



Transforming the relationship between **people, planet and the built environment**

Sustainability Report 2024



Future-proofing places:

Helping transform the relationship between people, planet and the built environment

Our purpose is that **'Together, we create sustainable living'**. This means we empower our customers to create a sustainable built environment, providing the solutions they need to future-proof places that support thriving communities and growing economies. If we succeed, together, we can transform the relationship between the built environment, society and the planet.



Further reading links

Annual Report and Accounts (ARA)

<https://ar23.genuitgroup.com/>



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Highlights

Greenhouse gas emissions (scopes 1 & 2)

15,986tCO₂e

2023 **15,986**

2022 18,251

2021 21,034

Total greenhouse gas emissions (GHG) from direct operations and activities (scope 1) and purchase of electricity (scope 2).

Importance to Genuit

We see the importance of leading by example, and decarbonising our own operational GHG emissions is crucial to demonstrating our commitment to achieving net-zero by 2050.

Commentary

Aligning with our science-based targets, we reduced scopes 1 & 2 emissions by 24% against our 2021 base year.

Recycled content

49.2%

2023 **49.2**

2022 48.7

2021 49.4

The proportion of the Group's overall polymer consumption fulfilled by recycled materials.

Importance to Genuit

The Group has a commitment to achieving the highest standards of environmental performance, maximising our use of recycled polymer where possible, to ensure lower embedded carbon and improving the circularity of products for our customers.

Commentary

Our use of recycled material increased from 48.7% in 2022 to 49.2% of our total tonnage consumption. Further projects launched to continue the pathway to our 62% target.

Greenhouse gas emissions (scope 3)

290,013tCO₂e

2023 **290,013**

2022 423,147

2021 395,308

GHG emissions from upstream and downstream activities in the value chain. Genuit's scope 3 emissions are dominated (~85%) by category 1: 'Purchased Goods and Services'.

Carbon intensity

0.140tCO₂e/t

Our scopes 1 & 2 GHG intensity increased during 2023, affected by lower production volumes with the 2022 carbon intensity being 0.136tCO₂e/t. However, the increase wasn't proportional to the decrease in volume, indicating an underlying improvement in performance.

Electricity sourced from renewable sources

91%

We have continued to focus on the coverage of our renewables-based contracts. Looking forward, we are investigating those activities outside Great Britain to drive this further.

Suppliers with science-based climate reduction targets

32%

As part of our near-term science-based target, our aim is to have 83% of suppliers by emissions covering purchased goods and services to have science-based targets by 2027.



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

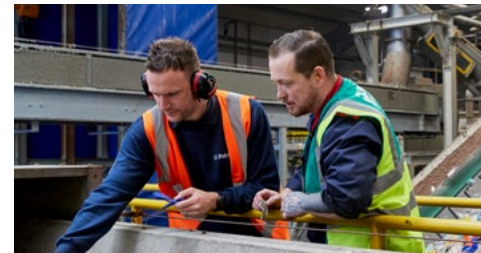
SBTi approve climate targets

In 2023, Genuit became one of the first in our industry to have their targets approved by the Science Based Targets initiative (SBTi). During 2024, the body has also approved Genuit's long-term targets to achieve net-zero by 2050.



Purchase of renewable energy

As part of our commitment to reduce GHG emissions from our activities, we prioritise the purchase of renewable electricity for our operational and service sites.



Circular economy and low carbon materials

We have adopted circular economy thinking by prioritising the use of recycled polymers in our manufacturing sites and setting targets to maximise their use. As a secondary consequence, these recycled polymers are commonly lower embedded carbon materials.



Leadership in the supply chain

Alongside our near-term (2027) targets, we've set long-term goals to achieve net-zero by 2050. Those see a 90% reduction in scopes 1, 2 & 3 emissions. To support that transition, we've established supplier engagement targets to ensure that our supply chain moves in the right direction.



Joe Vorih
Chief Executive Officer



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Foreword – Joe Vorih, CEO

“Our role is to partner with and empower our customers to build more... and crucially, to build more sustainably.”

It is with great pleasure that I introduce Genuit’s first dedicated sustainability report which covers our progress and achievements from the last year, and a look ahead to our ambitions for the future.

2023 has been another year of challenges for people around the world, with ongoing humanitarian, financial and climate crises. Such challenges pose huge questions, including what the future holds for the places we live, work and socialise.

Across the world, our built environment has never been more important. With increased urbanisation and growing populations, society faces the pressing task of ensuring our towns and cities can grow and become fit for the future, without exacerbating the impacts of climate change or placing too much strain on our nature and water systems.

With this, Genuit has a crucial role to play. Our business is focused on sustainability-driven growth, areas which are benefitting from changes in regulation and customer-driven need for climate solutions. Genuit’s future success is built in the transition to net-zero. As such, we remain positive in the outlook for the manufacturing and construction sector, as well as the opportunity to collaborate with others to help it transition to a sustainable future.

Under a new Government in the UK, housing and infrastructure are central to the country’s growth plans, with major reforms to planning and investment expected. As new legislation looks to unlock barriers to building, actors across the entire value chain have the opportunity to come together to ensure the development of the built environment aligns with our commitment to international agreements on climate change and ambitions for the net-zero transition.

We are starting to see the green shoots of this collaborative effort. Companies, government and communities are waking up to the power of cooperation to drive progress and regulation at a national level. At Genuit, collaboration is built into our DNA by our purpose: ‘Together, we create sustainable living.’

This means that our role is to partner with and empower our customers to build more, to do so more affordably, and crucially, to build more sustainably. By doing this, we can future-proof the built environment by adapting to and mitigating for the changing climate, whilst minimising any further impacts through reducing Greenhouse Gas (GHG) emissions.

Foreword – Joe Vorih, Chief Executive Officer [continued](#)

At Genuit, we are also getting our own house in order. Through our science-based approach to sustainability, we are working towards being the lowest carbon supplier of choice for our customers. This ambition is underpinned by our sustainability framework, which we introduced in 2021 and is comprised of four main components:

- **Tackling climate change:** We are committed to reducing the carbon footprint from our operations and products, without resorting to carbon offsetting.
- **Developing sustainable solutions:** To meet the challenges caused by having to mitigate and adapt to the effects of climate change, new products will have to be developed and produced in the most sustainable ways.
- **Advancing the circular economy:** We will lead the industry in recycling and waste management. Our aim is to increase recyclability to its maximum threshold and to become a zero-to-waste operation.
- **Investing in an engaged and diverse workforce:** We recognise the contribution a diverse group of colleagues makes to the achievement of these goals.

By embedding this framework, we are on a trajectory to become net-zero by 2050, and our sustainability plans have progressed well in the year. Most notably, in 2023 we became the first amongst our UK peers to have verified SBTi approval for our near- and long-term carbon reduction targets, which amongst other commitments will see us reduce our scopes 1 & 2 GHG emissions by 30% by 2027 compared to 2021. We are also the largest user of recycled polymers across our European peer group, making up almost half our total tonnage, and we have held the LSE Green Economy Mark since 2019 with over 70% green revenues.

As we look ahead to the next 12 months, I am confident that the framework and targets we have in place will allow us to serve the new demands placed upon the built environment, whilst being the lowest carbon supplier of choice for our customers. I am incredibly proud of our role in helping to transform society's relationship with the built environment. I also want to take this opportunity to thank everyone within Genuit for this continued commitment to our sustainability journey.

As towns and cities face increasing pressures from climate change and urbanisation, there's an urgent need to build resilience, protect communities and adapt our urban areas, all whilst minimising our own impact. I now invite you to explore the rest of our Report, and hope it provides you with an understanding of Genuit's role in the transition to net-zero, our efforts to date and our ambition for the future.

Joe Vorih
Chief Executive of Genuit Group

Genuit's Purpose brought to life



Foreword – Lee Adcock, Sustainability Director

“We are taking important steps towards achieving net-zero, and I am proud of our mission to create a sustainable built environment.”



Lee Adcock,
Sustainability Director



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further insights

At Genuit, we are taking important steps towards achieving net-zero, and I am proud of our mission to create a sustainable built environment. To me, this means two things. First, the enabled impact we have through our products and solutions which make our world more resilient as it adapts to the challenges of climate change. At the same time, we are working to reduce the direct impact we have, by helping to mitigate the effects that continued development of the built environment has upon our planet, be that in our own operations or when our products are in use.

The last few years have not been without their challenges, from the cost-of-living and energy crisis to geopolitical uncertainty and a need for greater investment to drive growth. But, at the same time, reaching net-zero by 2050 is entirely possible and we must not lose collective focus on the transition of the built environment.

We are making good headway towards our own targets, which you will see throughout this Report, but we know that there is still much to do. In society, similarly, we need to go further and, in order to make wholesale progress, must collectively tackle a number of short-term challenges. In both the UK and the EU, policymakers and regulators are increasing the requirements placed on manufacturers when it comes to sustainability, disclosures and climate transition planning.

More must also be done at a regulatory level to encourage and incentivise the adoption of new technologies and lift standards across the entire sector. However, to keep the goal of net-zero alive, we must go beyond these regulatory requirements. The cost of climate change will only become more severe, the less we do now. Across the value chain, we must work more closely to ensure the alignment of cost and benefits between those who shoulder the upfront investment, with those who will gain long-term.

But there is hope in sight, as many of the products and solutions that we need to put our built environment on a more sustainable footing already exist. The task now is for companies like Genuit to work with customers, to roll products and services out at scale. From rapid innovations in green technologies, to a rise in citizen science driving a desire to make a positive impact and progressive companies investing in sustainability successfully: together, we are realising the power of collaboration.

At Genuit, we recognise that the challenges of climate change will only be met by new products and solutions, developed and produced in the most sustainable ways. As well as our enabled impact from working with our customers to transition the built environment towards net-zero, reducing our own direct impact on the planet is fundamental to our strategy.

Foreword – Lee Adcock, Sustainability Director [continued](#)

We have ambitious near- and long-term GHG reduction targets in line with the latest thinking on climate science. In 2023, Genuit became one of the first companies in the built environment to have their targets approved by the Science Based Targets initiative (SBTi). In the last few months, the body has also approved Genuit's long-term targets. People across the industry agree that SBTis are the gold-standard of corporate target setting and are the only way to deliver a clearly defined pathway to reduce GHG emissions and reach net-zero by 2050. We also have 2025 targets to reduce our scopes 1 & 2 carbon intensity by 66% from a base year of 2019. To date, we have made continued progress towards our goals, and on a like-for-like basis we have now removed over 50% of scopes 1 & 2 carbon from the business since targets were put in place in 2020.

But there is more to do. Looking ahead, Genuit is committed to reducing absolute scope 3 GHG emissions, those emissions from upstream and downstream of our own operations, commonly called the value chain. Our scope 3 emissions are dominated by the raw materials we purchase and their embedded carbon, which is common for a manufacturing group. By the end of 2023, we have already reduced our scope 3 category 1 emissions by more than 25% from a 2021 base year.

