

An aerial photograph of a dense evergreen forest, showing a vast expanse of green trees from above. The canopy is thick and textured, with varying shades of green. The title text is overlaid in the upper left quadrant.

Environmental, Social & Governance Report **2023**

GRAHAM & BROWN

EST. 1946

We are a CARBON NEUTRAL BUSINESS

2022 was a landmark year in Graham & Brown's history as we became a Carbon Neutral Business.



A Carbon Neutral Business

PICTURED: Crane The Renaissance of Venus Bespoke Mural from the TATE collection – made to order in our digital factory with renewable energy on sustainably sourced paper



How did we get here?

A YEAR IN REVIEW

Our sustainability group first met in 2019. A diverse team from across our business, across geographical boundaries, gender, age and functional responsibilities came together to discuss how we could improve our impact on the environment. We had already done a lot ... but there were still big challenges ahead.

We were very motivated to make a difference and understand how could we improve further? The first thing we had to do was understand our Scope 1 & 2 emissions. What was our direct carbon impact? Then take steps to reduce the number with the ultimate aim of getting to zero.

Culturally our team now think sustainability first. It empowers our most powerful resource, people, into taking small actions



that can build up to a big impact. Our stories are shared within the report.

We've made significant improvements. There are many challenges ahead to remove the need to offset, but we have managed our impact on the environment and now we're adding new chapters to our story.

29%

The amount switching to renewable energy removed from our carbon footprint.

16.8M

The estimated number of trees we are responsible for being planted this century.

43%

of the Graham & Brown branded range is produced in our Digital Eco Factory. (17% of all our wallpaper is made this way)

3

International sustainability projects that we have invested in so far.

FACTORY OF THE FUTURE

... the green machines

We have invested over £2m in 6 digital printers within our new digital factory, which is located next to our distribution centre. This also reduces short haul transportation between sites.

The printers all run on 100% renewable energy and require no gas in the drying process, unlike our conventional factory.

Print runs and stock holding can be reduced, no engraving of print cylinders and their associated carbon footprints are required and stock holding and waste is reduced significantly.

All the inks used are water-based and solvent free, and 100% of the paper is sustainable.



Runs on
100%
renewable
electricity

Murals
made to
order with
REDUCED
waste

ZERO
gas utilised
in drying
process

On the right track ...

OUR CARBON REDUCTION PLAN

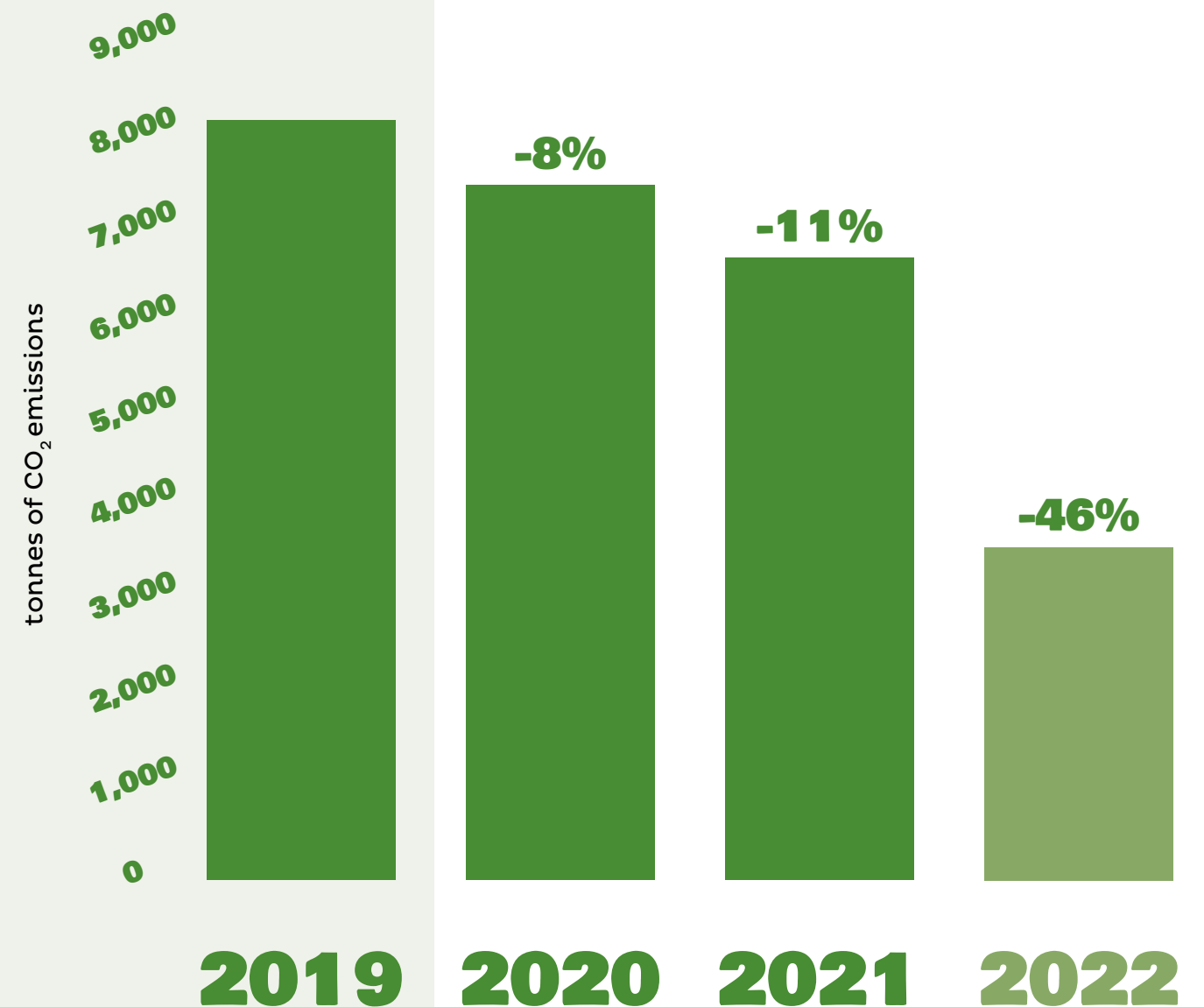
At the time of our last report we forecasted that our Greenhouse Gas (GHG) emissions for 2022 would be 5,747 tonnes of CO₂ which included any sourced wallpaper and our international businesses.

