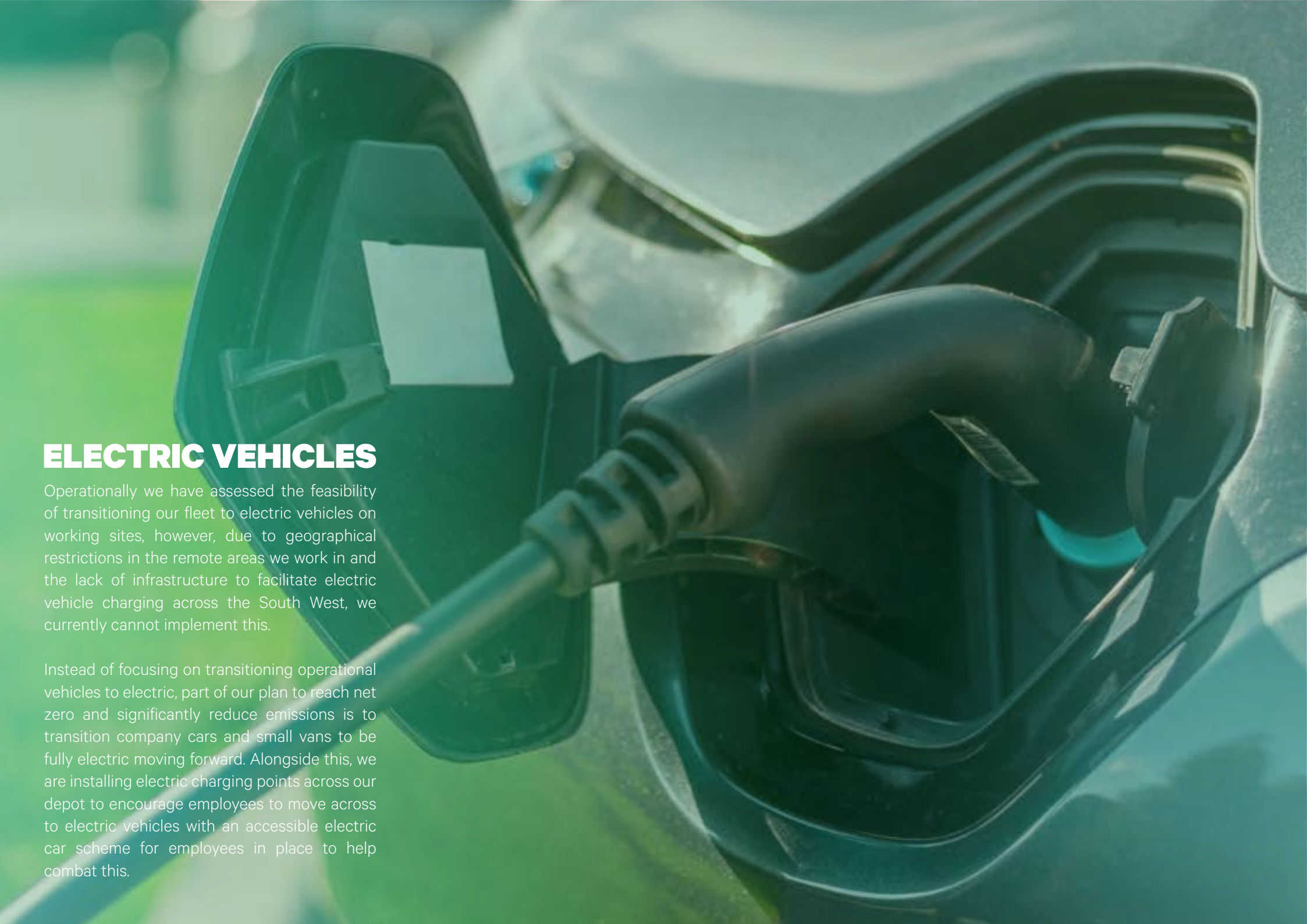
SOLUTION

Glanville Environmental's workshop department is dedicated to maintaining a high standard of vehicle maintenance across the fleet with a precisely scheduled plan of maintenance for each vehicle, working around the clock to ensure both safety and sustainability throughout the fleet.

Part of our plan to reduce carbon emissions involves a set schedule for maintenance on each vehicle which includes 6 monthly servicing for vans and plant machinery & equipment, 6 weekly servicing for HGVs, and every 12 months for cars.

RENEWABLES

As we work towards becoming a Carbon Negative company, we look to ensure the energy we use across the business from operations and remote sites to office spaces is purchased from renewable sources via our energy provider. On top of this, our long-term plan is to consider all available options to aid in becoming self-sufficient by installing solar panels, flower turbines, and combined heat power systems throughout our offices and sites.



ELECTRIC VEHICLES

Operationally we have assessed the feasibility of transitioning our fleet to electric vehicles on working sites, however, due to geographical restrictions in the remote areas we work in and the lack of infrastructure to facilitate electric vehicle charging across the South West, we currently cannot implement this.

Instead of focusing on transitioning operational vehicles to electric, part of our plan to reach net zero and significantly reduce emissions is to transition company cars and small vans to be fully electric moving forward. Alongside this, we are installing electric charging points across our depot to encourage employees to move across to electric vehicles with an accessible electric car scheme for employees in place to help combat this.

BATTERY POWERED TOOLS

Currently, the majority of the plant and machinery used by Glanville Environmental is powered by fossil fuels including diesel. Due to this, there are several measures in place to prevent fuel spills from causing environmental contamination. Fuel has to be carried in vehicles in jerry cans with drip trays fitted to prevent leakage. Spill kits are present on all large vehicles to deal with a multitude of spills including fuel. Plant nappies are also present in all vehicles so that any plant that contains fuel can be put on this absorbent pad whilst not being used.

As well as the extra equipment required for carrying fuel, the plant and machinery currently in use produce diesel and petrol emissions which are harmful to the environment and cause immediate poor air quality for employees and the communities we work in.

WORKING TOWARDS A SOLUTION

To reduce carbon emissions and the requirement to carry around leak prevention, battery-operated tools are being trialled across Glanville Environmental to assess how beneficial they are in terms of work output and sustainability.

We recognise the importance of battery-powered tools as an alternative to diesel, due to them releasing zero scope 1 emissions through use compared to the diesel alternatives currently in use. And as an environmentally conscious company to coincide with our Further Than Zero plan Glanville Environmental are working to find a sustainable solution to this and a suitable partner to work with and make the transition.

EVER EVOLVING

When it comes to the environment, there is no 'one size fits all' approach.

Our plan to reach net zero and become carbon negative is ambitious, but we remain committed to the cause, and as an environmentally conscious company we are dedicated to reducing our emissions and saving the precious planet we are blessed with.

Glanville Environmental won't stop here with our plans, we will stay focused on adapting and developing as technology advances and sustainable practices evolve. As we grow, our plans will also mature and we will continually progress to provide a sustainable future for generations to come.

Glanville
ENVIRONMENTAL

FURTHER THAN

ZERO

CO_2e
Reduced
Organisation

CO_2e
Assessed
Organisation

Find out more at: www.glanvilleenvironmental.com/sustainability