We recognise the key role our supply chain will play in our journey to reduce scope 3 emissions, and we'll continue to engage with our partners to help them reduce their carbon impact and adopt science-based targets, which in turn supports our strategy. By 2027, we will ensure that the suppliers who account for 83% of our raw material emissions will have science-based carbon reduction targets in place.

Another key area of focus for us is the continued innovations to replace legacy materials such as concrete or copper. We are working hard to produce more sustainable alternatives which avoid the legacy issues of mining, extracting and processing minerals and metals, and our recycled polymers are a clear example of how we are helping our customers transition.

However, technology is not at a standstill, and we continue to investigate new raw materials such as bio-polymers and innovative recycling techniques to raise the bar of sustainability even higher. We are also increasingly involved in lobbying for standards regimes to be less prescriptive on how products are made, without compromising on performance, and support the green and low embedded carbon transition.

As Genuit's Sustainability Director, I am truly proud of how aligned the whole business is to the net-zero and sustainability agenda. For everyone in the business, sustainability is at the core of how we operate and what we offer our customers. As our work progresses, I remain optimistic that we can work to change society's relationship with the built environment for the better. My hope is that over the coming months and years, we can use our leadership position in the sector as a way of driving change and ensuring that our customers have access to the products and solutions, they need to transition to net-zero. However, we are cognisant of the ever-evolving sustainability landscape, and the challenges and priorities we face as a business may shift. To succeed we must strive to be flexible to meet these changing dynamics while continuing to listen to our trusted customers and stakeholders.

Lee Adcock
Sustainability Director

Genuit's Purpose brought to life



Our world



The impacts of climate change are being felt across the world, and there has never been a greater need to act.

In the last few years alone, we are seeing a notable change in the frequency of extreme weather events, from heatwaves to storms and floods. The climate is having a real impact on people's lives and the places they live, work and socialise. Unfortunately, it is predicted that these kinds of events will only become more commonplace in the future – globally, the frequency and severity of extreme weather events have increased by a factor of five in the last 50 years¹. As this trend continues, society as a whole must urgently come together to increase the resilience of our towns and cities, and find meaningful solutions that address head on the challenges of a changing climate.



Society's relationship with the climate is out of balance. As populations grow and become more urbanised, the challenge is to align the needs of people and the planet in order to reach net-zero by 2050. The built environment is currently responsible for over 40% of global greenhouse gas (GHG) emissions and without action, this is set to double in the next 25 years².

Conflicting and competing demands in society naturally require trade-offs. In the UK, there is a very immediate need for more housing and better, future-proofed infrastructure to boost growth and prosperity. If we are to continue to deliver on this front, we need new products and solutions to enable building in ways that doesn't compromise the climate, nature and water systems we depend on.



All this needs to be tackled alongside challenges such as sluggish growth, a rising cost of living and the need for clean, secure and affordable energy. All this will naturally be front of mind for citizens, developers and policymakers, who have tended to prioritise speed and affordability in their decision-making process.

Our world *continued*

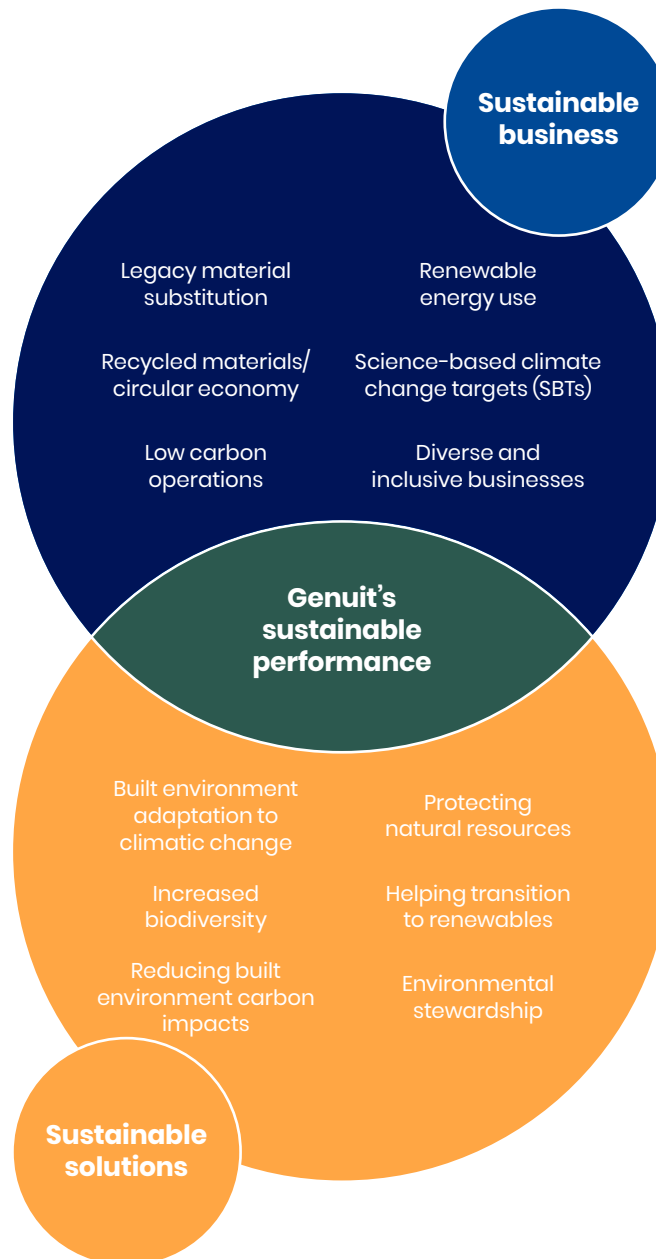
At Genuit, we see investment in the environment as an opportunity, not just in terms of future-proofing new places but also retrofitting old ones. But we cannot look at the climate in isolation. We need integrated thinking to address the concurrent challenges relating to water, nature and climate.

Current thinking around the Earth's natural processes and cycles suggests they are deeply intertwined and that changes to one part of the system have a cascading impact on the others. These key processes, otherwise known as planetary boundaries, are suggested to have their own thresholds and breaching them could set in motion a domino effect. To date, we have crossed the thresholds of six of the nine boundaries: climate change, loss of biosphere integrity, increased levels of novel entities, biogeochemical flows, and fresh water and land-system change³.

Without radical action, the impacts will become more severe, and the changes irreversible. Therefore, as we continue to develop our towns and cities, cooperation is crucial to drive positive momentum. Through the entire value chain, collaboration is needed, and all actors must bear some responsibility for the broader impacts to the climate. Doing so will ensure that environmental considerations are embedded end-to-end, from product development to installation and maintenance requirements.

Once-in-a-generation challenges require urgent and collaborative action. But, with great challenges come real opportunities. Society as a whole must see the climate and sustainable development as a top priority, so we can drive progress through innovation and creative thinking that unlocks new ways of doing things. We cannot afford delays and must act now to future-proof our built environment for the next generation.

1 UNFCCC: <https://unfccc.int/news/climate-change-leads-to-more-extreme-weather-but-early-warnings-save-lives#:~:text=The%20number%20of%20disasters%20has,deaths%20decreased%20almost%20three%2Dfold.>
 2 The Climate Group: <https://www.theclimategroup.org/built-environment#:~:text=Overview,driving%20the%20clean%20energy%20transition.>
 3 To discover more about planetary boundaries, scan the QR code here: <https://www.stockholmresilience.org/research/planetary-boundaries.html>



Our business units



Climate Management Solutions

Addressing the drivers for low carbon heating & cooling, and clean & healthy air



Water Management Solutions

Driving climate adaptation and resilience through integrated surface and drainage solutions



Sustainable Building Solutions

Providing a range of solutions to reduce the carbon content of the built environment

To help our customers

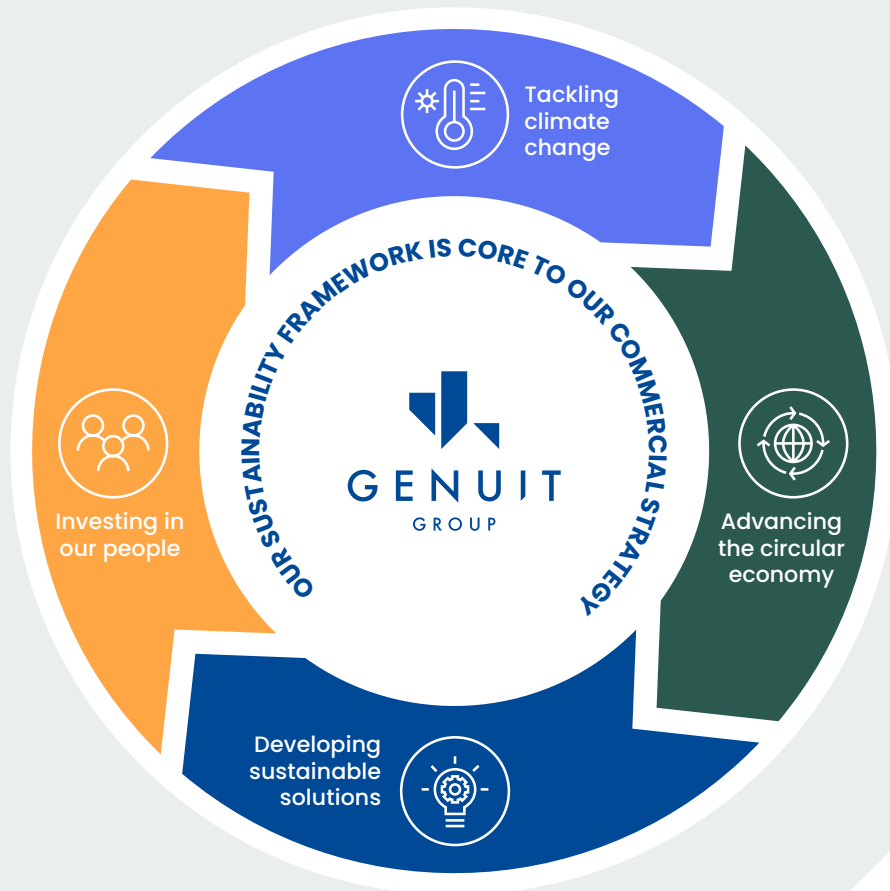
Genuit Group helps professionals create sustainable, engineered water and climate management solutions for the built environment.

→ Pages 12–26 contain more information on our approach to management solutions

Our strategy

Genuit has sustainability at its core.

At Genuit, sustainability is not an after-thought: we want to be the lowest carbon supplier of choice for our customers. Our strategy is focused on addressing key societal issues such as climate change, the circular economy, and making the built environment more resilient. Whether that means catering for ever more frequent extreme rainfall, or leading the transition to lower carbon heating and cooling, we are focused on addressing climate change and its consequences.