The benefit of moving to renewable energy, our digital factory and other initiatives are reflected in the reduction to a figure of 3,605 tCO₂ for the Group, plus 505 tCO₂ from outsourcing wallpaper, bringing the total for 2022 to 4,110 tCO₂. A fantastic effort by everyone.

We remain a large consumer of gas in the drying and incineration processes within our conventional factory. Green gas remains complicated and with a shortage in supply and infrastructure remains beyond our immediate access. We see offsetting to support key projects as better than doing nothing.

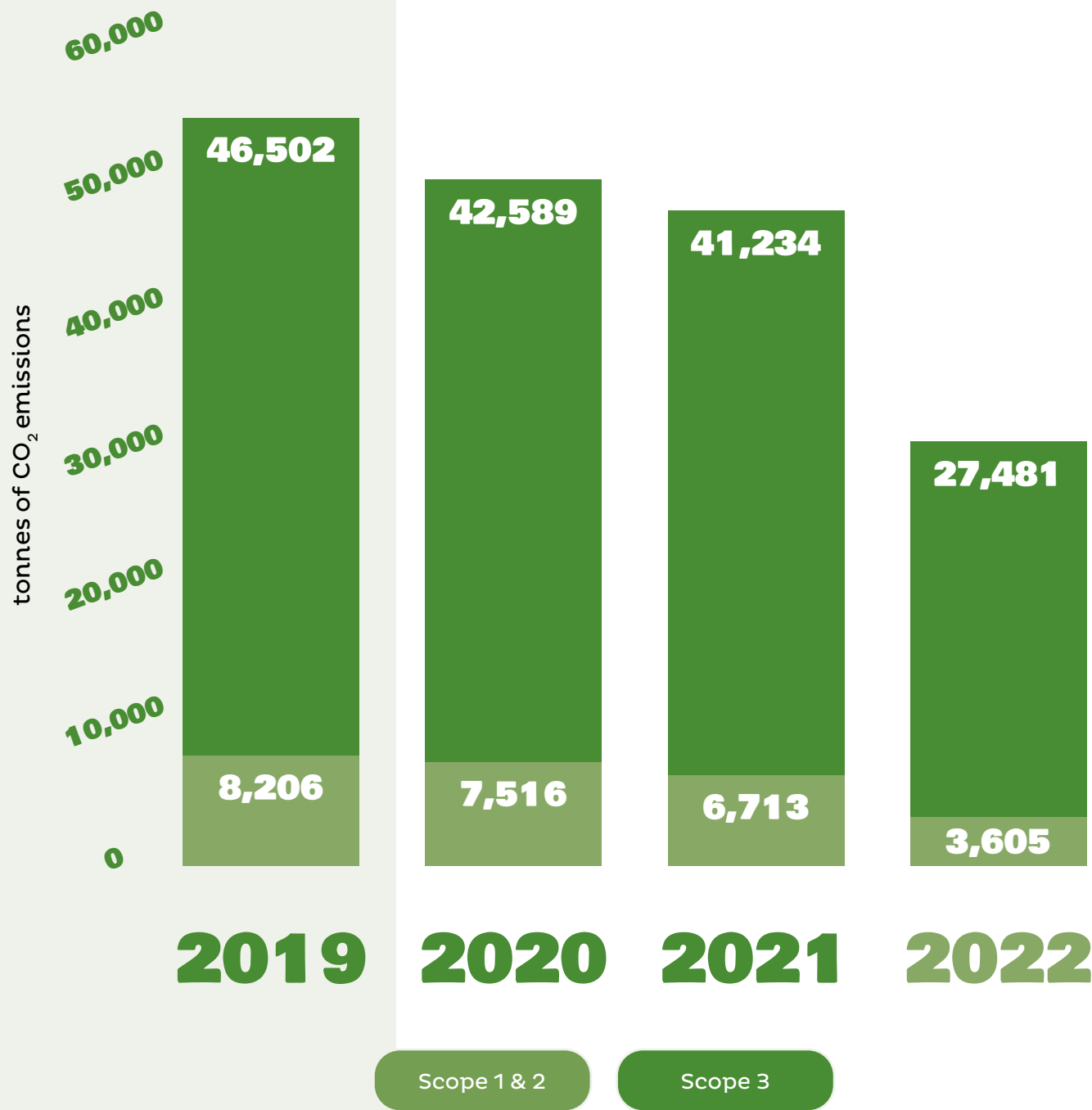
Our team meets monthly to address and review progress and we are two years into a decade long plan.

Scope 1 & 2 emission reduction



2019-20 data location based. 2021-22 data market based.

Scopes 1, 2 & 3 emission reduction



2019-20 data location based. 2021-22 data market based.
Scope 3 is estimated based on Scope 1 & 2

	tonnes of CO ₂ emissions			
	2019	2020	2021	2022
UK	7,374	7,068	6,525	3,419
Netherlands	155	138	116	147
CML	-	7	53	28
US	16	12	12	3
France	19	3	4	7
GBTC	642	287	5	2
Total of Scope 1 & 2	8,206	7,516	6,713	3,605
Estimated Scope 3	46,502	42,589	41,234	27,481

The Graham & Brown group is made up of Graham & Brown UK, N. Europe, S. Europe, North America and GB Technical Coatings. The company is primarily UK based with offices in France and office and distribution warehouses in the Netherlands and the USA.

