GB GRATTE BROTHERS | Group

Gratte Brothers 2022 Environmental Report

V01
24/01/23

Quality for Generations**.**

Contents

Executive Summary

In 2022 Gratte Brothers have experienced key environmental wins, which are pushing us ahead in terms of sustainability progress. This progress is becoming ever more important in tender questionnaires, interviews and supplier reviews. These key wins include our net zero journey, office upgrades, documentation improvements and high scoring Considerate Constructor Scheme sites.

Gratte Brothers net zero journey is well on its way. In partnership with Normative we have defined our initial organisational carbon footprint baseline. This has given an initial estimate of our total emissions (16,903 tonnes of CO2 equivalent), of which approximately 96% sit within our supply chain, and are as such indirect emissions, associated with the products and services which we purchase. Going forward, we will be setting specific net zero targets, and actions to achieve them, which will be set out in a roadmap document, and reviewed on an annual basis.

Upgrading head office to use mugs and dishwashers instead of paper cups was a strong financial and sustainability win for 2022. For just 40 of us to save one cup a day for one year, we have saved 24 trees, and all of the emissions (and costs!) associated with constant production and waste management of paper cups!

Environmental documentation updated this year includes the project environmental plan and the site specific aspects and impacts register. These will ensure that site specific environmental risks are appropriately controlled, and help to maintain the high standards set out as part of our ISO14001 compliance. Three environmental green alerts were issued in 2022, on the topics of waste transfer notes, FSC timber requirements and environmental incident reporting.

In 2022, Gratte Brothers reported two environmental incidents. A small spill of hydraulic oil at Stevenage, and incorrectly stored fuel at LON02. Both were closed out in a timely manner and communicated to sites to prevent recurrence.

Progress against environmental targets set out in the HSEQ strategy is reviewed on a six monthly basis. Targets are; the reduction of our carbon footprint by 30% by 2025 (goal is exceeded); replacing 5% of our fleet with hybrid / electric by 2023 (goal is exceeded); Improving the recycling rate at head office (goal is in progress); Increasing inspections and audits (goal is achieved); and improving the environmental behaviour of onsite operatives (goal is in progress). There are no concerns that those targets not yet reached will be completed in 2023 with defined actions as set out in this review.

Going forward to 2023, focus is expected to be on Gratte Brothers' continuing net zero journey, including the setting of targets and promotion of our strategy both internally and externally. Other key topics will be embodied carbon, sustainable procurement, the environmental benefit of pre-fabrication, and social value. National trends and areas to watch in the longer term will be renewable energy, new fuels (hydrogen and HVO), biodiversity, and an upgrade to mandatory sustainability reporting requirements.

Overall, Gratte Brothers is stepping into 2023 in an excellent position with regards to environment and sustainability, and will continue to progress towards a more positive future throughout the exciting year ahead.

2022 Key Environmental Wins for Gratte Brothers:

Net Zero Journey

<u>Completed this year:</u>
We have signed up to partner with Normative for three years. These are a carbon accounting software platform and climate experts. In partnership with Normative we have calculated our full carbon footprint (all three scopes- see below), and we will now set verifiable, data driven targets to reach net zero (before 2050!) and work on initiatives and requirements to reach these goals.

Having accurate data mapped out for us means that we can easily see where our carbon emissions are coming from, highlight any hot spots, and can begin to map attainable targets to reduce them. Our Journey to Net Zero initiative will see us reach a Net Zero carbon footprint group-wide long before 2050.

So far, we have uploaded the required data to Normative and can see this on our project dashboard (note that this is a very early stage footprint and the data requires refining over the next 2 years). This allows us to see where the majority of our emissions sit in each scope. A reminder on what the scopes, and key terms mean:
- <u>Net Zero</u>- A target of completely negating the amount of greenhouse gases produced by human activity, to be achieved by reducing emissions and implementing methods of absorbing carbon dioxide from the atmosphere.
- <u>CO2e</u>- The 'currency' for net zero- allowing all greenhouse gases to be represented by one figure- based on the global warming potential of each gas.
- <u>Scope 1</u>- Direct emissions from the operation of our business e.g. transport
- <u>Scope 2</u>- Purchased energy- electricity and gas
- <u>Scope 3</u>- Emissions from our value chain- likely to be at least 80% of emissions. This calculation is initially based on cost and will be refined with more accurate activity data in the future.