Our ambition

Tackling climate change

We are committed to reducing the greenhouse gas (GHG) emissions from our operations and products by focusing on reducing overall emissions without resorting to carbon offsetting

66%

Reduction of CO₂e emissions intensity from a 2019 base year (scopes 1 & 2)

30%

Reduction of absolute scopes 1 & 2 emissions from a 2021 base year



Advancing the circular economy

We want to continue to lead the industry in our usage of recycled polymers, as well as focus on reducing our own waste, to become a zero-to-waste operation

62%

of our polymer tonnage to be from recycled inputs. This represents the current available ceiling, given the standards regimes governing the use of recycled materials



Developing sustainable solutions

Given our focus on growth drivers which are linked to the sustainability agenda, we recognise that these challenges will only be met by new products, produced in the most sustainable ways

25%

of our revenue coming from products launched within the preceding five years



Investing in our people

We recognise the contribution a diverse group of colleagues makes to achievement of our goals. We also believe that providing development pathways in the workplace is a key enabler of social mobility

5%

of colleagues to be in accredited Earn and Learn programmes



Our strategy – Progress against targets

Tackling climate change



The Group made strong progress against reducing absolute scopes 1 & 2 emissions with a 24% reduction against our 2021 base year. Our scopes 1 & 2 GHG intensity increased during 2023 affected by lower production volumes. The Group has achieved a cumulative intensity reduction of 48.6% since the 2019 baseline data was established.

Carbon reduction (intensity):
Cumulative reduction of

Carbon reduction (absolute):
Cumulative reduction of

48.6% **24%**

Advancing the circular economy



Our use of recycled content increased from 48.7% to 49.2% from 2022 to 2023.

Our Sustainable Materials Working Group continued to increase the recycled content of our products and pursue opportunities to switch from virgin to recycled materials where product standards allow.

Recycled materials:

49.2%

Developing sustainable solutions



We further developed and launched new products during the year and achieved an overall Vitality Index of 21.5%.

We also continued to innovate our product lines, crucially where these support customer desires, recycled content and lower embedded carbon.

Vitality Index:

21.5%

Investing in our people



We continue to support and develop our most valuable resource: our people. At the end of the year we had over 250 employees in Earn and Learn programmes, across a range of disciplines including: engineering apprenticeships, financial accounting qualifications, and degrees in subjects such as facilities management and leadership.

People:
Percentage in Earn and Learn

8.2%

Decarbonising manufacturing emissions

Genuit recognises the critical role of energy transition in achieving a net-zero future. We are committed to supporting this transition by procuring 100% renewable electricity by 2030. We achieved a significant milestone by sourcing 91% of our electricity from renewable sources. This rapid progress has reduced our scope 2 carbon emissions by 94% (between 2017 and 2023) and enables us to offer lower carbon products to our customers.

As an electricity-intensive manufacturer, this transition is crucial in lowering the embedded carbon of our products and contributing to a more sustainable future.



Providing the pull to recycle end-of-life plastics

At the Genuit Group, we are committed to the circular economy and have achieved industry-leading recycled content usage of approximately 50% in 2023. We recognise that transitioning to a circular economy is essential for achieving a net-zero future for our industry. As part of this model, many of our sites offer return schemes, where we reprocess and re-use materials to create innovative solutions.

Smart water attenuation with Polysync

Using real-time weather forecasting and advanced attenuation technologies, Polysync helps to mitigate the increasing risks associated with extreme weather events caused by climate change. By accurately predicting rainfall patterns, Polysync optimises water storage in attenuation tanks, reducing the likelihood of flooding during heavy rainfall and maximising water retention for use during droughts. This proactive approach not only protects communities from flooding but ensures a reliable water supply during dry periods. By optimising water usage and reducing reliance on traditional water sources, Polysync contributes to a more sustainable and resilient water infrastructure.



Lean business principles

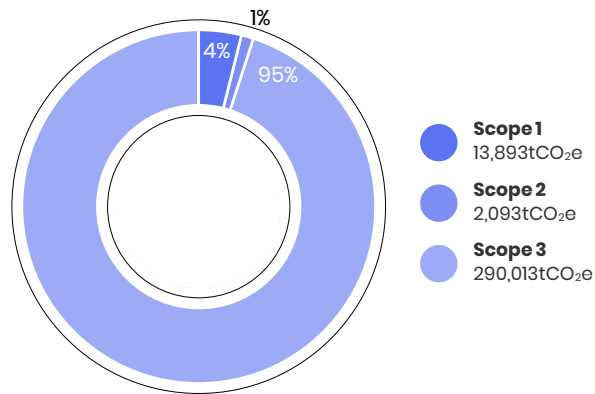
As part of our Genuit Business System (GBS) strategic aim, we are investing in developing our people at all levels of the business in understanding Lean concepts and how to deploy them to support business improvement. This learning is accredited through further education colleges, and is being recognised as part of our participation in The 5% Club.

Our performance

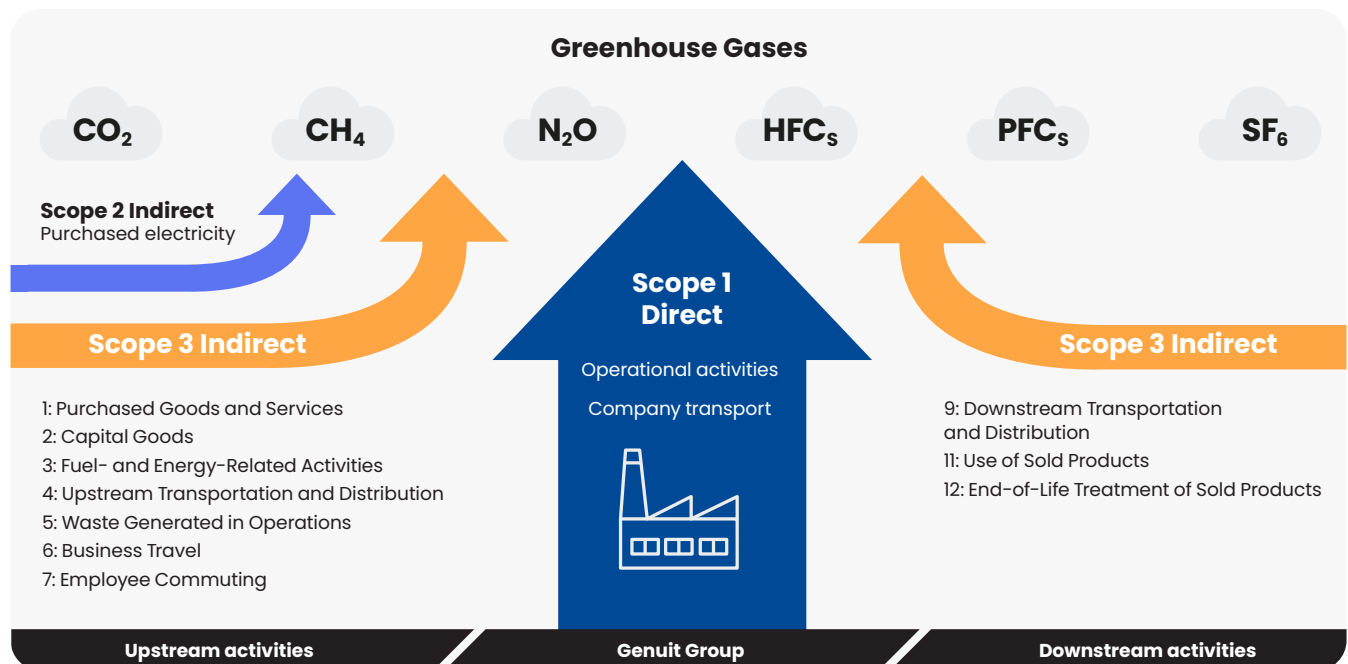
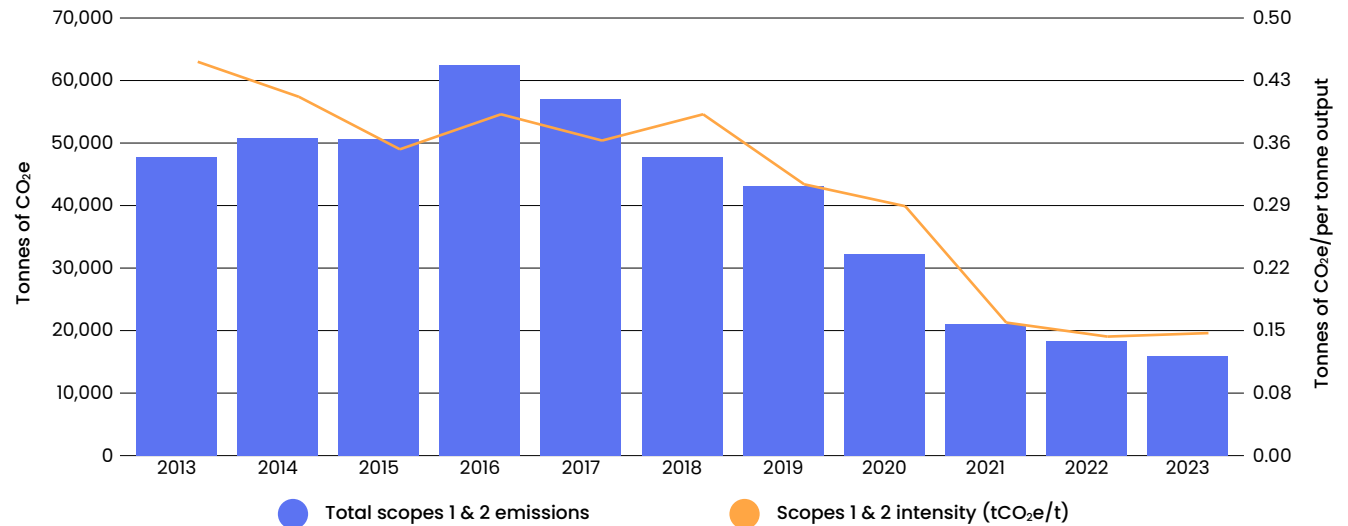
Our sustainability strategy provides the framework for ambitious action. This section will be a look back at all the great progress that we have already achieved.

Genuit has had a clear focus on reducing carbon emissions from our operations over the last decade, with significant reductions occurring after a peak in 2016.

Genuit Group FY2023 GHG inventory: Scopes 1, 2 & 3



As is common with manufacturing organisations our GHG inventory is dominated by scope 3 emissions, which accounts for ~95% of emissions in 2023. Due to our industry leading efforts to reduce scope 2 emissions through the purchase of renewable electricity we see this as the smallest category of emissions in the GHG inventory. Scope 1 emissions are the second largest and our focus and targets both near and long-term are focused on reducing our direct emissions from scope 1 such as use of natural gas and transport emissions.



Scope 3 categories not shown above are not deemed relevant to Genuit.

Our progress so far

Originally founded in 1980 as a manufacturer of extruded and moulded plastic products, by the mid-2000s the business centred around serving the built environment. Acquisitions and development in the core areas of the built environment, water management and climate solutions have seen Genuit positioned as a centred provider of sustainable and climate adaptation/mitigation solutions.