In 2021, the overall emissions on a location basis decreased mainly as GBTC’s operations were consolidated into our UK factory site (India Mill) from a separate location. While on a market basis there was a greater decrease as the UK sites’ electricity supply switched to contracts backed by the REGO (Renewable Energy Guarantees of Origin) scheme. There were less travel restrictions in light of the Covid-19 pandemic as vaccination was widespread and so there was an increase in road travel compared to 2020. Carbon intensity has decreased as utilities de-carbonise.

With the general trend, the group is on track to meet a 78% reduction on Scope 1 & 2 emissions by 2035 compared to a base year of 2019, but the business aspiration is to do this sooner.

SCOPE 3

What is it and what can we do about it?

Scope 1 measures Greenhouse Gas (GHG) emissions that go directly into our business, our buildings, and our business travel. Scope 2 is indirect GHG associated with the production of electricity, gas, steam or cooling.

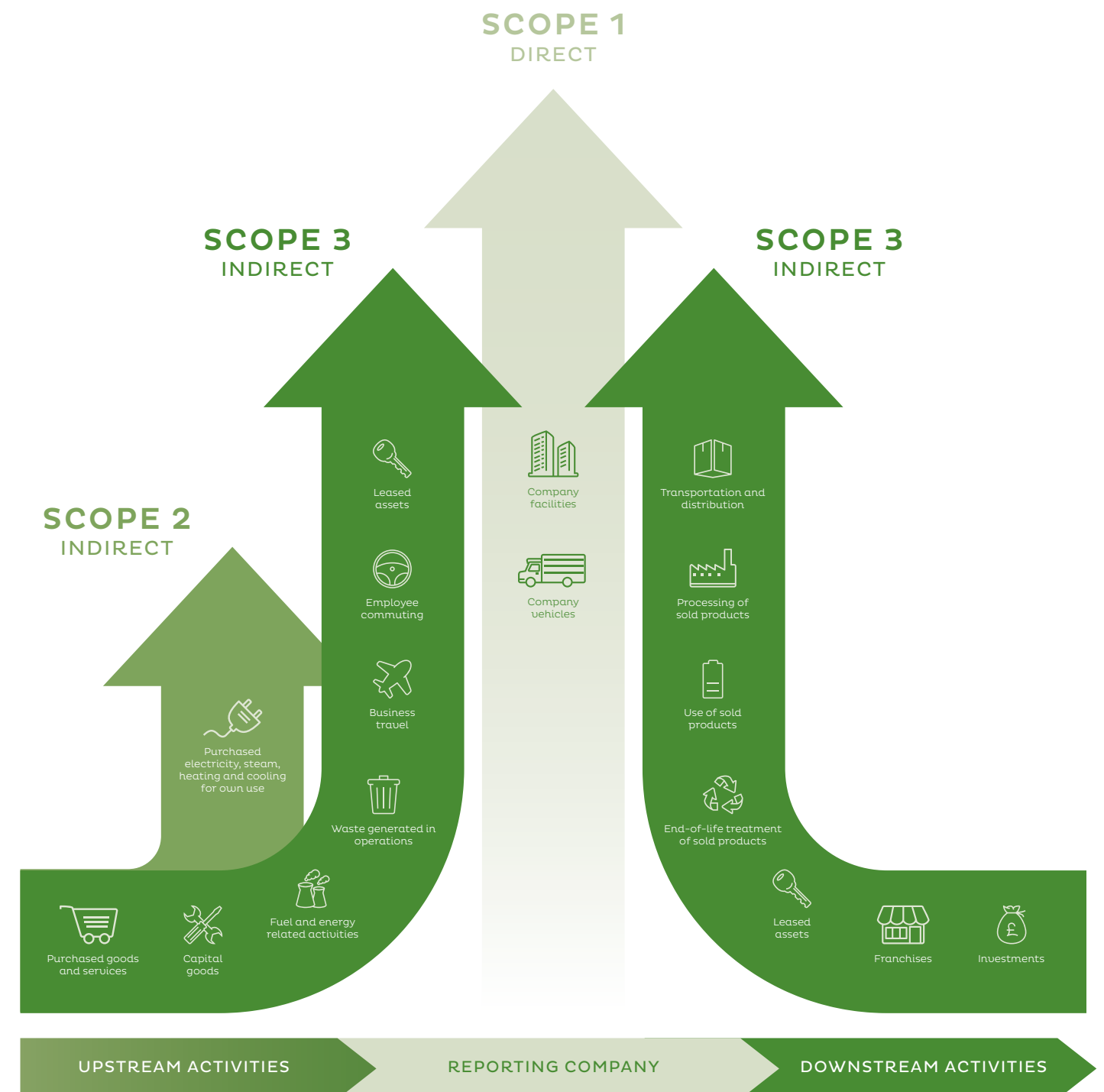
We have measured and tackled Scope 1 & 2 in our last report and this year we have estimated our Scope 3 GHG.

We estimate this to be 27,481 tonnes of CO₂ for 2022, as with most businesses this is 6 times greater than our direct emissions in Scope 1 & 2.

Of course, our Scope 3, is our supply chain's Scope 1 & 2 – so as our suppliers improve and take action on their Scope 1 & 2, our Scope 3 will in turn improve.

We have set about this by communicating with our network, sharing our learnings and understanding what they in turn are doing within their organisations. This forms part of our sourcing criteria.

