

# NAYLOR

## GROUP

### NET ZERO CARBON ANNUAL REPORT

Financial Year 2022  
(March 2022 - February 2023)





“Naylor cares deeply about the environment and we are sharing our journey to net zero with colleagues, as well as customers and suppliers.

We are continually working to reduce emissions in all areas and recognise that to achieve net zero by 2050 we need to explore and develop innovative and energy saving technologies.”

A handwritten signature in white ink that reads 'Edward Naylor'. The signature is written in a cursive style and is positioned above a horizontal line.

EDWARD NAYLOR  
CEO Naylor Industries PLC

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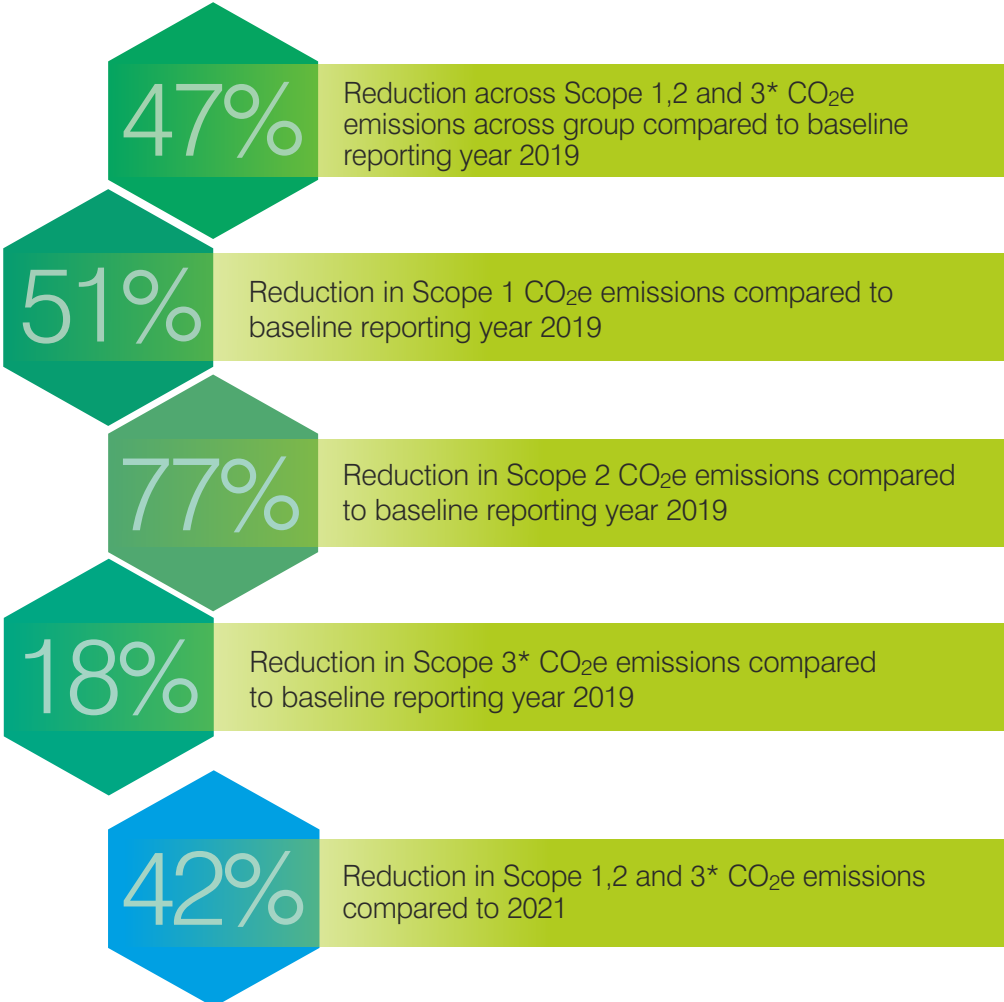
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# NET ZERO CARBON Group Overview

Naylor Industries PLC is proud to share this report detailing progress made towards achieving 'Net Zero Carbon Emissions' for the financial year 2022.