During 2023, the business was organised around three business units: Climate Management Solutions, Water Management Solutions and Sustainable Building Solutions, each with a distinct offering of sustainable products – see page 12 for more information.



Founded as a manufacturer of extruded and moulded plastics

1980

Acquisition of Surestop specialist valve business and Nuaire ventilation business

2015

Capital Markets Event outlining 2025 Environmental, Social and Governance (ESG) targets

2020

Restructured as CMS, SBS and WMS

2023

Acquisition of SkyGarden and Timoleon/Omni

2024

2014

Increased capability to deliver solutions for carbon efficiency and water management

2018

Acquisition of Permavoid and Manthorpe Building Products

2021

Acquisition of Nu-Heat and Adey

2023

Adopted science-based targets and Pledge to Net Zero

2050

Long-term commitments to reach net-zero GHG emissions across the value chain by 2050

Strategy in action

Our sustainable solutions

Climate Management Solutions (CMS)



Enabling lower carbon heating, cooling and fresh air

The Climate Management Solutions (CMS) Business Unit is dedicated to reducing the carbon impact of the way in which we heat and cool the built environment, whilst also addressing the need for clean, healthy air.

Our mission is to provide solutions that significantly enhance energy efficiency in hydronic or water-based systems through our Adey magnetite filters, and enable the widespread adoption of Air Source Heat Pumps (ASHP) with our Nu-heat underfloor heating (UFH).

While Adey and Nu-Heat specialise in hydronic and water-based solutions, Nuaire and Domus focus on delivering fresh, healthy air and low carbon heating and cooling for both homes and commercial spaces. Our Mechanical Ventilation and Heat Recovery (MVHR) systems capture heat from areas like bathrooms and transfer it back into the building's hot water system.

[Click to learn more](#)

Strategy in action [continued](#)

Nu-Deck® product sustainability benefits



1. What is the product?

Nu-Deck® is an advanced underfloor heating system specifically engineered for suspended timber floors. This innovative product seamlessly integrates low-temperature heating with a sustainable chipboard and MDF structural floor deck, offering a more environmentally friendly alternative to traditional underfloor heating.

By combining these essential components into a single, unified system, Nu-Deck further reduces carbon impact by minimising flooring material use and allowing for faster installation, whilst optimising heating energy efficiency throughout the living space it is installed in.

2. How is it sustainable?

Nu-Deck's manufacturing process is designed to minimise the consumption of virgin wood, thereby reducing the product's ecological footprint. Chipboard components are sourced exclusively from responsibly managed forests certified by the Forest Stewardship Council (FSC), ensuring that the wood is harvested in both an environmentally and socially responsible manner. Furthermore, the MDF used in Nu-Deck is produced entirely from recycled wood waste, reducing the demand for new timber whilst minimising landfill waste.

These eco-conscious material choices distinguish Nu-Deck as a significantly more sustainable underfloor heating option compared to traditional screed-based systems.

3. What does it enable?

Nu-Deck delivers the outstanding heating and energy efficiency characteristic of underfloor heating systems, whilst utilising sustainable materials to minimise environmental impact.

Nu-Deck's compatibility with low-temperature heating options enables it to significantly reduce the carbon impact of heating homes by minimising reliance on fossil fuels. As an underfloor heating system, Nu-Deck's ability to operate at lower temperatures compared to traditional emitters like radiators reduces energy usage, especially when installed with renewable energy sources such as heat pumps.

Nu-Deck's operational performance, coupled with its environmentally responsible manufacturing processes, make it an excellent eco-friendly heating solution that promotes circular sustainability.

Strategy in action [continued](#)



MRXBox – MVHR with cooling

Combines the provision of clean, healthy air, with the benefits of mechanical heat recovery, along with the ability to significantly reduce the temperature of fresh air entering a dwelling.

Helps to adapt to the consequences of climate change, whilst also improving energy efficiency and reducing the carbon impact of a heating system via MVHR.

Reducing our greenhouse gas (GHG) emissions, one box at a time



At Adey, new sustainably sourced brown boxes use 30% less cardboard than the previous design. They are also printed with earth inks and on FSC card, which is much better for the environment.

The new boxes will reduce the amount of cardboard by 72 tonnes per year!



Strategy in action [continued](#)

Our sustainable solutions

Water Management Solutions (WMS)

[Click to learn more](#)

Enabling adaptation and resilience

Within Water Management Solutions (WMS), our teams are dedicated to innovating stormwater and wastewater infrastructure to withstand the increasing challenges posed by climate change. Rising temperatures are leading to more frequent and intense rainfall events, overwhelming our aging infrastructure. Simultaneously, urbanisation is accelerating water runoff. Our green urbanisation strategy addresses both challenges by creating resilient stormwater systems and enhancing urban living spaces.

Our technical and commercial experts specialise in modern drainage design. We provide exceptional value to our customers by helping them develop solutions that combine functionality and sustainability.

In 2024, Genuit completed the acquisition of Sky Garden Limited. Sky Garden is a leader in green roof technologies, providing design, supply, installation and maintenance services for green and bio-solar roofs, podium decks and green walls. The business joins the WMS Business Unit and will extend the Group's blue-green roof offering. This is an attractive market segment with significant future growth potential associated with the increasing need for urban re-greening and stormwater management.



Strategy in action [continued](#)

Sky Garden – BioSolar Systems



What is the product?

A BioSolar roof integrates solar panels with a green roof, combining photovoltaic (PV) technology with vegetation. This system enhances energy production while fostering biodiversity by creating a habitat for plants and wildlife. The green roof serves as a base, supporting the solar panels and providing ecological benefits.

How is it sustainable?

BioSolar roofs are sustainable by maximising land-use efficiency. The green roof component mitigates urban heat islands, improves air quality, and manages stormwater runoff. Additionally, it extends the lifespan of the roofing materials by protecting them from extreme weather. The PV panels generate renewable energy, reducing reliance on fossil fuels.

What does it enable?

BioSolar roofs enable efficient space utilisation in urban areas by serving both energy production and ecological functions. Investing in a zero CO₂ energy production method can significantly reduce a building's carbon footprint: 20 tonnes of CO₂ per year can be saved by a typical 10kW PV system (0.43kg of CO₂/kWh). With no moving parts and no energy transportation, on-site PV energy generation easily enables organisations to obtain BREEAM rating credits and meet their Carbon Reduction Commitments. This multifunctional approach helps cities move towards more sustainable, resilient and liveable environments.

POLYwalk as a timber replacement



What is the product?

A timber boardwalk along the Peddars Way and Norfolk Coast Path at Brancaster was closed due to health and safety concerns over its rapidly deteriorating condition. The existing timber boardwalk had failed after less than 12 years; this had replaced a previous timber boardwalk that had lasted 20 years. A new and improved boardwalk was required for compliance with the Equality Act 2010.

How is it sustainable?

To comply with the Norfolk County Council design specification meant the new 1.7km x 1.5m wide boardwalk was designed to meet the needs of people with mobility issues, people in wheelchairs or using pushchairs and people living with dementia and other neurological conditions. This was achieved through the boardwalk's width, incorporating a high anti-slip rating (SRV 90+) castellated decking, colour and contrast in the materials, a consistent layout and frequent passing places, viewing points and seating, and all in GRP with a design life of 75 years. A light and dark wood timber effect was also provided as the finish, making the incredible life-like wood appearance blend perfectly with the natural environment.

What does it enable?

As well as enabling increased access for a range of abilities, due to Polydeck's unique plastic foam core, the project removed 370,000 500ml plastic bottles from landfill, helping Norfolk County Council meet net-zero 2030 targets.

Strategy in action [continued](#)

Retrofit of a smart blue-green roof at Bloc, Manchester



What is the product?

A retrofit smart blue-green roof, installed as part of a two-year-long research project, focused on reducing the flood risk associated with increasingly common prolonged high-intensity storm events.

How is it sustainable?

Polypipe Civils & Green Urbanisation's Polysync (Polypipe CGU's smart water attenuation system), Permavoid (a shallow sub-base attenuation system, made from 100% recycled polymer) and Permafilter Geotextile were used to create the smart blue-green roof system on Bloc – a Manchester city-centre workspace that has been transformed as part of a £50m pioneer redevelopment programme.

Unlike conventional green roofs, which typically use a drainage layer to simply remove rainwater, this 525m² blue-green structure, retrofitted to Bloc's flat roof, manages rainwater at source. The collected surface water is then either retained for re-use or gradually released to help prevent flooding ahead of periods of extreme weather.

Results from the two-year-long research project have demonstrated the efficacy of this blue-green roof approach, with nine out of 36 rainfall events resulting in almost all the rainfall volume generated by the roof being captured within the smart green roof, equating to an 80% to 100% reduction in outflows to the public sewer.

The breakthrough technology has also enhanced biodiversity by maintaining flora in optimum growing conditions.

What does it enable?

The installation allowed for improved handling and management of rainwater and through evaporative cooling helps reduce energy demand on the building. The planting increases biodiversity and has an overall positive biodiversity net gain.

Smart blue-green roof installation, West One, Leeds



How is it sustainable?

Polypipe CGU products were used as part of a redevelopment project creating Bruntwood SciTech's West Village in Leeds.

West Village is a new office space that brings together innovation, flexibility and environmental responsibility. Nature has been blended into the design of the space, which features biophilia that cocoons the building and its outdoor areas.

These outdoor areas include a roof terrace and an innovative blue-green roof system – which Polypipe CGU's Polysync, Permavoid, Permavoid Permatex Capillary Geotextile and Aquadrain products were used to create.

What does it enable?

The installation allowed for improved handling and management of rainwater and through evaporative cooling helps reduce energy demand on the building. The planting increases biodiversity and has an overall positive biodiversity net gain.

What is the product?

A smart blue-green roof installation for a redeveloped office building that has been designed with the aim of bringing natural life back to urban areas.

Strategy in action [continued](#)

Blue-roof rainwater attenuation system, Stockport Interchange



What is the product?

Polypipe CGU provided products to help deliver a blue-roof rainwater attenuation system in the Stockport Interchange regeneration project.

How is it sustainable?

Polypipe CGU's products were used in a two-year-long £90m regeneration project, which put sustainability at its centre, in Stockport.

The project, which is one of the biggest single projects outside of London, creates a gateway to the town, linking the train station to the town centre through a series of paths, cycleways and a two-acre park – the first of its kind in the UK.

To help deliver this monumental project, Polypipe CGU were pleased to supply wicking geotextile, Terrain domed roof outlet and a range of Permavoid products including Permavoid 85, Permavoid 85 with passive irrigation, Permavoid Square, Permavoid Square with passive irrigation.

What does it enable?

What does it enable? The installation allowed for improved handling and management of rainwater and through evaporative cooling helps reduce energy demand on the building. The planting increases biodiversity and has an overall positive biodiversity net gain.

Stormwater and foul water management at Magna Park Corby



What is the product?

Polypipe CGU supplied products to create one of the UK's largest dedicated logistics and distribution parks: specifically, we supplied Ridgidrain, Polysewer and Ridigistorm-XL.