A screenshot of the key dashboards is included as Appendix A. This data analysis has allowed us to identify the top emissions sources with regards to our direct operations and suppliers, group-wide.

<u>Next steps and timeline:</u>
- Set targets- long term overall net zero target, and shorter term targets per scope and business unit. Scope 1 and 2 are the easiest to control and as such will have shorter term goals.
- Scope 3- engage with top suppliers to gain more granular data and refine carbon footprint calculations.
- Roadmap/Strategy document will detail our journey and how we will reach the targets we set- document likely completed by March 2023 (to be internally and externally sharable).
- Annual report to update on progress.
- Eventually, Normative will assist us in selecting verified carbon offset programmes.

Office Upgrade to Mugs and Glasses

The paper cups at Regents Wharf have been successfully replaced with mugs and glasses.

Key environmental statistics:
- You only need to use a ceramic mug 18 times to break even with a paper cup in terms of water use, energy and waste (i.e. from the production process). Each use after that means more environmental savings, and less waste.
- If you were to save a cup a day for 40 years you would save 24 trees. SO if 40 of us save 1 cup a day for 1 year, that's 24 trees…
- For every paper cup you use, you create a carbon footprint equivalent to 60.9 grams of carbon dioxide. CO2 (among other things) is a primary contributor to climate change. So, removing these will also contribute to our carbon footprint reductions.
- A study in the UK showed that: The carbon footprint of paper cups in the UK is equivalent to over 52,000 tonnes of carbon dioxide, similar to what 33,300 cars produce in a year.'

2022 Environmental Documentation

Updated documents:
- Project Environment Plan- To be completed on all projects where we are PC and where the project value exceeds £200,000. Documents site specific environmental considerations.
- Site Specific Aspects and Impacts Register- Appended to the above plan, serves as an opportunity to highlight potential environmental impacts and identify control measures that will be in place throughout the project. Together, these documents ensure the key environmental risks are minimised and are an important part of maintaining our ISO14001 certification.

New Documents:
- Environmental Risk Assessment- To be completed when an in depth environmental risk assessment is required, including detail such as the site geology, hydrology and potential contamination sources.
  - This has been utilised at Stevenage to close out a concern raised during the ISO audit regarding the potential for spills to impact the drainage channel near the loading bay.

Green Alerts
In 2022, three environmental green alerts were issued, relating to the below topics:
- Waste Transfer Notes- detailed the context behind the need for a waste transfer note and the requirements for filling one in.
- FSC Timber- detailed the background to what legally sourced timber is, and what the evidence we are required to provide consists of.
- Environmental incident reporting and planning for emergencies- prompted by an environmental near miss (see below), detailing the correct procedure for planning for and responding to an environmental incident.

- LON02- score of 37/45 – 'Very Good'. Actions are in place to reach 'Excellent'- next visit is organised for February 2023.
- Likely to be requested more often as a part of BREEAM so can utilise trackers which have been created for LON02 and continue to gain good scores.
- Upcoming requirement at KAO LON06.

Environmental Incidents

In 2022, two environmental near misses have been recorded, as below:

- Stevenage- a minor leak from the hydraulic system on the main gate led to an approximate 500ml hydraulic oil spill on the concrete. A spill kit was used and disposed of correctly and a near miss report created. This prompted a green alert for proper response to this form of incident.
- LON02- a temporary plastic fuel container had been left balanced between a fuel tank and a walkway. This was removed and disposed of, the area fenced off and spill kits and drip trays put in place. A near miss report was created and closed out by these actions.

Going forwards, the reporting of environmental near misses and incidents is to be encouraged to gain more data.

HSEQ Targets and KPIs Summary

Environmental targets are recorded within the HSEQ strategy. Progress against targets is reviewed on a six-monthly basis. An update on each is below:

Target 1- Carbon Emissions: Lower overall carbon footprint of operations and office by 30% by 2025- based on a 2019 baseline (scope 1 and 2 emissions)

Target is in progress and exceeding goal.