The report shows the performance of each division represented by the volume of greenhouse gases emitted in tonnes of 'CO<sub>2</sub>e' (tCO<sub>2</sub>e) and a summary of improvements each division has made



\*Partial scope 3 quantification, includes emissions calculated from; Grey fleet, Waste, Water, Air Travel, Rail Travel, Electricity T&D, Electricity WTT, Natural Gas WTT, Bulk Fuel WTT, Business Travel WTT (T&D - Transfer and Distribution, WTT - Well to Tank).

# NET ZERO CARBON Group Overview

GHG Emissions Scope	Source	2021 GHG Emissions (tCO <sub>2</sub> e)	2022 GHG Emissions (tCO <sub>2</sub> e)	Change in Emission (tCO <sub>2</sub> e) from 2021	% Change from 2021	% Change from baseline year 2019
<b>Total Scope 1 Emissions (tCO<sub>2</sub>e)</b>		<b>10,783.3</b>	<b>5,846.4</b>	<b>-4,936.9</b>	<b>-45.8%</b>	<b>-51.8%</b>
<b>Total Scope 2 Emissions (tCO<sub>2</sub>e)</b>		<b>43.9</b>	<b>90.1</b>	<b>46.2</b>	<b>105.4%</b>	<b>-77.8%</b>
<b>*Total Scope 3 Emissions (tCO<sub>2</sub>e)</b>		<b>3,040.2</b>	<b>2,004.1</b>	<b>-1,035.8</b>	<b>-34.1%</b>	<b>-18.3%</b>
<b>Total GHG Emissions (tCO<sub>2</sub>e)</b>		<b>13,867.5</b>	<b>7,941.0</b>	<b>-5,926.5</b>	<b>-42.7%</b>	<b>-47.0%</b>

Table 1 - Naylor Industries PLC group greenhouse gas emissions 2021/2022 with % change since 2019.

\*Partial scope 3 quantification, includes emissions calculated from: Grey fleet, Waste, Water, Air Travel, Rail Travel, Electricity T&D, Electricity WTT, Natural Gas WTT, Bulk Fuel WTT, Business Travel WTT (T&D - Transfer and Distribution, WTT - Well to Tank).

Division	Site	2021 GHG Emissions Ratio (tCO <sub>2</sub> e/Production Tonnage)	2022 GHG Emissions Ratio (tCO <sub>2</sub> e/Production Tonnage)	Change in Emission (tCO <sub>2</sub> e) from 2021	% Change from 2021	% Change from baseline year 2019
<b>Naylor Drainage</b>		<b>0.437</b>	<b>0.363</b>	<b>-0.073</b>	<b>-16.8%</b>	<b>-16.8%</b>
	Cawthorne Clay	0.724	0.862	0.138	19.1%	35.5%
	Methil	0.126	0.104	-0.017	-14.3%	-14.3%
	Cawthorne NPP	0.086	0.109	0.023	27.5%	26.6%
<b>Naylor Specialist Plastics</b>		<b>0.126</b>	<b>0.076</b>	<b>-0.050</b>	<b>-39.9%</b>	<b>-40.5%</b>
	Wombwell	0.112	0.070	-0.042	-37.6%	-38.1%
	Tipton	0.151	0.085	-0.066	-43.8%	-44.9%
<b>Naylor Concrete</b>		<b>0.011</b>	<b>0.009</b>	<b>-0.002</b>	<b>-22.2%</b>	<b>-35.7%</b>
	Barugh Green	0.011	0.011	-0.000	-1.9%	-17.8%
	Garforth	0.011	0.005	-0.006	-55.3%	-
<b>Naylor Technical Solutions*</b>		<b>0.016</b>	<b>0.033</b>	<b>0.016</b>	<b>101.1%</b>	<b>-</b>
	Gainsborough	0.016	0.033	0.016	101.1%	-
<b>Total (with NTS)</b>		<b>0.201</b>	<b>0.128</b>	<b>-0.073</b>	<b>-36.3%</b>	<b>-51.5%</b>

Table 2 – Group tCO<sub>2</sub> per tonne emissions Baseline year 2021/2022 with % change from 2019.

