



Sustainability 2021

Polypipe Building Services

Building a sustainable business

At Polypipe Building Services, part of the Genuit Group, 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.

We're committed to managing our own environmental impact, at the same time as ensuring that our products and solutions work to benefit the environments in which they are used.

Sustainability is core to our business model, our strategy, our culture, and our values, driving innovation in both how we run our business and the solutions we create.

We're raising the bar on sustainability, holding ourselves accountable setting a clear strategy with ambitious targets and measuring progress along the way.

**Proud to be
awarded the
London Stock
Exchange Green
Economy Mark**



London
Stock Exchange



Sustainability Targets 2025

Genuit Group



Advancing the circular economy

- 62% of tonnage from recycled plastics
- 0 waste to landfill



Delivering sustainable solutions

- 25% of sales from products that do not exist today



Tackling climate change

- 66% reduction of CO2 emissions (scope 1 and 2) without offsetting



Investing in our employees

- 5% of workforce actively involved in recognised learning

It is our ambition to increase recyclability to its maximum threshold and to become a zero-to-waste operation. In 2020 45.9% of materials were from recycled inputs and several our sites are zero waste to landfill including the Polypipe Building Services site in Aylesford, Kent.

Guided by industry drivers such as the need for cleaner, healthier air, resilient drainage systems, green urbanisation and low carbon heating and construction we continue to invest in new product development and aim to maintain a level of R&D investment great than 2% of revenue.

We are committed to reducing the carbon footprint of our operations and products by focusing on reducing overall emissions, without resorting to carbon

offsetting. In 2020 we achieved a reduction in carbon emissions (tCO₂e) of 15.4% and a reduction in carbon emission intensity (scope 1 & 2) of 7.8%.

We've joined the 5% club which commits us to having 5% of our workforce actively involved in recognised learning and work schemes such as apprenticeships, graduate programmes, and student sponsorships. In 2020 3.8% of our workforce were involved in such schemes.



Materials

Whether prime or recycled polymers, our materials are sourced to a strict sustainable policy and this ensures all suppliers meet the highest standards. With ISO 9001 Quality Management and ISO 14001 Environmental Management accreditation, we only manufacture with the very best materials.

Reduce. Re-use. Recycle.

Where industry standards allow, we try to reduce the amount of virgin material going into our products whilst our development teams continuously look at how

we can maintain strength, quality and longevity in our products, using less material, more recycled material and optimising machine usage.

We also monitor every production process and pursue continuous improvement in our operations to eliminate the sources of waste. For example, we reduce power and water consumption by meter usage at machine level.

Polypipe are also signed up to Operation Clean Sweep®. Operation Clean Sweep is an international initiative from the plastics industry to reduce plastic pellet loss to the environment. The initiative's aim is to ensure that the plastic pellets, flakes, and powders that pass-through manufacturing facilities in the UK are handled with the care they deserve and do not end up in our rivers or seas.



Since signing up we've implemented;

- **Site audits** - identifying transfer points and potential spill areas.
- **Worksite set-up** - containment systems and employee equipment.
- **Training programme**
- **Prevention, containments and clean up procedures** - (transport, loading/unloading material, storage, packaging, recycling, and waste disposal)

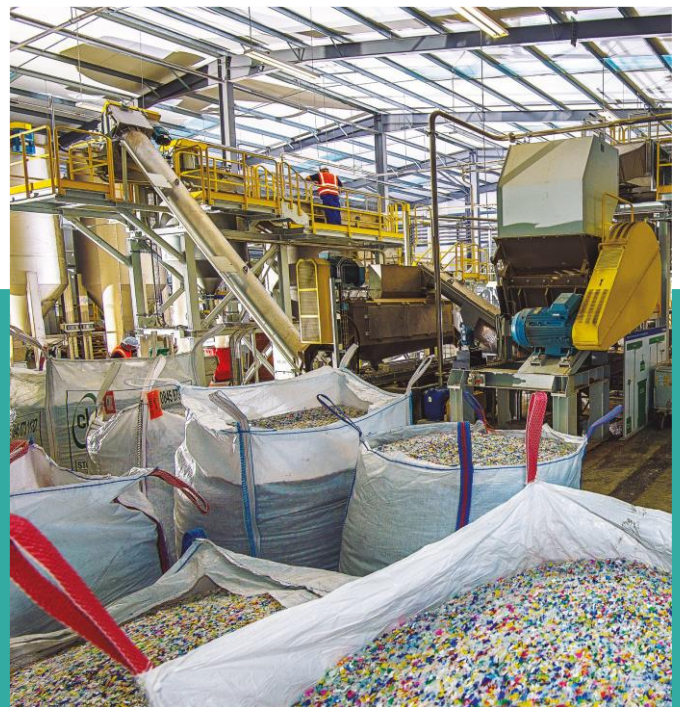
Polypipe does not just recycle all in-process material waste, we have our own recycling facility that takes plastic bottles and containers and makes them into plastic pellets used to make our pipes.