Graph showing yearly calculated scope 1 and scope 2 emissions, demonstrating reduction:
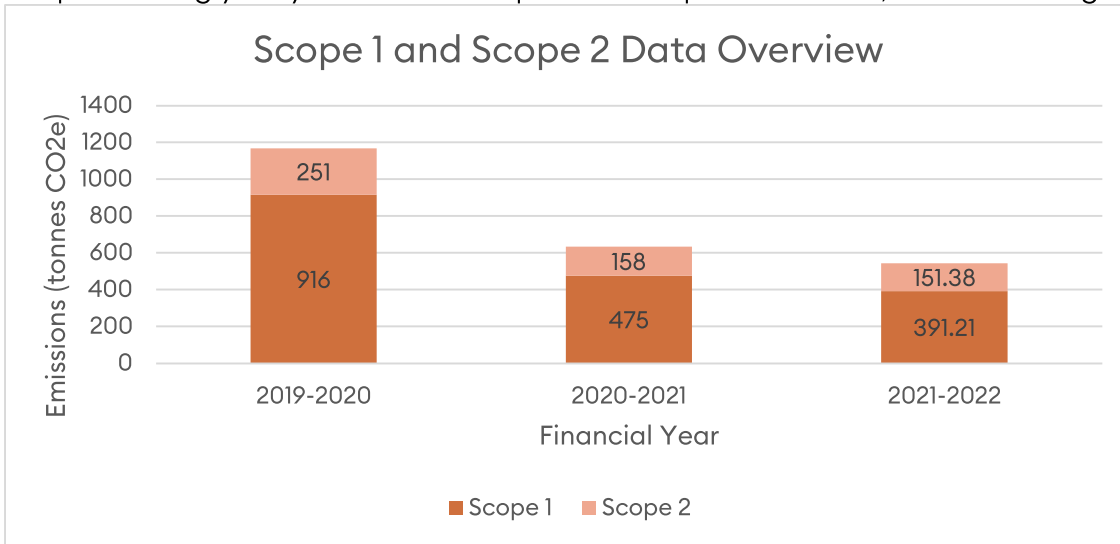

Table showing Scope 1 and Scope 2 data (in tonnes of CO2e) from baseline year (2019-2020) through to most recently available data (2021-2022).

	2019-2020	2020-2021	2021-2022
Scope 1	916	475	391
Scope 2	251	158	151
Total	1167	633	542.59

Since the baseline, there has been an overall drop of 54% in our combined scope 1&2 emissions. This drop has come from:
- BMS upgrades
- Lighting upgrade
- Fleet upgrade and replacement
- Reduction of mileage due to remote service availability

This target will link in with our net zero strategy where we will continue to reduce scope 1 and scope 2 emissions. Strategy to be released early in 2023 with information on new targets.

Target 2- Fleet: Lower the carbon emissions of the fleet- 70% of vehicles in the fleet to be electric or hybrid by 2030, 5% of fleet to be electric or hybrid by end of 2023.

Target is in progress, currently exceeding goal.

The table below shows the current split of all vehicles by vehicle type and operating business (inclusive of company cars and fleet vehicles, excluding grey fleet):

(Company car = used for both company and private use. Fleet Vehicle = company use only e.g. vans).

		Total	GBL	GBSM	GBCEL	GBSS	GBG
Number	**Diesel**	61	19	11	21	1	9
	Petrol	47	6	30	1	3	6
	Hybrid	10	2	6	2	0	0
	Total No	118	27	47	24	4	15
Percentage (Rounded to Whole Number)	**Diesel**	52	70	23	88	25	60
	Petrol	40	22	64	4	75	40
	Hybrid	8	7	13	8	0	0

Currently, hybrids make up 8% of our total vehicles, with GBSM leading the way. This is ahead of the '5% by 2023' target.