\* Naylor Technical Solutions - tCO<sub>2</sub>e/Thousand £ of product sold.

The results in table 1 show a reduction of 47% in Scopes 1, 2 and 3\* in 2022 compared to the baseline reporting year of 2019. This is primarily associated Scope 1 and 3 emissions attributed to lower natural gas consumption, a result of scaled back clay production. Table 1 shows a 51.8% reduction in scope 1 emissions attributed to a significant reduction in natural gas consumption. While Scope 2 emissions increased by 46tCO<sub>2</sub>e due to the acquisition of Naylor Technical Solutions in August 2021. However, we have seen a real-term reduction of 77.8% in scope 2 emissions compared to baseline year 2019.

Table 2 shows carbon emissions (CO<sub>2</sub>e) associated with the production of our products. This table shows a 36.3% decrease in CO<sub>2</sub>e emitted per tonne of product compared to 2021 and a 51.5% decrease compared to baseline year 2019.





# NET ZERO CARBON Drainage

Division		2019 (Baseline Year)	2021	2022
Clay	GHG Emission (tCO <sub>2</sub> e)	13230	11880	5746
	Tonnes of CO <sub>2</sub> per Tonne product produced	0.636	0.724	0.862
Cawthorne Plastics	GHG Emission (tCO <sub>2</sub> e)	929	1065	1298
	Tonnes of CO <sub>2</sub> per Tonne product produced	0.086	0.086	0.109
Methil	GHG Emission (tCO <sub>2</sub> e)	151	155	130
	Tonnes of CO <sub>2</sub> per Tonne product produced	0.121	0.126	0.104

## Action taken to Reduce Carbon in 2022

Clay	<ul style="list-style-type: none"> <li>■ Solar provided Cawthorne with 83,680kWh (50% split) of renewable energy</li> <li>■ Production scaled back in response to rising gas prices.</li> <li>■ Increase in LED lighting</li> </ul>
Cawthorne Plastics	<ul style="list-style-type: none"> <li>■ Renewable solar generated on site provided Cawthorne with 83,680kWh (50% split) of renewable energy</li> <li>■ Site mains compressed air piped into fabrications area allowing stand alone 11kW compressor to be stood down and used as back up. Approximate savings of 45,000kWh of electricity and 9000kgCO<sub>2</sub>e</li> <li>■ New chillers installed – proposed savings of 1.8MWh electrical power per annum</li> <li>■ Average production yield improved by 1%</li> <li>■ Combined heat and power generator use caused CO<sub>2</sub>e emissions to increase</li> </ul>
Methil	<ul style="list-style-type: none"> <li>■ Use of Piranha system resulted in reduced energy loss associated with improved maintenance and PPM's (Planned Preventative Maintenance)</li> <li>■ Investigating feasibility of renewable energy through Power Purchase Agreements (PPA's)</li> <li>■ Abertay University energy saving study undertaken</li> <li>■ Fire doors and shutter doors replaced – improved heat retention</li> </ul>





# NAYLOR Specialist Plastics





# NET ZERO CARBON Specialist Plastics

Division		2019 (Baseline Year)	2021	2022
Wombwell	GHG Emission (tCO <sub>2</sub> e)	225	193	176
	Tonnes of CO <sub>2</sub> per Tonne product produced	0.113	0.112	0.070
Tipton	GHG Emission (tCO <sub>2</sub> e)	158	142	132
	Tonnes of CO <sub>2</sub> per Tonne product produced	0.154	0.151	0.084