“In 2019, Polypipe recycled 44,700 tonnes of plastic, of which 16,000 tonnes came from recyclable plastic bottles and containers”

To see more about how we recycle plastic bottles to plastic pipe visit:
<https://youtu.be/t6POT6wa-t0>

Carbon. Carbon. Carbon.

Producing pipe with recycled plastics instead of virgin plastic reduces embedded carbon dioxide. Life cycle analysis (LCA) reports suggest that there are clear environmental benefits to producing plastic products from recovered plastics, compared with using virgin polymers and disposing of the product post-use via incineration or landfill; and these environmental gains are particularly high for high-density polyethylene (HDPE), such as that used to make plastic bottles. For each tonne of HDPE that is recycled, one tonne of carbon dioxide is saved versus producing and disposing of the same quantity of virgin material.



For example, producing a kilogram of virgin plastic releases 2–3 kilograms of carbon dioxide, which is about as much as the same amount of steel. However, a single kilogram of plastic can produce more usable product in application than steel and 100 times more than concrete, so the embedded carbon dioxide in application is significantly less with plastic pipes than with the alternative legacy materials.

Not only is polymer material recyclable at the end of its product life, which is designed to be at least 50 years, the benefits of plastic also make it a much more considerate choice for the environment versus alternative materials. Concrete, clay, copper, steel and ductile iron pipe systems all contain significantly more embedded carbon through their production processes, and all require significantly more haulage and specialist lifting equipment than much lighter plastics, which means that the use of Polypipe systems greatly reduces carbon emissions in delivery and installation.

You can read more about the benefits of plastic in a [document](#) from The European Plastic Pipes and Fittings Association (TEPPFA)



Polypipe Carbon Emissions

We aim to minimise the lasting impact of our operations on the environment, and sustainability is a key feature of our products and their impact on the environment. Our modern and efficient injection-moulding and extrusion operations use significant amounts of electricity. We monitor very closely our electricity usage, even at a machine level, and take a proactive approach to improve energy efficiency.

Greenhouse gas (GHG) emissions for the Group during 2020, in tonnes of carbon dioxide equivalent (tCO₂e) were as follows;

Greenhouse gas emissions by source and reporting period

Source	%	2020	2019	Change
– fuel combustion (stationary)	13.0	4,739	3,261	45.3%
– fuel combustion (mobile)	30.8	11,252	13,976	(19.5)%
– fugitive emissions (F-gas)	1.8	665	940	(29.3)%
– purchased electricity	54.4	19,860	24,993	(20.5)%
Total emissions (tCO₂e)	100.0	36,516	43,170	(15.4)%
Output (tonnes of production)		128,036	139,308	(8.1)%
Intensity (tCO₂e) per tonne of production		0.285	0.310	(8.0)%

Greenhouse gas emissions by scope and reporting period

	2020	2019	Change
Total emissions (tCO₂e)	36,516	43,170	(15.4)%
Scope 1 and 2 emissions intensity*	0.252	0.273	(7.8)%
Scope 3 emissions intensity*	0.033	0.037	(9.5)%
Total emissions intensity*	0.285	0.310	(8.0)%

* Expressed in tCO₂e per tonne of output

Energy consumption by type and reporting period

Energy source (MWh)	%	2020	2019	Change
Electricity	53.2	77,363	86,803	(10.9)%
Gas	15.0	21,789	8,903	144.7%
Transport fuel	31.2	45,431	49,455	(8.1)%
Other fuel	0.6	819	Not reported	n/a
Total	100.0	145,402	145,161	0.2%

Our GHG emissions were calculated using the methodology set out in the updated GHG reporting guidance issued in June 2013 by the Department for Environment, Food and Rural Affairs (DEFRA). Carbon emission factors were taken from the Department for Business, Energy and Industrial Strategy's 2019 update of GHG Conversion Factors for Company Reporting, with the exception of non-UK electricity, which were taken from the European Residual Mixes 2017: Association of Issuing Bodies.