It's a big challenge but if we are to make a difference all businesses have to work together to achieve this.



Progress Tracker

☒ Completed

☐ In progress

☐ Upcoming




Carbon Net
ZERO

OFFSETTING PROJECTS

Why do we offset?

Our commitment to improving the planet for ourselves and our children is demonstrable by the action that we have taken already. However, the majority of our remaining carbon footprint is down to the usage of gas in our 'analogue' factory to dry our inks and turn emissions into clean air.

Hydrogen is something we are investigating, but the infrastructure to deliver a consistent supply to a production unit doesn't currently exist. It could be a five to ten year lead time until it is commercially available.

Biogas created using sustainable organic matter that are available now are in short supply and consequently also only available at a significant premium. We don't believe

doing nothing is an option, and we need to buy some time because progress isn't made overnight, which is why we choose to offset.

We don't see this as avoiding the problem, but rather mitigating our output now, while we actively investigate ways to reduce our carbon emissions and reduce our need to offset in the medium term. 2023 will see us contribute to a further project in addition to our projects from last year.

We have also taken the decision not to proceed with the Graham & Brown Woodland within the UK. We would not see any offsetting benefits until 2036 and we are committed to getting to net zero much sooner than that.



**FOREST
CARBON**

Working with Forest Carbon, we are supporting conservation and sustainable forest creation projects that follow and are accredited by Verra standards. They also meet many if not all of the UNs 17 Sustainable Development Goals. These projects are certified under Verra VCS - the Verified Carbon Standard - and the credits are publicly listed on the Verra Registry to provide transparency. For more information about Forest Carbon, visit forestcarbon.co.uk



Rimba Raya Biodiversity reserve REDD+, Indonesia.

We are backing a project in Borneo which follows the UN backed REDD+ framework (see appendix).

Between 2001 and 2015 Indonesia lost 25.6M hectares of tree cover. Equivalent to losing 15 billion tonnes of carbon. With commercial pressures to fell forests, woodlands, and extract from peat swamps, conservation is an equally important part of protecting and enhancing the earth's existing carbon stocks.

The Rimba Raya project is based on the island of Borneo and preserves carbon-dense tropical peat swamp by halting the deforestation of roughly 47,000 hectares of forest (and the wildlife), much of which was originally intended for conversion

to palm oil. The project focuses both on the community development of the 2,500 households living in the area and biodiversity conservation, particularly the protection of the 105,000 endangered Borneo Orangutan. The project actively engages the community in food, security, income, healthcare, and education all through the support of carbon finance.

In addition to delivering on our emission reduction goals, the project is the first to have been validated by the SDVista to contribute to all 17 UN Sustainable Goals (UNSG).

We need international projects until the UK, and any potential European projects, achieve maturity.



Clean Water and Sanitation

By minimising the land use change the project is helping to prevent downstream flooding. Through local partnerships it is also training communities to manufacture and sell inexpensive water filtration devices, to provide clean drinking water.

Industry, Innovation and Infrastructure

The project is building news and radio communication facilities and community centres for the project staff and the local community.

Life on Land

Indonesia has the largest number of threatened mammal species in the world and the fourth largest total threatened flora and fauna species types. With GPS-linked mobile phones, data is collected during field surveys for biodiversity monitoring.



Decent Work and Economic Growth

Forestry is expected to employ more than twice as many people in the region as grazing and create conditions for investment downstream in sustainable timber industries.

Industry, Innovation and Infrastructure

The project will contribute to sustainable development in Uruguay with the increased and improved quality of employment, aid decentralisation and the preserved biodiversity and soil quality.

Life on Land

Although established on former grazing land there has not been displacement of grazing activity. Planting is planned and laid out to protect habitat connectivity.



Forestal el Arriero, Sustainable Forestry, Uruguay.

Amazingly only 33% of the world's timber comes from sustainable sources and whilst 100% of timber used in our paper is from sustainable sources, supporting projects further afield that manage forests sustainably are vital to protecting the worlds oldest forests.

Graham & Brown are supporting this project to convert land in the East of Uruguay that was previously under extensive grazing by beef cattle to high quality and high value timber production. Expected to be for long-lived products

and so ensuring continued carbon storage, trees are replanted after felling providing continuous rotation of carbon capture.

This project contributes to 13 of the 17 UN Sustainable Goals (UNSG).

We need international projects until UK and any potential European projects achieve maturity.





Methane Recovery, Princepeel Wilbertoord, Netherlands.

Agricultural operations have been shaping the landscape and the way of life in the Dutch Provinces of Limburg and North Brabant for several hundred years, a predominantly rural region known for pig farming. These areas are home to the majority of swine farms in Holland.

This concentration of livestock has already led to a situation in which the complete manure cannot be disposed of on fields in the region any more due to the reached nitrogen absorption limit of the soil. The over supply of manure means it must be transported to regions with soils still having a demand for fertilisers.

The main objective of the project activity is the technical production of biogas from pig manure, which would otherwise release uncontrolled methane emissions into the atmosphere during storage, as well as mitigate GHG emissions by replacing fossil fuels.

The biogas is used to generate kinetic energy that replaces diesel oil to power irrigation pumps with internal combustion engines, which will be modified to run on biogas. Additionally, renewable energy is produced to be fed into the local power grid.



Affordable and Clean Energy

Biogas from the excess manure is used to generate heat and electricity, which is used internally and fed into the local power grid.

Climate Action

The project helps to avoid the use of fossil fuels thus has a positive impact on CO₂ emissions in the region.

Life on Land

Project reduces environmental impacts such as Greenhouse Gas Emissions, odour nuisance and water/soil pollution typical in traditional outdoor manure storage and unprocessed application to fields.