The split between fleet vehicles and company cars separately is below (expressed as a percentage):

		Company Cars	Fleet Vehicles
Percentage	**Diesel**	20%	84%
	Petrol	63%	16%
	Hybrid	17%	0%
		100%	100%

To address the lack of hybrid / electric cars in the fleet vehicles category:
- Two electric vans- Vauxhall Vivaro-e have been ordered for GBCEL (early 2023 expected delivery date). These will be rolled out to those engineers who have required space for an at-home charger, and who do an appropriate number of miles. Following feedback, further vans will be ordered.
- Where electric vans are successful or vans with higher range available are developed, these will be tested and bought in for GBL.
- GBSS have got two plug in hybrids on order- fleet vehicles in GBSM and GBSS will continue to be replaced with hybrids when current fleet comes to the end of its current use cycle.

To continue to improve the percentage of hybrid/electric cars in the company cars category:

- We have changed the vehicle procurement policy from 2% Co2 reduction upon change of vehicle to 5%, which encourages hybrids and electric vehicles to be chosen and this has led to 10 of the 60 company cars being hybrids. This policy is in review in early 2023 to ensure continued CO2 reductions.
- As more company cars are renewed this is expected to increase.

We can in the future consider using HVO fuel and hydrogen- see sections 5&6.

Target 3- Recycling: Improve the recycle rate at Head Office-Increase recycle rate to 80% by end 2021

Target is in progress and behind goal.

Table showing the monthly percentage of waste recycled from waste collections across offices:

	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22
London	37	51	43	42	64	42	42	56	57	44	40	28
Chelmsford	34	20	23	36	22	33	28	32	35	43	39	35
Stevenage	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	50	50	50
Belfast	35	63	52	35	49	49	No Data	66	49	49	50	50
Worthing	0	0	0	0	0	0	0	0	0	0	36	11
Warrington	29	11	25	7	29	10	12	25	6	8	12	14
Average	27	29	29	24	33	27	21	36	29	32	38	31

Across all offices, our recycling % has stayed relatively consistent across the year, with a slight increase in the overall average percentage. There is the largest data variation in achieved recycling at Warrington, this is likely due to a huge difference in the total amount of waste produced by the office over the year (varies between 22kg to 138kg).

The highest average across all offices was in October 2022, when the Recycle Week campaign occurred. There is a correlation between the increased number of awareness materials and the improved recycling number. A recycling bin was also introduced at Worthing in October 2022, where previously only general waste was collected.

In order to consistently increase recycling, we can improve segregation of waste and reduce contamination of recycling (i.e. make sure ONLY recyclable materials end up in the recycling bin). We can also remove non-recyclable items from the office (e.g. paper cups- food containers).

Awareness campaigns and a review of the bins/waste streams/materials available will be completed to address this throughout 2023.

Target 4- Inspections- Increase environmental inspections and audits- Scored site visits to be carried out monthly.

Target is in progress and achieving goal.

The table below shows the number of inspections carried out on sites, split by business unit, and at the Gratte Brothers offices during 2022 (from March onwards as AK started with GB at end of Feb).

Operating Business	Number of Inspections
Group (Offices)	5
GBL	21
GBSM	2
GBSS	1
GBCEL	1

The most common topics in which findings are raised are:
- Completion of documentation- i.e. Project Environment Plan and Aspects and Impacts Register- though generally now this is completed during a kick off meeting with AK on first visit to new project.
- Environmental incident planning- including communication of spillage incident response plan (Gratte Form 6302) and spill kits being present near higher risk areas such as chemical storage or refuelling.
- Waste Transfer Note copies on site / accessible from site for collections of waste by contractors.
- Environmental training- including SEATS training (see below), and regular relevant environmental toolbox talks.
- Hazardous waste storage separate to other waste storage and in appropriate bins.
- Environmental data collection on site- e.g. miles travelled. Although this is something that can be improved across the group and will go hand in hand with digitisation.

Target 5- Training- Improve environmental behaviours of operatives working on Gratte projects- All supervisors to have SEATS training by 2023

Target is in progress and behind goal.

Approximately 20% of site managers have had SEATS training at various points in the last 5 years.
SEATS training is being organised by HR to include site-based manager staff, within the next year. AK and JM are looking into the options for refresher training initial training has been completed- it is possible an internal training scheme could be more beneficial within the 5 years that SEATS lasts for. Renewal will be required for the majority after 5 years due to site / client requirements.

2023 Focus for Gratte Brothers

Continued work towards HSEQ strategy targets surrounding key themes (see section 3).