More information on our sustainable group practices can be found in our [2020 annual report](#)

Polypipe Building Services

Sustainable practices in the supply chain

In addition to Genuit group practices, customers of Polypipe Building Service also benefit from key sustainable initiatives;

Polypipe Advantage Service

Supplying fabricated drainage stacks and water supply systems means less packaging is needed for the pipes and fittings. When customers choose to use our Polypipe Advantage Service, they are dramatically reducing the amount of cardboard and plastic packaging reaching their sites.

What's more we recycle all end caps and pipe cut offs when returned to us.

Package Recycling

At our manufacturing facilities in Aylesford, Kent, we aim to re-use and recycle as much of our packaging as possible.

We encourage all customers to return both metal and wood stillages and plastic totes. These can be re-used multiple times.

Whilst we try to limit the amount of packaging used when delivering to our sites, we do have to ensure products are safeguarded against damage and arrive in the best condition. We therefore use, where appropriate, cardboard and plastic packaging which can be recycled.



With a dedicated recycling area at our site in Aylesford we accept the following packaging to be returned to us for recycling;

- Shrink wrap
- Banding
- Cardboard
- Paper labels
- White plastic wrapping



Polypipe Building Services Recycling Highlights 2020

- PVC - 490 tonnes recycled
- HDPE - 53 tonnes recycled
- Cardboard – 34 tonnes recycled
- Pallets – 5693 – reused
- U-Frames – 12885 – reused
- Slats – 13381 – reused

**“Find out more
about our
recycling by
watching this
[video](#)”**

Environmental Product Declaration.

At Polypipe Building Services we supply products and systems using various materials for both drainage and water supply. For us to understand our products environmental impact, we refer to Teppfa's EPD. Environmental Product Declarations are assessments that calculate the overall environmental impact of a product over its entire life cycle, including extraction of raw materials, production of materials and the product, construction, use and end-of-life treatment.

For Terrain Drainage please refer to the below EPD's

PVC

<https://www.teppfa.eu/wp-content/uploads/SW02-PVC-U-soil-and-waste-epd-0220.pdf>

PP

<https://www.teppfa.eu/wp-content/uploads/SW04-PP-low-noise-soil-and-waste-epd-0220.pdf>

PE

<https://www.teppfa.eu/wp-content/uploads/PW01-PE-epd-0220.pdf>

For MecFlow Water Supply please refer to the below EPD's

PP-R

<https://www.teppfa.eu/wp-content/uploads/HC03-PP-R-hot-and-cold-epd-0220.pdf>

MecFlow and Terrain Q raw material, pipes and fittings recently undergone a Lifecycle Assessment review.

Please contact us to obtain a copy.

In addition, MecFlow and Terrain Q have secured Gold Standard in the Cradle to Cradle Products Innovation Institute. For more information on what this means please visit [Home - Cradle to Cradle Products Innovation Institute \(c2ccertified.org\)](http://Home - Cradle to Cradle Products Innovation Institute (c2ccertified.org))

**CRADLE TO CRADLE
PRODUCTS
INNOVATION
INSTITUTE**

LICENSED MARKS:

Cradle to Cradle Certified™ Gold

THE LICENSED MARKS IDENTIFIED ABOVE MAY BE LICENSED TO:
Polypipe Ltd

FOR THE BELOW LISTED CERTIFIED PRODUCTS ASSOCIATED WITH THE NAME:
Polypipe MecFlow and Terrain product families

Peter Simpleton
Cradle to Cradle Products Innovation Institute

START DATE: 13 July 2021
EXPIRATION DATE: 15 June 2022

CERTIFICATION #: 4965

LEAD ASSESSMENT BODY: Eco Intelligent Growth
MATERIAL HEALTH ASSESSMENT BODY: MBDC

Only the following products are considered Certified Product(s) within the scope of this certification and the associated Trademark License Agreement:
Polypipe CLICKWELD and Pipe with CLICKWELD, male and female fittings: Terrain Q range 40-315mm, MecFlow range 20-500mm, MecFlow Flex 16-63mm
Excluded from scope: Metal transition fittings

Certified under Version 3.1 of the Cradle to Cradle Certified™ Product Standard
Use of Licensed Marks is subject to terms and conditions of the C2CPI Trademark License Agreement and Trademark Use Guidelines.
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Date: October 2021