SOCIAL RESPONSIBILITY

Looking out for others

Clearly the biggest issues facing us are global – but Graham & Brown has always acted locally in the community too, not just from an environmental point of view – we won our first environmental award in 1974 for clean waterways – but also in regard to the wellbeing of our colleagues, and the wider communities at our bases in Blackburn, UK, Middenmeer, Holland, Lille, France and New Jersey, USA.

In 2021, we raised **over £113K** through charitable activity

In 2021, we set out in our last report our ambition to raise £75,000 for 75 years in business. We are delighted to say we smashed this figure and our colleagues, friends and family raised an incredible £113,375.42. This was achieved from all

manner of events and activities from head shaving, to daredevil rope walks, sky dives, Zoomba and even brewing of a charity beer in France

Buoyed by the success of this, and the sense of fun and togetherness it inspired within Team G&B, the charity committee instead of disbanding decided to “go-again”. More great initiatives have taken place, including a walk across all the bowling clubs in the North West of the UK. We even teamed up with CoppaFeel! breast cancer awareness charity in International Wallpaper Week to raise awareness and funds for a great cause. Even Doris, our 1960s Morris Minor took a rest from her Design of the Year livery to don the limited edition CoppaFeel! Charity Wallpaper!



Our 2022 events raised a whopping **£62,000**

One of the beneficiaries of this is Blackburn Youth Zone. As head of a long standing and respected Blackburn based business, Andrew Graham MBE had been conscious for some time that he was in a special place to support the local community, many of whom suffered deprivation and social challenges. Businessman Bill Holroyd had launched a youth charity and persuaded Andrew to visit the Bolton branch to see the work that was going on.

“The visit had a massive impact on me,” says Andrew, who subsequently agreed to be the founding Chairman of the Blackburn Youth Zone. He worked tirelessly to get enough local business support to create an outstanding youth centre offering the best facilities. “This project is here for the long term.”

Today the youth zone supports over 1,000 young people a week and offers a range of after school activities for young people aged 5-19 years old, from boxing to art and dance. The youth zone delivers its services directly from facilities in Blackburn and now Darwen, extending its community reach across East Lancashire. It has also set up the first youth hub in the UK to help teenagers get into the job market with incredible success. This helps support the confidence, development and aspirations of all young people across our community.

Our 2022 charity events raised an amazing £62,000! We look forward to continuing our fundraising in 2023.



STRONG VALUES, HIGH STANDARDS

Our commitments

Inclusion & Diversity

At Graham & Brown our strength is our people and we are committed to building a culture of collaboration, diversity and inclusivity, knowing this will bring fulfilment, enjoyment and ultimately success for each of our colleagues and the organisation as a collective. We endeavour to attract, recruit, and promote a diverse group of skilled and talented colleagues, that is representative of our local community.

Our approach is set out within our Equal Opportunities Policy shared with all

colleagues. The Exec Team is split 75% male to 25% female. The wider leadership team is split 60% male to 40% female. No ethnic minority groups are currently represented within the leadership team.

We recognise under-representations in senior roles, however this takes time to change due to a low turnover of colleagues at this level. We operate a robust pay and grading system that ensures equal pay for equal work.

Health & Wellbeing

The health and wellbeing of colleagues is of the utmost importance. All colleagues have access to our occupational health doctor, occupational health nurse and counselling practitioner. All three have worked alongside us for many years and have a fantastic understanding of the support our colleagues require.

Colleagues have the opportunity to receive training as first aiders or mental health first aiders to support one another, with the role of menopause coaches being introduced in 2023.

Regular health and wellbeing initiatives are held offering support and educational opportunities, with possibilities to link to charity or social engagement, as outlined in the Social Responsibility section of this report.

We're also not afraid of trying something different, such as our Woof Wednesday



initiative, which tapped into the health and wellbeing benefits of furry friends visiting the office. Likewise, the 'Blue Space' monthly group sessions allow colleagues to build trust and share challenges, lightening the burden and supporting mental health and wellbeing.

All colleagues also have access to our cycle to work scheme, which supports the discounted purchase of bicycles.

Board Management

Graham & Brown is committed to creating an open and transparent leadership structure built on our collaborative culture.

Everyone's voice counts and all colleagues receive a monthly update on financial performance and progress against our business plan and budget at our Monthly Huddle, which is cascaded throughout the organisation. So that all colleagues feel empowered to support our vision.

Our directors meet monthly for a Board Meeting, at which we review our Health & Safety report and Financial performance along with an update on key projects to support our company vision and purpose.

Our purpose is to help customers create loving homes.

The directors meet weekly at an Exec Huddle to update each other on key actions and create an open culture, other members of the leadership team join this meeting to update and input on key



projects and the full leadership team of directors, heads of and country leaders meet monthly for updates and twice yearly for a global leadership retreat to shape our vision for the future.

Wherever possible we look to build a succession plan with home grown talent and have people development training programs to support this. Of our current leadership team of 12 colleagues, over half are home grown. Where internal succession is not possible we go to market to recruit the best leadership talent with an emphasis on attitude and culture, supported by technical capabilities.

Responsible Investment

Our long term strategy is to generate profit and cash flow to fund future investment. We have an excellent, open and long term relationship with our bank and share monthly management accounts, yearly budgets and our long term vision.

The shareholders are all family members of the Graham family and have been connected with the business for over 50 years and encourage long term investment and vision. This has enabled us to grow from humble beginnings, 76 years ago to a leading player in our industry.

The company is supported with a strong balance sheet and owns significant property assets in the UK within the group.