How is it sustainable?

In late 2021, work began constructing Magna Park Corby, one of the UK's largest dedicated logistics and distribution parks.

Working with long-term partners VolkerFitzpatrick and supplying via Wolseley, Polypipe CGU provided products Ridgidrain, Polysewer and Ridigistorm-XL for the project, which saw 4km of drainage for foul water and stormwater for future occupants of the park.

What does it enable?

The Polypipe CGU team provided a range of services to support the project. The recycled content of the products supplied resulted in an equivalent of 630,120 recycled milk bottles being used.

Strategy in action [continued](#)

Our sustainable solutions

Sustainable Building Solutions (SBS)



Driving out carbon

The Sustainable Building Solutions (SBS) Business Unit offers a range of market-leading products and brands designed for efficient installation. Our solutions, from residential plumbing and drainage to prefabricated commercial soil stacks and GRS radiator pipe guides, contribute to our goal of becoming the lowest carbon supplier of choice for housing developers, commercial property owners, M&E contractors, and builders' merchants.

Our Polypipe and Terrain plumbing and drainage products have long been recognised for superior performance and lower embedded carbon compared to traditional materials like copper or cast iron. We continue to differentiate our polymer-based products by reducing embedded carbon through increased use of recycled plastic waste and minimising product weight.

Our value-added prefabricated solutions, such as Polypipe Advantage, not only reduce carbon emissions but improve product quality, consistency and installation efficiency. These solutions align with the government's push for increased Pre-Manufactured Value (PMV) in construction projects, which refers to the proportion of offsite or prefabricated work within a project's overall value.

[Click to learn more](#)

Strategy in action [continued](#)

Polypipe underfloor heating (UFH) – sustainability case study with Pringle Homes



1. What is the product?

Underfloor heating (UFH) system – featuring staple system, autobalancing manifold and smart controls.

2. How is it sustainable?

UFH operates at a lower water temperature than radiators, requiring less energy to warm an equivalent space. UFH is therefore an ideal companion system for air and ground source heat pumps which are more energy efficient than traditional boilers. When paired with smart controls, heating systems can be optimised to heat individual spaces on personalised timetables rather than whole houses at unused times. Also in use is the autobalancing manifold which prevents oversupply for unoccupied rooms. Altogether, a UFH system can offer significant energy savings over traditional home heating systems, and the pipework is guaranteed for 50 years, making it a future-proof technology.

3. What does it enable?

This UFH system is being used by Pringle Homes on an exclusive development of 42 new homes being built on the edge of the Ribble Valley in Lancashire. The development offers residents the very best in modern living while preserving traditional English character.

Pringle Homes is renowned for its premium new builds, and this development is no different. With the clear objective of achieving an energy-efficient and high-quality finish, Pringle Homes engaged with Polypipe Underfloor Heating to supply UFH and manifolds for the homes.

UFH was selected as it naturally creates an open, elegant feel that would ensure the interior of the homes would be in keeping with the rest of the luxury development. The lack of radiators frees up space in a room, allowing design versatility for residents who can organise, use and fill the space how they want.

Strategy in action [continued](#)

Polypipe Underfloor Heating (UFH) – sustainability case study with Pringle Homes [continued](#)

In addition to the UFH, Polypipe Underfloor Heatings' sleek stainless-steel premium manifolds were installed. The manifolds have a patented valve that enables automatic flow control, meaning that as the circuits open and close, the valve adjusts itself to ensure the flow rates set are maintained in each circuit. This technology, which is not found in standard manifolds, allows the system to achieve optimum temperature distribution and uniform heat output, ensuring increased comfort for residents.

Increased comfort, however, does not have to come at the expense of energy efficiency. UFH is a naturally great option to aid residents in decreasing their energy consumption. This is because, by heating the whole surface area of the floor, UFH ensures that heat is evenly distributed across the room, meaning that it can operate at lower temperatures than traditional radiators.

Combined with the use of smart controls, residents will benefit from a comfortable temperature in occupied rooms while also keeping energy use to a minimum in unused rooms. As a result, less energy is used overall, resulting in both lower energy bills and an eco-friendlier home.

From the outset, Polypipe UFH was heavily involved in the project, working on the design and layout for the UFH, as well as providing advice to ensure a smooth installation process. During the project, this level of support was critical, as the installation was undertaken by two different installers, with the work being handed over halfway through.

This could have caused delays to the project timeline. However, with Polypipe's technical support and traditional staple system, which minimises the number of fixing materials required, the new installer was able to pick up the project and carry out the large-scale installation seamlessly.

With the end-users in mind, Polypipe Underfloor Heating's support extended beyond the installation process. It provided a range of training resources, including videos, to show both Pringle Homes and new residents how to work the underfloor heating and control systems, and effectively increase the efficiency of the system.



Sam Fleuriot, Commercial Director at Pringle Homes, said:

“Polypipe Underfloor Heating engaged with us early on in the project to support with an efficient system design that would provide residents with a luxury feel. Having worked with the team on several projects previously, we know that their technical and design support is second to none and this project was no different.

With the actual installation having changed hands mid-way through the project, the training and support that Polypipe Underfloor Heating provided was critical to ensuring that the installation process ran smoothly and that project timelines were met. In addition to this, with Polypipe's continual product innovation, we know that both the UFH and manifolds will provide maximum comfort to residents long into the future, while also helping them to save on their energy bills.”

Strategy in action [continued](#)

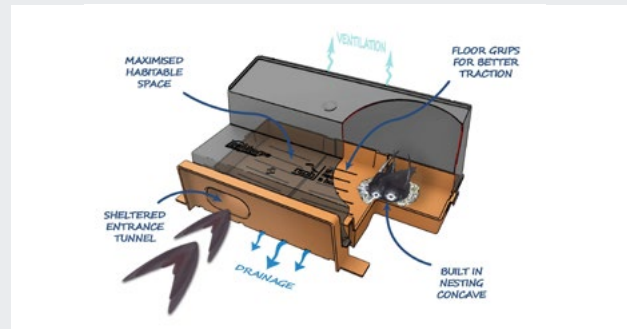
Manthorpe Building Products' innovative solutions for urban wildlife conservation

Manthorpe Building Products has consistently demonstrated its commitment to integrating wildlife conservation into the built environment. This case study highlights the company's forward-thinking approach to addressing the declining populations of bats and swifts in urban environments, showcasing two original products that provide essential habitats for these species.

In recent years, both bats and swifts have experienced a significant decline in available roosting and nesting sites within urban areas. This loss is primarily due to improved building design, modern materials, and construction practices that result in fewer structural defects, inadvertently reducing opportunities for wildlife to find shelter. Recognising this challenge, Manthorpe has developed two complementary products: the Manthorpe Bat Ridge Roost™ and the Dual Swift Nesting Brick.



Manthorpe Building Products leading the way with swift conservation



Swift Bricks

The Bat Ridge Roost, developed in partnership with the Bat Conservation Trust (BCT), provides a protected, secure, and enclosed habitat for bats. Designed to be installed at the apex of the roof as a contemporary ridge end cap, this product utilises the height of the gable end to offer accessibility and security for bat populations. Similarly, the Dual Swift Nesting Brick, an evolution of Manthorpe's original 2016 design, creates safe, integrated nesting spaces for swifts within building walls.

Both products showcase Manthorpe's commitment to user-friendly, versatile designs that seamlessly integrate into modern construction methods. The Bat Ridge Roost features a two-part installation process, combining speed of fitting with compatibility for both dry verge systems and traditional verge details. This versatility extends to the Dual Swift Nesting Brick, which has been redesigned to accommodate the narrower 50mm cavities common in timber-frame constructions, as well as being suitable for rendered wall details and retrofitting into existing structures.

Manthorpe's collaborative approach is evident in the development of both products. The Bat Ridge Roost benefitted from the extensive knowledge of the BCT regarding bat behaviours and practices throughout the UK.

Similarly, the Dual Swift Nesting Brick was created in partnership with the Royal Society for the Protection of Birds (RSPB), Barratt Developments Plc, and with input from Actions for Swifts. This collaborative ethos ensures that the products not only meet construction industry requirements but provide optimal habitats for their target species.

The design of these products goes beyond simply providing shelter. The Bat Ridge Roost's exterior mounting prevents ingress into the roof space, addressing concerns of both homeowners and developers. The Dual Swift Nesting Brick features a specially sized entrance hole that accommodates swifts while deterring larger birds. Both products have been carefully engineered to balance the needs of wildlife with the practical requirements of modern construction.

Manthorpe's wildlife conservation products also contribute to broader environmental initiatives. The Bat Ridge Roost supports biodiversity efforts by providing multiple roost options across development sites, allowing for the monitoring of bat populations by ecologists and enthusiasts. Similarly, the widespread implementation of Swift Nesting Bricks can help track and support swift populations in urban areas.

Strategy in action [continued](#)

High recycled content packaging



What is the product?

The packaging bag for our PolyPlumb® Enhanced fittings.

How is it sustainable?

The packaging bag contains 50% recycled plastic film and, for the most commonly used size bag, represents a 30% reduction in film thickness (using less plastic overall in construction of the bag).

What does it enable?

When launching our improved range of PolyPlumb fittings – PolyPlumb Enhanced – we looked at all aspects of product development, including its packaging. After consultations with many experts and different suppliers, we have proudly arrived at our newest and most sustainable packaging yet. The plastic film we use to form the bags contains 50% recycled plastic which is as far as we are able to go without compromising the integrity of the bag. The higher the recycled content, the more brittle the bag becomes and the higher the risk of splits and tears. This 50% blend allows us to be at the forefront of the market for recycled content use whilst ensuring our product reaches our merchant customers intact.

We also looked at the size of bags we produce in order to reduce any empty space within our bags. On our most commonly used size bag, we have reduced the film thickness by 30%. This has allowed us to use less plastic when constructing the bag whilst still ensuring the bag's structural integrity.

Polypipe & Wolseley recycling programme



What is the product?

A trial between national manufacturer Polypipe Building Products and national merchant Wolseley UK to identify sources of waste plastic in the construction supply chain, collect it, sort it and recycle it, preventing that waste plastic from going to landfill.

How is it sustainable?

Plastic is a durable construction material that can have a service life of over 100 years, and can then be recycled multiple times. One of the challenges facing the plastics industry is that along the way waste is generated via packaging, damages, breakages and offcuts, and for ease of process for the installers, these items often end up in a general waste skip and subsequently sent to landfill. With this trial, Polypipe Building Products and Wolseley are preventing that from happening and funnelling as much of the waste as possible back into useful construction products, with the remainder being used by specialist partners further down the supply chain.

What does it enable?

Together, Polypipe Building Products and Wolseley UK will look for innovative ways that plastic waste generated within our customer journey can be collected, recycled, and reused in the manufacturing of new, functional construction products.

This is our long-term vision, and this trial is how we will begin to achieve this joint ambition of a sustainable future for the construction industry.

Strategy in action [continued](#)

Polypipe pre-insulated heat network pipes



What is the product?