## Action taken to Reduce Carbon in 2022

Wombwell	<ul style="list-style-type: none"> <li>■ New injection moulder – projected to save approx. 500,000 kWh of electricity per annum (63% more efficient than previous).</li> <li>■ Reduced heat waste - heating thermostats reduced to 19°C and timing settings adjusted to work schedule to reduce instances of wasted heat.</li> <li>■ Reflective film installed on windows – helps stabilise temperature reducing demand on air conditioning in summer.</li> <li>■ Oily rags recycled – reduced waste disposal</li> <li>■ Upgraded drying – now using vacuum drying instead of compressed air drying.</li> </ul>
Tipton	<ul style="list-style-type: none"> <li>■ Sonar technology used to detect air leaks and defective bearings, helps reduce energy waste</li> <li>■ Using increased volumes of reprocessed material</li> <li>■ Heater timing settings optimized to work schedule to reduce instances of wasted heat.</li> <li>■ Lighting PIR (Passive Infrared Sensor) in use around site.</li> </ul>





# NAYLOR Concrete Products





# NET ZERO CARBON Concrete Products

Division		2019 (Baseline Year)	2021	2022
Barugh Green	GHG Emission (tCO <sub>2</sub> e)	286	246	254
	Tonnes of CO <sub>2</sub> per Tonne product produced	0.013	0.011	0.011
Garforth	GHG Emission (tCO <sub>2</sub> e)	n/a	160	71
	Tonnes of CO <sub>2</sub> per Tonne product produced	n/a	0.011	0.004

## Action taken to Reduce Carbon in 2022

Barugh Green	<ul style="list-style-type: none"> <li>■ Water tank installed - resulting in increased use of recycled water, saving approximately 2,000,000 litres of water per annum</li> <li>■ Increased use of electric and hybrid vehicles in company fleet</li> <li>■ Replaced part of diesel FLT fleet with electric FLT</li> <li>■ Air survey conducted, air leaks reduced</li> <li>■ Phased soft start installed on some motors - improves efficiency by up to 30% and increases life span of motors/equipment</li> <li>■ Further LED lighting installed</li> <li>■ New offices thermally insulated to prevent heat loss</li> <li>■ On site solar generated approximately 73,000 kWh of renewable electricity</li> </ul>
Garforth	<ul style="list-style-type: none"> <li>■ Replaced LPG with BioLPG - resulting in LPG emission reductions of approximately 32%</li> <li>■ Switch to LPG resulted in lower diesel consumption</li> <li>■ Improvements in yield</li> <li>■ Doors routinely closed to retain heat</li> <li>■ Garforth switched to zero carbon electricity contract during 2022</li> <li>■ Switch to zero carbon energy contract part way through financial year and switch to BioLPG resulted significant reduction in CO<sub>2</sub>e emissions</li> </ul>



# NAYLOR Technical Solutions





# NET ZERO CARBON Gainsborough

(Financial Years)	2019	2021	2022
GHG Emission (tCO <sub>2</sub> e)	n/a	23*	132
tCO <sub>2</sub> e/Thousand £ per product sold	n/a	0.016	0.032

\* Partial year quantification

## Action taken to Reduce Carbon in 2022

Gainsborough

- New insulated shutter doors – provides better heat retention
- Insulated roof and walls installed in new shed
- New more efficient LPG truck in use – reduced emissions
- Lower emissions in 2021 are a direct result of a partial GHG quantification due to Gainsborough joining the group part way through the year. CO<sub>2</sub>e emissions increased in 2022 due to Naylor bringing manufacture of mesh product line in house from sub-contractor

Please note - Following changes to calculation approaches and improvements in the data quality, there has been a restatement of the 2021 GHG figures this year. As a result, the figures originally published in 2021 have altered in an effort to improve the accuracy of the GHG quantification.

# NAYLOR