Financial Crime & Corruption

Graham & Brown is committed to ensuring that we have robust systems, processes and controls in place to minimise the risk of fraud and financial irregularity. Changes to systems and processes are well documented and thoroughly tested prior to launch. Where possible multiple levels of authorisation are adopted.

In the rare event of gifts being made to colleagues, we collect centrally and re-distribute for charity. All hospitality offers must be reviewed and authorised by the Human Resources team.

Sourcing

We are committed to responsible and sustainable sourcing. Where relevant we request the use of sustainably sourced products with our suppliers, and many of our key suppliers hold the relevant certifications (PEFC, etc).

Our investment in digital printing technology powered by renewable energy shows our commitment to more direct forms of sustainable sourcing. We continue to investigate ways to build on this and are currently looking into solar power.

We are committed to not investing, directly or indirectly, with companies with questionable ethical practices. All of our suppliers from China are SEDEX (Supplier Ethical Data Exchange) approved. We operate a policy of due diligence, risk assessment, and measuring effectiveness in the eradication of modern slavery and human trafficking.



In addition to our own auditing procedures, we regularly undergo a 2-Pillar Sedex Members Ethical Trade Audit (SMETA) within our own business.

Furthermore, all of our suppliers have confirmed they don't use Russian sourced materials.

Cybersecurity & Data Protection

Cybersecurity risk remains one of the biggest challenges faced by business as the world transitions digitally. Graham & Brown continue to develop and learn through third party experts and also invests heavily to ensure we utilise the optimal tools and techniques available to us.

Our objective is to avoid an attack but have a business continuity plan in place to protect the business in the event of an issue. This has been tested and proven.

We are continuing to train IT colleagues in this extensive area and regularly enjoy peer group learning to expand knowledge. We comply with legislation and in the event of an issue would report to the ICO in line with current timescales and processes.



Passionate about improving the wellbeing of our colleagues



Cybersecurity measures are tested and developed frequently



Committed to eradicating Modern Slavery & Human Trafficking



25

small ways we're making a big difference

As a business we have empowered our greatest resource, our people, to think sustainability first, knowing that even the smallest of actions when combined can have a big impact.

Throughout the following pages we have highlighted some of these decisions ...

PICTURED: Alcazar Forrest, Coppice Forrest and Fable Forrest wallpapers – all produced in our digital factory with renewable energy on sustainably sourced paper



1 Renewable Electricity

A **29%** reduction in our Scope 2 carbon emissions

The UK arm of our business moved to renewable electricity at the end of 2021. We have seen the benefits of this decision in this year's figures. Renewable electricity made a 29% reduction in our carbon emissions in Scope 2. A short story with a massive long-term benefit. Our digital factory uses 100% renewable energy.



2 Electric Cars

8 on-site charging points,
3 fully electric vehicles

We have installed 8 charging points in the UK to go with the multiple charging points in our European hub. A petrol pool car for which the lease expired has been replaced by our first all electric car. There are now 3 fully electric vehicles in our fleet, and our policy is to replace all expiring contracts for company cars with fully electric cars. Our shuttle van used between sites is now a plug-in hybrid vehicle.



3 Clean Air Emissions

Emissions cleaner than the outside air!

Our wallpaper uses water-based ink. Ink is of course wet, so it needs to dry before it can be rolled and wrapped. Sixty years ago, this would have involved hanging the wallpaper to dry on what were known as festoons. A slow, costly and laborious process.

Now we use ovens to cure and dry the product and burn off any emissions in the process. The heat from incinerating waste gases back to clean air is recycled through the production process, making our factory more energy efficient.

Only clean air is released into the atmosphere.

We recognise that this is an area that will be key to reducing our energy consumption and carbon emissions over the next decade and have begun several ambitious improvement projects.

It does mean that today our emissions are cleaner than the outside air!

A large warehouse interior with high ceilings and industrial lighting. In the foreground, a red Toyota forklift is being operated by a person. The warehouse is filled with tall stacks of large rolls of paper, some standing upright and others lying flat. The floor is marked with yellow lines.

4 Sustainable Paper

Over **16.8M** trees planted this century

Our paper literally grows on trees. We have been using sustainable paper for nearly three decades. We use around 6,000 tonnes of paper each year. That is a lot of trees, but all our paper pulp comes from sustainably managed forests.

It takes an average of 24 trees to make a tonne of paper, and from that we can make 1,300 rolls of wallpaper. We've made over 300 million rolls of wallpaper this century. Which means we've used 5.6 million trees in production since 2000. For every tree we use three more are planted, which means we have planted 16.8m this century.

5 Forklift Batteries

Forklift truck emissions slashed by **21%**

We have begun the journey to move all our forklift trucks from Lead-Acid to Lithium-Ion battery powered trucks. This reduces the carbon emissions of the trucks by 21%. So far we have transitioned 22 of our 35 forklift trucks and expect it to take a further two years to update our full fleet.

6 Transport by Road

2 TONNES of CO₂ saved by our logistics partners

The overwhelming majority of our retailer goods are shipped by road from our main warehouse, accounting for around 95% of our dispatch. We work with logistic partners who have carbon reduction at the heart of their plans.

DPD delivered 7,385 of our orders with all-electric vehicles in 2021, saving 2 tonnes of CO₂. We expect that figure to significantly increase when their data for 2022 is received.

DPD have plans to deliver by all-electric vehicles to 30 towns and cities in the UK by the end of 2023, and now have 1,500 all-electric delivery vehicles. These will eventually have an impact on our Scope 3 emissions.

7 International Trade

27% of our airfreight shipments are Carbon Neutral

International trade accounts for around 50% of our total business, yet despite this only 3% of product produced by Graham & Brown is distributed via airfreight. This is an area we continue to monitor and improve.