A series of pre-insulated pipes containing between one and four pipes each encased in insulation and a rigid outer pipe, to facilitate flow and return of hot and cold water for heating purposes. The pipe can be cut to the customer's required size and is most commonly used to connect individual properties to remotely situated ground or air source heat pumps, or to connect a residential development to a mains hot water supply in the street from a larger heat network.

How is it sustainable?

Air and ground source heat pumps are more energy efficient and sustainable ways of generating hot water for heating purposes than traditional boilers. The pre-insulated piping allows homeowners to situate these heat pumps, which are often bulky and noisy, away from the property and still transport the hot water they generate efficiently into the home for use as part of a home heating system. These pumps are often paired with UFH systems, further enhancing their energy efficiency. A heat network acts in the same way as a heat pump but supplies warm water to an entire development rather than an individual dwelling.

What does it enable?

Polypipe Building Products' pre-insulated pipes are being installed on the Park Lane Heights luxury homes development in Hastings. There are a total of 67 plots, made up of two-, three- and five-bedroom homes. The development is using a two pipe, pre-insulated pipe configuration to allow the connection of remotely positioned Air Source Heat Pumps (ASHPs) away from the properties.

ASHPs are a low-carbon alternative to conventional domestic hot water and heating boilers, and the development of this local heating network enabled by the pre-insulated pipes has meant that an ASHPs can be used.

The UK Government has identified district heating as a crucial element in achieving its net-zero emissions target by 2050. Only round 2% of heating and hot water is currently supplied by district heating systems. To achieve the net-zero target, it is estimated that 18% will be the requirement by 2050.

Strategy in action [continued](#)

Our sustainable business

As well as offering products that enable society to mitigate and adapt to the challenges of climate change, Genuit Group has set ambitious, science-based targets to reduce our own impact on the environment and achieving net-zero by 2050.

As a Group, we are focused on transitioning to a low carbon business with our SBTi-aligned science-based decarbonisation targets at the heart of what we do. Transitioning to the use of recycled content and other low carbon material choices will continue to play a key role for us on this journey. Using recycled polymers has significantly less carbon impact than virgin polymers, and our target of 62% of our materials being from recycled inputs by 2025 remains an important milestone for us in our journey to net-zero.

Prioritising recycled materials is fundamental to driving a more circular economy. By incorporating recycled materials into our manufacturing processes, we can extend the life cycle of resources and reduce our environmental footprint. Beyond the immediate benefits of recycled content and carbon reduction, we are committed to addressing all aspects of sustainability within our business. In the following pages, we will highlight a series of case studies that showcase our concrete actions to promote a more sustainable future.



Strategy in action – Direct impact

Advancing the circular economy

We are pioneers in the industry at utilising recycled materials and establishing a robust end-of-life solution for plastics. Our aspiration is to maximise recyclability and explore innovative opportunities to further enhance our sustainability efforts.



49.2%

the proportion of the Group's overall polymer consumption fulfilled by recycled materials

The Group acknowledges the imperative to adopt a more circular economics approach, minimising the consumption of raw materials and maximising the re-use of so-called 'waste materials'. We envision a future where fewer resources are discarded without being repurposed or recycled. Instead, we aim to increase the production of new products using recycled materials that have already served their initial purpose within the economy and society, reducing reliance on virgin materials.

In moving to a circular economy, we'll see a reduction in the use of virgin materials, and as a consequence society will benefit from:

- reduction in waste destined for disposal;
- reduction of materials lost into the environment
- reduction in carbon impact (CO₂e emissions), as the majority of embedded carbon in products is associated with the first use of virgin raw materials such as plastic, cement, steel and aluminium.

We have embraced a circular economy approach by prioritising the use of recycled polymers at our manufacturing facilities and establishing targets to maximise their utilisation. These recycled polymers generally exhibit lower embedded carbon compared with virgin materials. Consequently, by increasing our reliance on recycled polymers to support a transition to a circular economy, we not only reduce our supply chain's carbon footprint but also achieve a significant reduction in our scope 3 greenhouse gas (GHG) emissions.

As part of the Sustainable Solutions for Growth strategy, we have introduced a workstream focused on increasing the circularity of materials in the sectors in which we operate. This Sustainable Materials group is working to shift products being manufactured from virgin polymers and materials to recycled materials wherever possible and without detriment to the products' quality or functionality. We are also looking at emerging opportunities such as bio-polymers in the medium term.

We understand both the need for a rapid transition to a low carbon economy and the need to promote circular economy thinking and how these offer opportunities and challenges for our business activities.

Two of the main strategic objectives within our sustainability strategy are addressing climate change, and closing the loop by our use of recycled materials. The Group aims to be the 'lowest carbon supplier of choice' to our customers, meaning continuing our focus and reduction activities on operational and supply chain carbon emissions. We also understand the need to promote and drive behaviour that prevents the loss of plastic materials into the environment through the entire life cycle and as such are a signatory to Operation Clean Sweep, an international initiative from the plastics industry to reduce loss of plastic pellet, flake or powder into the environment. Providing a route for end-of-waste plastic to be consumed within the manufacture of new plastic products provides an economic base to help prevent waste plastics being discarded into the environment.

As can be seen on page 1, our use of recycled materials has increased from 2022 and we now have more than 49.2% of all raw materials supplied from the secondary products market, significantly adding to the UK capability to recycle used plastics and avoid the use of virgin materials.



Case study Zero waste and Operation Clean Sweep

We're on our way to becoming zero-to-waste across our operational units, and we're a signatory of Operation Clean Sweep (OCS), committing its sites to ensuring zero plastic pellet, flake and powder loss into the environment.

Tackling climate change

We are dedicated to mitigating the greenhouse gas (GHG) emissions associated with our operations and products. To achieve this, we are concentrating on reducing overall emissions and setting ambitious, science-based targets for both the short and long term.

In our business

We aim to minimise the impact of our operations on the environment and by 2025 aim to have reduced our scopes 1 & 2 carbon intensity by 66%, without offsetting. Furthermore, we target a 30% reduction in absolute scopes 1 & 2 emissions by 2027.

In 2020, we achieved full ISO 50001 accreditation for energy management systems in some of our largest operational sites, providing a clear focus on energy management.

The Group has set ambitious near-term science-based GHG reduction targets and made long-term reduction commitments to achieve net-zero in line with the latest thinking on climate science.

The Group's absolute scopes 1 & 2 GHG emissions were 12% lower than in the 2022 reporting period, and although influenced by lower production volumes we also saw improvements in our emissions, independent of those production volume reductions. This resulted in the Group achieving an emissions intensity of 0.140 tonnes CO₂e per tonne of product during 2023, a strong performance despite lower production output.



In our solution

Scope 3 GHG emissions are dominated by the goods and services we purchase. In this area we recognise the key role that our supply chain plays, and therefore we have set a target to engage with our suppliers so that they reduce their carbon impact, which in turn supports the Group strategy. By 2027, we will ensure that the suppliers who account for 83% of our purchased goods and services emissions, will have science-based carbon reduction targets in place.

We are also aware of what we can do ourselves. The transition to recycling and other low carbon material choices will continue to play a key role for us. Using recycled polymers has significantly less carbon impact than virgin polymers and the use of recycled materials is key to increase and enhance the circular economy benefits that come with using materials that can be recycled, repeatedly, through the manufacturing process.

As part of our Sustainable Solutions for Growth strategy, we will provide solutions which are the most sustainable and economically viable solutions at that point in time. By offering polymer alternatives to legacy materials such as concrete or copper, we are able to offer more sustainable products than those legacy alternatives.

However, technology is not at a standstill, and we continue to invest Research and Development (R&D) resource in areas such as bio-polymers and chemical recycling to investigate ways to raise the bar of sustainability even higher. We are also increasingly involved in lobbying for standards regimes to be less prescriptive on how products are made, without compromising on performance.

Tackling climate change [continued](#)

Recycled PVC success in extrusion

Manthorpe Building Products completed a recycling project where they moved 13 different product ranges from virgin PVC to 100% recycled PVC. This project completed in March 2023 and over the past 12 months has consumed 398.4 tonnes of recycled PVC, saving 364 tonnes of CO₂e. With the completion of this project, Manthorpe Building Products' recycled material percentage went above 50% for the first time and has consistently been above this mark ever since.



Rainwater harvesting

Our Polypipe Ulster production site operates a closed-loop water system, eliminating the need for freshwater imports for industrial cooling. By combining advanced cleaning and separation water treatment with rainwater harvesting, we achieve self-sufficiency in industrial cooling water. This innovative approach has reduced our water consumption, conserving valuable water resources and minimising our environmental impact.



Biofuels

Our Aylesford, Kent, manufacturing site has been a pioneer in sustainable fuel use, employing Hydrotreated Vegetable Oil (HVO), also known as second-generation biodiesel to fuel its HGVs, since 2022. By switching to HVO, we significantly reduce the carbon emissions of HGVs, by 90%, as well as reducing tailpipe emissions, which is particularly beneficial in urban areas. This commitment to lower carbon fuels enables us to deliver more sustainable products to our customers. We aim to expand HVO usage to other sites in the future, further reducing our GHG emissions.



HEV/EV cars

In 2022, Genuit Group launched a competitive electric vehicle (EV) and hybrid electric vehicle (HEV) company car scheme. Since then, we've witnessed an exponential increase in EV and HEV adoption, with over half of our company cars now being electric or hybrid. By the end of 2023, 60% of our eligible colleagues had selected these vehicles, and that number has continued to increase through 2024. The scheme has been well-received by employees, demonstrating our commitment to a sustainable future.

Tackling climate change **continued****Recycled materials**

At Polypipe Civils & Green Urbanisation (CGU), our commitment to delivering top-quality products to our customers goes hand in hand with our dedication to sustainability. To further advance this dedication, we have established a state-of-the-art polymer processing plant which not only ensures product excellence but plays a pivotal role in our environmental stewardship.

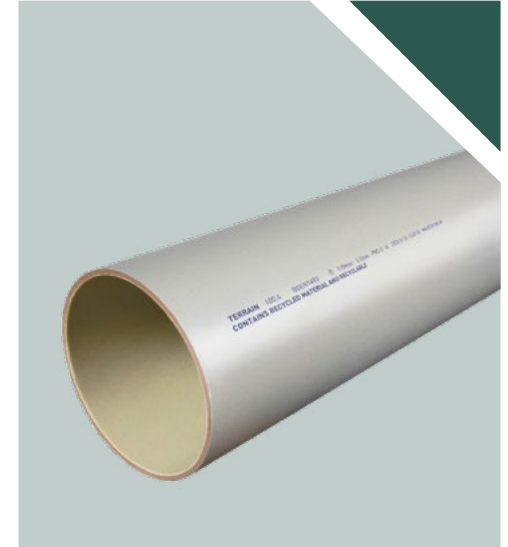
In addition to aligning our operations with the circular economy, our plant plays a crucial role in reducing pollution and environmental degradation by diverting significant amounts of plastic waste from landfills, oceans and incinerators. Our Polymer Processing Plant processes about 250 million bottles annually.