- Net Zero Journey- Set net zero targets, both in the long term and shorter term to guide us forward. Produce a net zero strategy document which can be shared internally and externally. On an annual basis, review progress and produce annual report along with financial reporting.
- Embodied Carbon- Understanding the impact of our material choices on the embodied carbon of a final build. Links with sustainable procurement below and will require us to ask for carbon calculation information from suppliers, in the form of environmental product declarations or other. There are databases which allow us to start making these calculations and improving understanding.
- Sustainable Procurement- Throughout the group, we can improve on how much we take sustainability into consideration when procuring both goods and services. A review of what we ask for with regards to sustainability when looking at new suppliers will be undertaken, with recommendations for what we should add to this process. This goes hand in hand with our net zero strategy where we are going to need to engage with our supply chain to reduce scope 3 emissions. This also gives suppliers the opportunity to showcase any innovative solutions.
- Environmental benefits of pre-fabrication. The key to understanding this will be to gather data regarding waste on sites of a similar size, where we are/are not using pre-fabrication. Data will relate to waste, deliveries (with regards to emissions) and energy efficiency. Waste data is already being collected, methods to collect the remaining data to be developed and the comparisons to be made.
- Recycling- Continue to improve in offices. Focus on improving awareness on site, segregating waste streams and tracking waste production to identify any areas where improvements are required.
- Environmental incident reporting- To be encouraged to improve numbers of near misses and understand where areas of improvement are. Green alerts to be produced and shared with sites for any regularly occurring areas.
- Social Value- Closely linked with environment and sustainability, the measurement of a company's social value is becoming more important and coming up in more conversations. Social value impact can be measured as a financial value- e.g. volunteering hours are converted into a monetary value, so we easily compare and promote our social impact along with other factors. This will be linked with the CSR strategy development.

Relevant Sustainability Trends / Future Items to Consider

- <u>Embodied carbon</u> and decarbonising buildings- understanding the full embodied carbon value of a project is only going to become more important and we will have to input data regarding material quantities and carbon values. We can help my making choices regarding materials with lower embodied carbon values.
- <u>Renewable energy</u>, cost of energy and living- promoting lower energy choices has the joint benefit of improving a client's 'green' credentials and allowing them to reduce their energy costs. Wherever we can help make these energy reductions, we should promote them with this joint benefit.
- <u>Hydrogen fuel</u>- can be produced using clean energy to split essentially inexhaustible water molecules, producing only oxygen as a by-product, so making it a good fuel option with regards to emissions. However, 96 per cent of hydrogen today is made directly from fossil fuels- using a process that releases carbon dioxide. With the continued development of green hydrogen (produced using renewable energy), in the next 5 years we can start to think about hydrogen fuel for our fleet and on site.
- <u>HVO fuel</u>- regularly known as biofuel- made from vegetable oils, grease waste, and residues from the agriculture and food industry. This is a completely renewable diesel alternative and considered a 'drop-in' alternative, requiring no upgrades to fleet engines. As the infrastructure improves and cost falls, we can consider this to help reduce the emissions of our fleet vehicles.
- <u>Biodiversity</u> - link to carbon reductions and social value. Our sites are rarely greenfield, and therefore present little opportunity for nature improvements. However, we can bring this into our net zero strategy, as improving biodiversity has the joint impact of removing carbon from the atmosphere, and it is important to look for solutions with multiple benefits. The more we can improve biodiversity at our own buildings and sites, the better.
- <u>Mandatory Reporting</u>- with regards to emissions reporting, more data is going to be required to be included, including scope 3. Business risks and opportunities with regards to sustainability will eventually also be required to be stated. Exact dates for compliance are yet to be stated but likely to be in the next few years.
- <u>STEM</u>- encouraging careers opportunities- as a company we could get involved with STEM events to encourage careers in construction- engineering and environmental.
- <u>Green Finance</u>- investment requirements mean that there is rarely going to be a build without a strong sustainability focus- which means more BREEAM requirements and data gathering.
- <u>Digitisation</u> as a method to reduce environmental impact.
- Potential <u>emerging industries</u> in the sustainability space such as vertical farming.