In our direct to consumer logistics (we deliver worldwide) market segment air transportation is 3.5% of the mix, with 27% of those deliveries going via DHL Express GoGreen Carbon Neutral Shipping. Our aim is to improve on that in 2023.



8 Cantastic

Our paint cans are **100%** recyclable once cleaned

All our paint tins are completely recyclable once they have been cleaned. They are made from steel which is the most recycled material in the world. As it has magnetic properties it can easily be recovered from all efficient waste streams. Recycling obviously saves resources and reduces CO₂ emissions. Steel is a permanent material and can be infinitely recycled without any loss of quality.

The plastic paint cans we use on our Superfresco EASY branded paint are made from a minimum 30% recycled plastic.

9 Boxing Clever

30% sustainably sourced,
100% good

100% of our cardboard packaging is made from recycled or managed sources. Each carton is made from a minimum 70% recycled card and 30% sustainably sourced pulp – so it is 100% Good.

10 Recycled Bags

100% recyclable bags to protect from spillage

Since our last report we have introduced recycled bags for use when dispatching our paint. These bags can also go in the plastic recycling. Our paint goes into cardboard outer but we feel it best to put it in a bag in case of any spillages in transit to ensure our paint ends up where it belongs – on ceilings, walls, doors, and woodwork.



11

Pallets

100% of pallets recycled through supply chain

100% of all pallets are recycled within the G&B supply chain or collected for recycling if damaged.

Furthermore, we've now got 80% of our pallets through our UK main warehouse using IPP – a pallet pooling system. The pallets themselves are made from sustainable wood sources (FSC, PEFC certified). The pallets are maintained for a ten-year lifespan – where once depreciated they will return as biomass to nature closing the circular loop.

12

Pallet Wrap

11% reduction in pallet wrap consumption

In 2022 we reduced our pallet wrap consumption by 11%, with a mission to reduce it further in 2022. To achieve this we simply reduced the film width and thus the overlap of the wrap. A simple idea well executed.

100% of all cardboard and pallet shrink wrap is made from recycled materials.



13

Eco Poly-wrap

We continue to seek a sustainable solution

We are still investigating ways to improve the shrink wrap on our wallpaper. In 2005 we launched our first ECO wallpaper, it was printed with water-based inks on sustainable paper and featured a corn starch wrap that would biodegrade as compost. Unfortunately, it tended to biodegrade on the shelf. Our search for a solution continues.



14

Reduced Packaging

100% recyclable card –
100% reusable tote bag

When we launched our bed linen in September 2022 we worked hard to ensure that we could be as sustainable as possible. So each duvet cover and pillow set comes in a fabric reusable tote bag, with small belly band made out of FSC® certified cardboard. To ensure cleanliness in transit the product is put in a recycled plastic bag that can be recycled in the plastic waste.



15

The Cotton Club

Sustainably and ethically
sourced cotton

Our bedding range uses BCI sourced cotton. The Better Cotton Initiative (BCI), is the largest cotton sustainability programme in the world, ensuring cotton is ethically and sustainably sourced. This is done by ensuring cotton is produced with three key pillars of sustainability in mind: environmental, social, and economic.

16 Compressing Our Waste

We have invested in a machine that will reduce our plastic and cardboard waste by compressing it into bales. This reduces the waste collection frequency, and less miles driven by trucks from our waste collecting company.

17 Shredded Wallpaper

We try to print as much perfect product as possible but there is waste involved in the set up process. Rather than sending this waste to landfill the paper is sent to a partner who shreds it to be used in as padding in brown paper bags and other packing materials.

18 Recycled PVC Traffic Cones

PVC is important to creating the durable textured product within our group product offer. Our waste plastisol is recycled and turned into traffic cones which help create safer roads and working environments.

19 Working to Recycle Old Wallpaper

We remain committed to finding a solution

When wallpaper is hung, it comes into contact with water, in the form of the paste, glues and the adhesives used to hang it. It therefore must be constructed in such a way that it doesn't dissolve when in contact with water. This is known as "Wet Strength". This allows the wallpaper to be hung easily and has durability properties once in place that a customer would expect.

Unfortunately, these very properties obstruct the recycling of waste wallpaper. Paper recycling relies on the paper being completely water soluble to break it down to pulp. Just the opposite of how wallpaper is designed to perform. Add to that, that wallpaper removed from the wall can have plaster remnants or may have been painted which further complicates things.

Much more work is needed to make it kerb-side recyclable – we recognise the industry needs to tackle this but we require a lot of assistance.



20 Colourants and Inks Recycled

Inks recycled for **ZERO** waste and less energy used in the drying process

In our conventional production, there is a need to produce large tubs of ink in order to print thousands of rolls of wallpaper. Whilst our colour dispensers are extremely accurate, any inks left over at the end of the process are now able to be recycled and used again meaning zero waste. Our new digital factory uses “toners” and adds water which means less energy is used in the drying process.



21 Just the Right Amount

Ultrasound technology makes coatings safer and less wasteful

Paper coming into the mill often needs to be coated to improve the performance of the surface for print and product durability. The layer of the coating is measured in microns (thousandths of a millimetre). This was previously done with lasers, which had a radioactive element. Graham & Brown have invested in ultrasound measuring technology that is even more accurate, reduces waste, and is safer to work with.

22 Green Science

Environment first mindset

Our Research & Development teams are constantly looking at the make-up of our products to find the best materials to use, whilst our engineering team are constantly looking for efficiencies and the application of new technologies. This takes time.

Some technology that will help us isn't ready to introduce to manufacturing right now, some solutions are not currently commercially viable, and many other things that could help are merely conceptual ideas at this time that we are investigating.