**Use of recycled and alternative materials**

Genuit Group is an industry leader in utilising recycled materials. In 2023, nearly half of our total polymer tonnage, including over 6,500 tonnes from our own polymer processing plant, was derived from recycled sources. This commitment to circular economy principles has contributed to a substantial reduction in scope 3 category 1 'Purchased Goods and Services' emissions, a significant portion of our overall carbon impact. We are committed to further increasing our use of recycled materials to achieve our sustainability goals, aiming for 62% by 2025.

**Lightweighting**

The lightweighting project was started in the autumn of 2023. The team focused on auditing products/processes Group-wide to identify significant opportunities to reduce material mass through advanced product design or altering manufacturing processes, i.e. lightweighting. As a result, in 2024, lightweighting will contribute a 5% p.a. reduction in tCO₂e against the Group 2027 reduction target. This percentage shall accelerate in subsequent years.

**Environmental Product Declarations (EPDs)**

Recognising the construction industry's significant contribution to global GHG emissions (approximately 40%), Genuit Group is committed to transparency and sustainability. We provide our customers with access to detailed environmental data through third-party verified Environmental Product Declarations (EPDs). With EPDs covering some of our largest product ranges, we empower customers to make informed decisions and contribute to a net-zero built environment. By showcasing our low carbon solutions, we support the industry's transition to a more sustainable future.

Tackling climate change [continued](#)**H&S performance**

Three-year HSE Strategy gets underway

As part of Genuit Group's three-year Health, Safety and Environment strategy, we have developed and launched a comprehensive audit programme – the 'Genuit Blue HSE Audit'. The audit programme covers 20 topic areas such as Risk Management, Legal Compliance, Environment, Training, Emergency Preparedness, Control of Hazardous Substances, etc. Each site will undergo an annual two-day audit, conducted by trained in-house auditors. The audit will focus on identifying good practice which can be shared across the Group as well as opportunities for improvement.

**Improving our environmental performance**

As part of our commitment to minimising our impact on the environment we are striving for continuous improvement and setting ambitious targets. One of these is reaching Zero Waste To Landfill for our operational sites at Polypipe CGU.

This has been achieved through optimisation and collaboration with our on-site polymer recycling facility at Horncastle, whilst harnessing Operation Clean Sweep principles to prevent plastic entering the watercourse.

**Beach clean**

At Polypipe CGU, we're committed to doing our bit for the planet. This commitment often manifests itself in various forms and, in the summer of 2024, it was all about keeping our beaches clean. Partnering with Lincolnshire Wildlife Trust at Seacroft Marsh SSSI near Skegness, our team collected a total of 42kg of waste!

**Efficient use of energy**

Genuit's manufacturing processes are energy intensive with a bias towards electro-intensity. Our modern and efficient injection moulding and extrusion operations use significant amounts of electricity, and our larger warehouse and stocking facilities use natural gas predominantly as a heating fuel. We monitor very closely our energy usage, even at a machine level, and take a proactive approach to improve energy efficiency. UK Government schemes such as the Climate Change Levy Agreements (CCA) and Energy Savings Opportunity Scheme (ESOS) provide a mechanism for regular energy assessment, tracking and improvement programmes. And several of our larger sites are externally certified to the energy management system ISO50001.

Tackling climate change – Transitional plan

Pathway to Net-Zero

1 The journey so far

- Carbon intensity decreased by 48.6%
- Recycled content at 49.2%
- Absolute scopes 1 & 2 emissions decreased by 24%
- 91% of purchased electricity from renewable sources
- Emissions from purchased raw materials decreased by 26.7%
- 32% of suppliers have science-based targets

2 Leading the pack

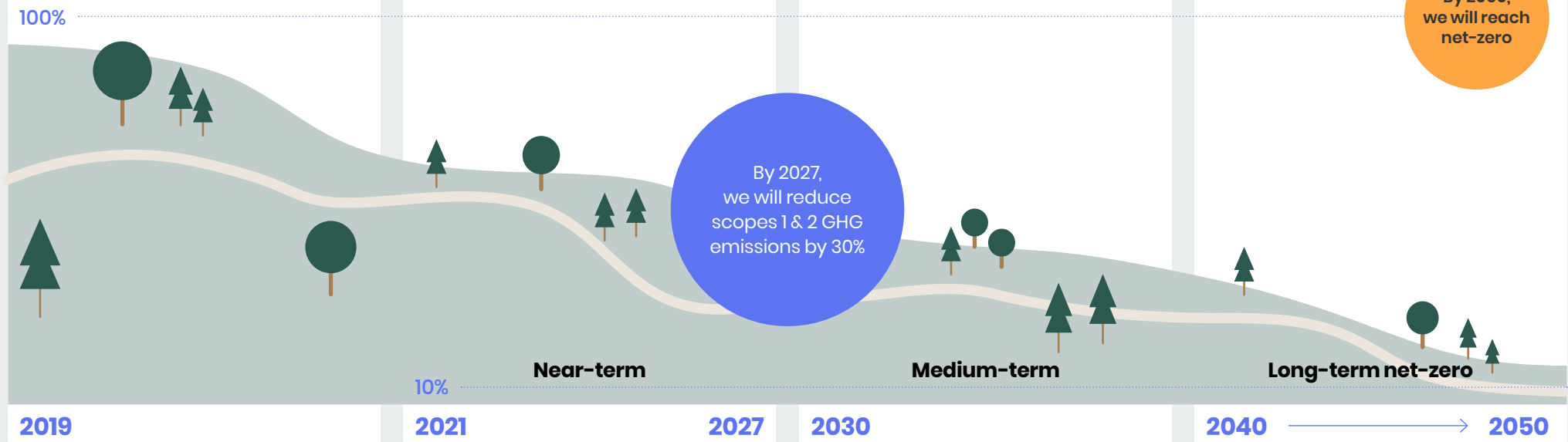
- Aligning ambition to climate science through setting of science-based targets
- Decarbonising our own site operations
- Reducing emissions from transport with plug-in hybrid electric vehicles (PHEVs) or full electric vehicles (EVs) and bio-fuels
- Reducing embedded carbon from new materials and using recycled content
- 30% reduction in absolute scopes 1 & 2 GHG emissions by 2027

3 Scaling up and driving down emissions

- Driving down scope 1 emissions from production activities
- Fully decarbonising transport emissions
- Adoption of innovative raw materials when available
- Decarbonisation of value chain through supply chain science-based target commitments

4 Delivering net-zero

- Deeper decarbonisation of Genuit Group operations
- Advanced circular economy activities
- 90% reduction in absolute scopes 1 & 2 GHG emissions by 2050
- 90% reduction in absolute scope 3 GHG emissions by 2050



Tackling climate change – Transitional plan [continued](#)

Pathway to Net-Zero

As we presented in the 2023 Annual Report and Accounts, we were committed to setting long-term Group-wide emissions reductions in line with net-zero and the Science Based Targets initiative (SBTi).

We have responded to the SBTi's urgent call for corporate climate action by committing to align with 1.5°C and net-zero through the Business Ambition for 1.5°C campaign. We are pleased to announce that in June 2024 our long-term reduction plans were approved by SBTi, including a 90% reduction in scopes 1 & 2 and a 90% reduction in scope 3 emissions by 2050. In making these commitments, Genuit has defined targets required as part of our climate-related transition plan and Pathway to Net-Zero.

Goods purchased for the manufacture of products account for the majority of our GHG inventory (scopes 1, 2 & 3). In the medium and long term, reducing this aspect will be key to achieving net-zero by 2050. The embedded carbon in these purchased raw materials derives from the primary products of the polymers and metals. With circular economy thinking and industry-recognised practices, once materials go through their first use and come back into the raw material supply chain, the primary production and embedded carbon is no longer associated with the material, to avoid double counting. Therefore, recycled materials or materials made from recycled content offer the most obvious low carbon solutions in the short to medium term, and hence our position as one of the leading consumers of recycled polymers.

In the short and medium term, the switch from virgin materials to recycled is clear. In the longer term, low carbon primary materials are likely to become available as the primary materials supply chain decarbonises in line with a net-zero trajectory. Furthermore, new and innovative materials such as bio-polymers are likely to become available, offering lower embedded carbon content than conventional materials. These will be crucial where applications do not allow for the use of recycled materials. Bio-polymers are material where the base component is produced from natural sources, for example chemically synthesised from a biological material.

A key element of achieving our Pathway to Net-Zero is the setting of challenging targets in the short term to provide the impetus for continuous progression and to remain on the required trajectory. As part of this journey, and as 80% of our total GHG inventory is in our purchased goods, i.e. the raw materials we buy to manufacture our finished goods, the supply chain engagement is crucially important. We have set ambitious scope 3 targets both in terms of absolute reductions of emissions and also in requiring 83% of our suppliers by GHG emissions to adopt science-based targets. We understand our leadership role in giving clear signals to the supply chain and working with our partners to achieve the carbon reductions required to avoid the worst effects of climate change.

Pathway to Net-Zero definitions

What does 'Carbon Neutral' mean?

Although often used interchangeably with 'net-zero', the two are not the same. In general, when companies claim carbon neutrality they are counterbalancing CO₂e emissions with carbon offsets without necessarily having reduced emissions by an amount consistent with reaching net-zero at the global or sector level (science-based targeted reductions).

Products that directly reduce or mitigate emissions during the life cycle may be described as carbon neutral if rigorous assessment shows this to be the case. Individual products may also be carbon neutral if residual emissions are offset by other carbon reduction activities and a third-party assessment has verified the claim. Third parties are developing processes to verify and approve carbon neutral claims. This is a developing area of product declaration and one that the Group is evaluating.

What does 'net-zero' mean?

A state of balance between anthropogenic (man-made) emissions of greenhouse gases and anthropogenic (derived from human activities) removals. Net-zero GHG emissions must be achieved at the global level to stabilise temperature increases.

The Science Based Targets initiative (SBTi) net-zero standard outlines what companies need to do to enable the global economy to achieve net-zero by 2050.

Companies must take action to halve emissions before 2030. Likewise, long-term deep emissions cuts of at least 90% before 2050 are crucial for net-zero targets to align with climate science.

Our net-zero target boundary includes all scopes 1, 2 & 3 emissions, both upstream and downstream.

Who is the 'Science Based Targets initiative'?

The Science Based Targets initiative (SBTi) is a partnership between the Carbon Disclosure Project (CDP), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).

The SBTi's goal is to enable companies worldwide to do what climate science requires of the global economy: to halve emissions by 2030, and achieve net-zero before 2050.

The SBTi develops criteria and provides tools and guidance to enable businesses and financial institutions to set GHG emissions reduction targets in line with what science tells us is needed to keep global heating below 1.5°C.

As previously highlighted, the Group has approved near-term targets and has submitted to SBTi long-term reduction targets of 90% for approval.

What are 'science-based targets'?

Science-based targets provide a clearly defined pathway for companies to reduce GHG emissions, helping prevent the worst impacts of climate change and future-proof business growth.

Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement: limiting global warming to 1.5°C above pre-industrial levels.

Governance

Governance

Genuit has sustainability at its core. For us, sustainability is not an after-thought. We've set an ambitious sustainability framework supported by external target setting.

At Genuit, we're in the business of sustainability.

Expectations of the built environment to solve the urgent challenges facing our infrastructure, buildings, communities and planet have never been greater. Across the Group, we're finding solutions for the challenges we are faced with: creating a more resilient business, society and planet.

We have a role to play in making the built environment more sustainable. We do this by becoming a sustainable, low carbon business ourselves as well as delivering sustainable solutions at scale.

In 2023, Genuit Group committed to and had approved near-term 2027 targets by the Science Based Targets initiative (SBTi). In 2024, we followed that commitment and had approved our long-term 2050 targets by SBTi.



Governance [continued](#)

Sustainability governance and strategy

Governance

Sustainability governance is deeply ingrained within Genuit's culture. The Board of Directors oversees and approves the Group's strategy and cultural framework, which includes sustainability initiatives and objectives. The Chief Executive Officer is ultimately accountable for executing this strategy and managing climate-related risks. Our Risk Committee, chaired by the Chief Financial Officer, is responsible for identifying and monitoring sustainability risks and opportunities.

We recognise the importance of effective governance for managing climate-related risks and opportunities. The Board has overall responsibility for the Group's internal control framework and risk management systems. This includes reviewing the effectiveness of the Group's risk and control processes and ensuring the identification, assessment and ongoing monitoring of risk, including a wide range of sustainability topics. It delegates monitoring and management of these to the Group's Risk Committee. Day-to-day oversight and strategy on sustainability matters is the responsibility of the Chief Strategy and Sustainability Officer and the Sustainability Director.

We are committed to assessing risks and opportunities relating to sustainability topics throughout our businesses, to support our customers and the wider community with low carbon benefits (through our low-emissions products and services), or mitigate against physical risks (such as flooding) through integrated surface and drainage solutions. Sustainability topics are a key factor in decision-making and considered by senior executives when setting ambitions for Group strategy.

During 2023 and 2024, we continued to integrate the monitoring, reporting and understanding of climate-related and sustainability risks and opportunities. These risks and opportunities are reviewed and captured on our Group Risk Registers, which are reviewed by the Risk Committee. This structure allows the Board, management teams and Committees to have adequate information to make strategic and local decisions.



SCIENCE
BASED
TARGETS



Strategy

Climate change continues to pose significant challenges to the built environment. We are aware that transitioning into a lower carbon economy may entail changes to policy, legal, technological or other market changes which may cause varying levels of financial and reputational risks to us as a Group. Nonetheless, sustainability is core to our commercial strategy.

As part of our assessment of climate-related risks and opportunities, we have identified transition and physical risks that climate change poses and that we seek to address and mitigate through our business strategy.

The Group takes into consideration a range of sustainability matters when setting our Group targets and our current Sustainability Framework has a clear focus on climate, circular economy, people and innovation at its heart. In order to supplement our existing Sustainability Framework on climate change, we took the decision to align with 'science-based targets' to provide a methodology for sustained, continual and net-zero aligned emissions reductions through to 2050.

Science Based Targets initiative near-term targets

The Group has set ambitious near-term and long-term GHG reduction targets and made long-term commitments to reach net-zero GHG emissions across the value chain by 2050. Genuit has approved near-term and long-term science-based emissions reduction targets by the Science Based Targets initiative (SBTi). Genuit Group's climate-related targets include commitments to the following:

Near-term targets

- Reduce absolute scopes 1 & 2 GHG emissions 30% by 2027 from a 2021 base year (SBTi Target)
- Reduce CO₂e emissions intensity by 66% from a 2019 base year (scopes 1 & 2) by 2025
- Increase annual sourcing of renewable electricity from 94% in 2021 to 100% by 2027 through 2030 (SBTi Target)
- 83% of our suppliers by emissions covering purchased goods and services will have science-based targets by 2027 (SBTi Target)
- Reduce absolute scope 3 GHG emissions by 13% for our purchased goods and services by 2027 from a 2021 base year

Long-term targets

- Reduce absolute scopes 1 & 2 GHG emissions 90% by 2050 from a 2021 base year (SBTi Target)
- Reduce absolute scope 3 GHG emissions 90% by 2050 from a 2021 base year (SBTi Target)

Pledge to Net-Zero

- Genuit has publicly committed to net-zero by 2050 with 'Pledge to Net Zero'

Data and metrics

Carbon and energy

In the table to the right we present Genuit Group's greenhouse gas (GHG) inventory and electricity used. We also show the base-year data used in setting our science-based targets with the Science Based Targets initiative (SBTi).

We believe the purchase of renewable electricity through contractual arrangements provides the market support required to continue to decarbonise electricity supply networks. Implementing the GHG Protocol, we report market-based scope 2 emissions which represents this purchasing choice. However, we recognise the need for transparency and therefore scope 2 (location-based) emissions are shown in the table below.

GHG inventory

	Base year value FY2021 (tCO ₂ e)	Base year emissions covered by targets (tCO ₂ e) (%)	FY2022 reporting value	FY2023 reporting value
Scope 1 (tCO ₂ e)	19,547	19,547 (100%)	16,839	13,893
Scope 2 (market-based) (tCO ₂ e)	1,487	1,487 (100%)	1,412	2,093
Scope 2 (location-based) (tCO ₂ e)	18,757		17,057	15,009
Total scopes 1 & 2 (market-based) (tCO₂e) (ABS1)	21,034	21,034 (100%)	18,251	15,986
Electricity				
Total electricity use (MWh)	81,102	81,102 (100%)	80,812	69,986
Electricity procurement from renewable sources (MWh)	76,236		73,512	63,460
% of electricity from renewable sources (O1)	94%		91%	91%
Scope 3 (tCO ₂ e)				
Category 1: Purchased Goods and Services	335,282	335,282 (100%)	372,279	245,734
Category 2: Capital Goods	17,803		17,204	15,685
Category 3: Fuel- and Energy-Related Activities	10,879		13,743	11,673
Category 4: Upstream Transportation and Distribution	9,204		1,206	1,024
Category 5: Waste Generated in Operations	1,052		1,248	1,060
Category 6: Business Travel	636		490	416
Category 7: Employee Commuting	6,932		8,199	6,964
Category 8: Upstream Leased Assets	N/A		N/A	N/A
Category 9: Downstream Transportation and Distribution	6,002		896	761
Category 10: Processing of Sold Products	N/A		N/A	N/A
Category 11: Use of Sold Products	4,464		4,321	3,670
Category 12: End-of-Life Treatment of Sold Products	3,054		3,561	3,024
Category 13: Downstream Leased Assets	N/A		N/A	N/A
Category 14: Franchises	N/A		N/A	N/A
Category 15: Investments	N/A		N/A	N/A
Suppliers of purchased goods and services with science-based targets (% coverage of scope 3: cat. 1) (O2)	0%		20%	32%

Notes:

- Genuit Group performs full inventory of its scopes 1 & 2 emissions on an annual basis. Scope 3 full inventories took place in 2021 and 2022. During 2023, scope 3 category 1 and 2 was fully re-assessed with other categories being estimated based on changes to activity at a site level.
- 90% of the data is calculated using actual data, with 10% being estimated based on pro-rated actual data as described in note a.
- Following a materiality assessment, categories 8, 10, 13, 14 and 15 were not deemed relevant to the nature of the business and marked as N/A.
- Data are prepared following the GHG Protocol methodologies with the following notes and alternative methodologies for scope 3 categories (<https://ghgprotocol.org/sites/default/files/2022-12/AppendixD.pdf>).
- Category 1 for the Nuair business is undertaken using the methodology defined in the standard 'Embodied carbon in building services: a calculation methodology CIBSE TM65: 2021'.
- Category 11 was assessed based on power consumption over a 12-month period. This is a deviation from the GHG Protocol as the in-use periods are not always known and depend on actual customer behaviour. Genuit Group continues to review and refine the methodology for category 11 assessment which may lead to changes in the reported value in future years.

Data and metrics [continued](#)**Recycled content**

Calendar Year	% of polymer used derived from recycled polymer materials
2018	38.4%
2019	49.2%
2020	45.9%
2021	49.4%
2022	48.7%
2023	49.2%

Water

	Total water supplied (m ³)	Total wastewater (m ³)	Water intensity per tonne of production (m ³ /t)
2020	57,500	31,161	0.449
2021	68,811	40,254	0.460
2022	74,634	51,508	0.557
2023	66,597	44,169	0.585

Management systems

Percentage of manufacturing sites with management systems covering quality, environment, health and safety and energy	% coverage of manufacturing sites
ISO 9001:2015	
Quality management systems	92%
ISO 14001:2015	
Environmental management systems	92%
ISO 45001:2018	
Occupational health and safety management systems	85%
ISO 50001	
Energy management	31%
Other sustainability management systems	Number of sites
BES 6001	
Framework Standard for Responsible Sourcing	3
PAS 2080	
Carbon management in infrastructure	2

Data and metrics [continued](#)**Green revenues**

Genuit Group's sustainable product offerings are centred around providing solutions that help society manage the effects of climate change or support efforts to reduce emissions of greenhouse gases.

Below we present percentage of revenues from the sale of green products categorised following the LTSE Russell Green Revenues Classification System 2.0 that contribute to the global green economy.

Green Economy Mark (FY23 FTSE Russell Green Revenues Classification)		
Code	Micro-Sector & Description	Revenue (%)
ER.03.2	Recyclable Products & Materials Revenue-generating activities related specifically to products that have been created to allow for multiple re-use, disassembling and repurposing or are able to biodegrade rapidly at the end of their useful life.	30.52%
EM.01.0	Buildings & Property (Integrated) (General) Revenue-generating activities related specifically to the design, development, manufacture or installation of energy and other resource efficient products and services for use in residential, commercial and municipal buildings. Products include those that contribute to international certification standards such as LEED and BREEAM and can include entire buildings.	43.47%
WI.03.0	Flood Control Revenue-generating activities related specifically to the design, development, manufacture, operation or installation of products and services that prevent or reduce the impact of flood waters.	
WI.06.0	Water Infrastructure Revenue-generating activities related specifically to the design, development, manufacture, operation or installation of products and services that enhance water infrastructure systems. This includes specialty pipes, pumps, valves, actuators, hydrants and meters activities and the development and construction of water infrastructure.	
EM.02.0	Controls (General) Revenue-generating activities related specifically to the design, development, manufacture or installation of efficient energy manipulation and optimisation systems. Activities include efficient semiconductor controllers and microgrid controllers.	
WI.01.0	Advanced Irrigation Systems & Devices Revenue-generating activities related specifically to the design, development, manufacture or installation of equipment that enables water to be applied efficiently in agricultural contexts.	
Total green revenues		73.98%



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