23 Stock Management

Efficient stock management means less wasted resource

Avoiding waste by improving processes, means we can manage our stock efficiently. We have a hi-tech forecasting system and manage our print runs as effectively as we can.

Making just enough at the right times means less wasted resources.

24 Made to Measure

Made to order ranges reduce stock holding and resource

Our curtain and blind products are made to order. This again reduces stock holding while giving the consumer much more choice and means less resources are used.



25 Paint What You Need

Mountains of choice, not mountains of stock

The majority our paint is made to order. This allows us to have a perfectly partnered palette of over 400 colours that match our wallpapers, without holding thousands of litres of stock of each colour that could go out of fashion, and therefore go to waste.

This technique means we can refresh the palette with the colours our customers want. Our Graham & Brown paint tins are 100% recyclable, and our paints are all water based and ultra low VOC.

APPENDIX

Definitions

Net Zero

The exact definition of net zero is still being debated, but is more challenging than carbon neutrality. Generally, it is accepted that to claim Net Zero you must work towards an approved framework i.e. Paris Agreement. You must consider the whole Value chain emissions (Scope 1, 2 & 3) Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organisation (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.

Although scope 2 emissions physically occur at the facility where they are generated, they are accounted for in an organisation's GHG inventory because they are a result of the organisation's energy use.

Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain.

Scope 3 emissions include all sources not within an organisation's scope 1 and 2 boundary. The scope 3 emissions for one organisation are the scope 1 and 2 emissions of another organisation.

Greenhouse Gases (GHG)

These include Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF₆).

Carbon Dioxide (CO₂)

Carbon is short hand for measuring Green house gases (GHG) and is used as Carbon Dioxide is the main contributor to GHG.

Zero Carbon

The dictionary definition of zero carbon is “causing or resulting in no release of carbon dioxide into the atmosphere”.

Carbon Neutral

The term ‘carbon neutral’ is widely used to describe where emissions from a company, product or service are matched with carbon reductions or removals elsewhere, usually via the purchase of carbon credits (‘carbon offsetting’).

VOC

Volatile Organic Compound

One of a number of chemicals, including benzene and acetone, that evaporate or vaporise readily and can be harmful to human health and the environment.

PVC

Polyvinyl Chloride

PVC is oil derived, which is of course a fossil fuel with large amount of energy used in its extraction.

Phthalate Free pronounced *Thigh-late*

Phthalates are used in vinyl wallcoverings. When consumed Phthalates have been found to be carcinogenic and have been used in the production of lipstick and plastic bottles. All phthalates were removed from all of our products in 2019.

SECR

Streamline Energy and Carbon Reporting

UK Government legislation requiring businesses with a turnover of £30m or employing 250 people to report on their carbon footprint.

REDD+

Reducing Emissions from Deforestation and Forest Degradation

REDD+ is a united Nations-backed framework that aims to curb climate change by stopping the destruction of forests. The ‘+’ signifies the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

REGO

Renewable Energy Guarantees of Origin

The Renewable Energy Guarantees of Origin (REGO) scheme provides transparency to consumers about the proportion of electricity that suppliers source from renewable generation.

FSC®

The Forest Stewardship Council®

The Forest Stewardship Council® is an international nongovernmental organisation that promotes environmentally appropriate, socially beneficial, and economically viable management of the world's forests. To learn more, visit www.fsc.org

SEDEX

Supplier Ethical Data Exchange

Sedex is a not-for-profit organisation that aims to improve ethical and responsible business practices in global supply chains. The online system allows suppliers to maintain data on ethical & responsible practices and allows them to share data with their customers.

Legally our manufacturing is a low risk to the environment.

We comply fully the UK's “Pollution Protections and Control Act 1999” and “Environment Permitting Regulations of 2016” and as such are recognised as a low-risk impact on the environment.

We are actually 25% under the threshold target* (*Target is to have a score below 40, we score at 30).

What is renewable energy?

Renewable energy is made from resources that nature will replace, like wind, water, and sunshine.

Renewable energy is also called “clean energy” or “green power” because it does not pollute the air or the water. It does NOT include electricity from nuclear sources.

We use less than
0.0024%
of the world’s PVC*

We are currently looking for bio-sourced ethylene as an alternative to oil. This will reduce crude oil dependency by 47% in the manufacture of our plastisols.

Is PVC good or bad?*

We use plastisol's (PVC – Poly vinyl chloride) in our Superfresco and Boutique Heavyweight vinyl products. It is the best material for producing hard wearing, textured, paintable and durable wallcoverings.

Products our customers love for these very reasons. It also uses a lot less energy than other alternative materials. Our R&D team continues to develop innovations in this area. We removed Phthalates from our wallcoverings in 2019.

*Based on a estimated world PVC usage in 2022 of 55,715,000 tonnes.
(Source:Statista 2021)

Carbon Credit Management

	Project	Purchase Credits (tCO ₂)	Retired Credits (tCO ₂)	Balance
2021	Project Purchases	6,000		6,000
2022	Sourced Wallpaper GHG		112	
	G&B Group GHG		3,605	
	G&B Europe Sourced Wallpaper GHG		383	
			4,110	1,890
2023	Purchase of Credits for 2023	2,220		4,110



Graham & Brown account code with Verra is 3587



UNSG Development

UN Sustainable Goals

These are the 17 sustainable development goals to transform our world.

sdgs.un.org



Graham & Brown account code with Verra is **3587**

verra.org



Graham & Brown are working with Forest Carbon for advice and sourcing of international carbon offsetting projects.

woodlandcarboncode.org

forestcarbon.co.uk



Graham & Brown are working with BusinessWise Solutions to measure and understand our energy usage to create total energy management solutions.

businesswisesolutions.co.uk



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