

Executive Summary of Carbon Footprint Report

FY2023 (01 June 2022- 31 May 2023)





Report Highlights

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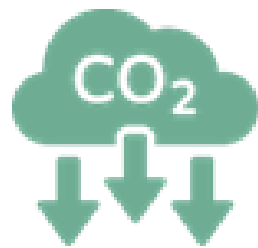
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Commitment to Net Zero

ETL’s Carbon Reduction Roadmap aims to reduce emissions year-on-year in line with NET Zero reduction targets. Our updated roadmap states a Net Zero target date of 2050 and target of a 70% reduction in CO2e emissions by 2033 (from the baseline position), with incremental targets each year and associated actions. This target has been set using the Science-Based Targets Initiative (SBTi) guidance. Key measures to achieve this include monitoring and reporting on energy use, identifying where savings can be made, increasing the overall efficiency of our operations and use of renewable energy.

As part of our Carbon Reduction Roadmap we are committed to:

Introduction

Carbon Lens were commissioned by ETL to carry out a Carbon Footprint Report for the periods FY-2022 and FY-2023.

This executive summary focusses on the FY-2023 report, and also expands on ETL’s carbon reduction initiatives as set out in our Roadmap.



Measuring

understanding, and taking steps to reduce our own greenhouse gas emissions, (Carbon Footprint).



Reducing emissions

across all aspects of operations, including energy use, transport and travel, supply chain, financial investment, and waste.



Influencing

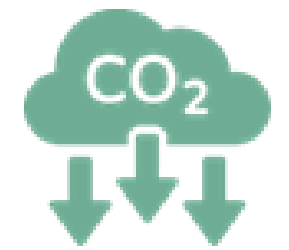
stakeholders including suppliers, customers and staff to take steps to reduce emissions.



Reporting

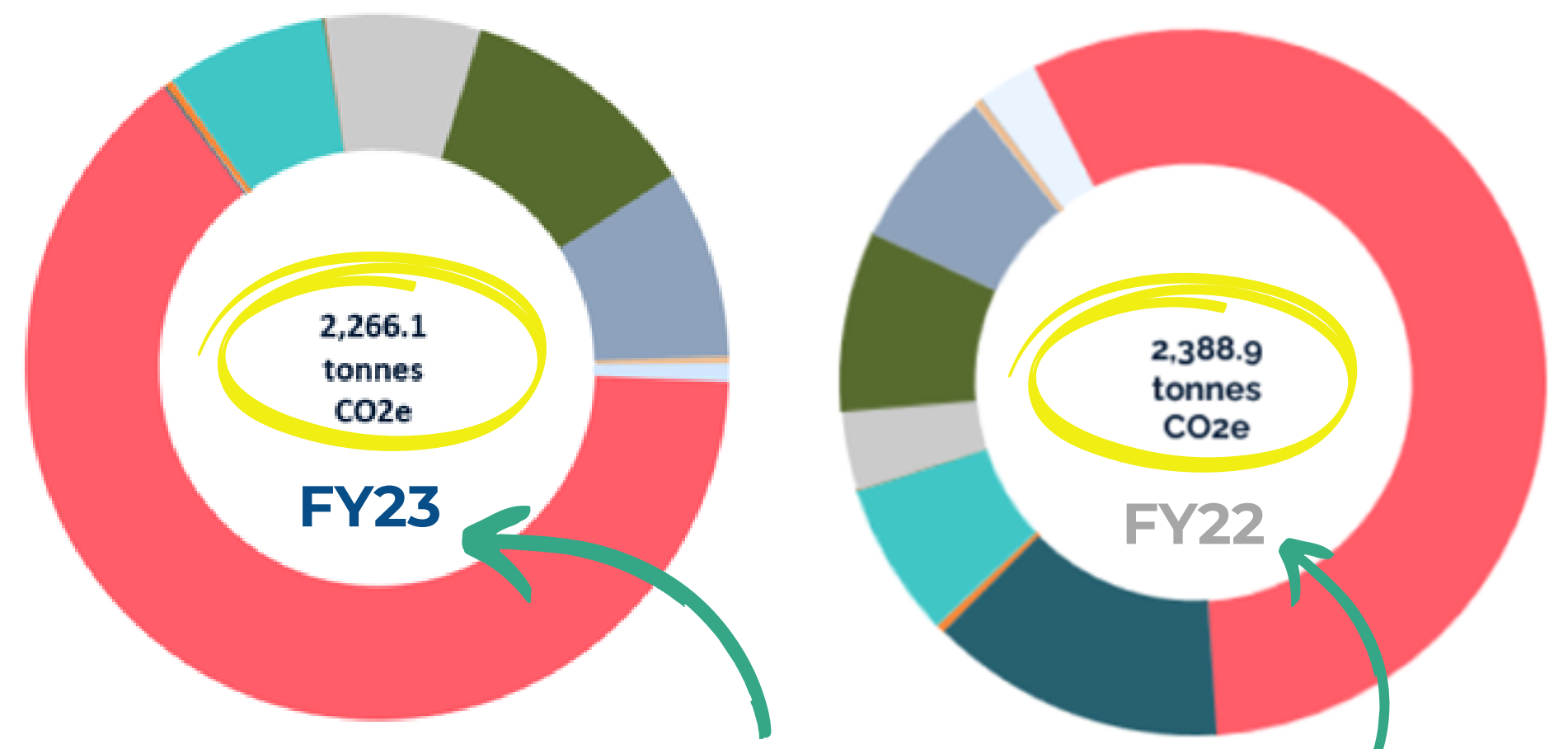
and publicising progress.

Carbon footprint comparison - FY23 vs FY22

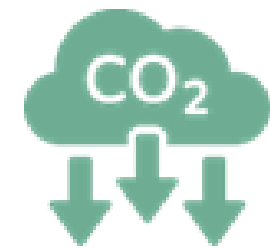


Summary

- Total emissions in FY23 are calculated to be 5% lower than in FY22 (location based)
- The **most significant reduction was capital spend**, due to the C4 building project that was factored into the FY22 emissions
- Turnover has increased, so carbon intensity (emissions per £M) has reduced by 19%, indicating improved carbon efficiency (further details on page 7).
- **Purchased goods and services** are the highest contributors of emissions (64%), followed by **transport of product** (11.1%), **staff commuting** (8.6%), **electricity** (7.4) and **business travel** (7.1%)



Aspect	Tonnes CO ₂ e (Location Based)					2022 Emissions	
	Total	Scope 1	Scope 2	Scope 3	%	tCO ₂ e	% Change
Mains Gas	9.30	7.94		1.35	0.4%	11.37	-18%
* Electricity	167.57		120.00	47.58	7.4%	168.64	-1%
Fuel oil	2.92	2.37		0.54	0.1%	1.70	72%
* Business Travel	161.40	3.77	1.98	155.65	7.1%	85.96	88%
* Transport	251.63			251.63	11.1%	197.42	27%
* Staff Commuting	195.25			195.25	8.6%	177.38	10%
Working from Home	7.58			7.58	0.3%	9.71	-22%
Waste	0.15			0.15	0.0%	0.07	116%
Water & Sewerage	1.34			1.34	0.1%	1.39	-3%
Air Con Cooling	17.34	17.34		0.00	0.8%	65.66	-74%
* Purchases	1,449.18			1,449.18	64.0%	1,346.52	8%
Capital Spend	2.39			2.39	0.1%	323.03	-99%
Total	2,266.05	31.43	121.98	2,112.65	100%	2,388.85	-5%



Consumption comparison - FY23 vs FY22

Summary

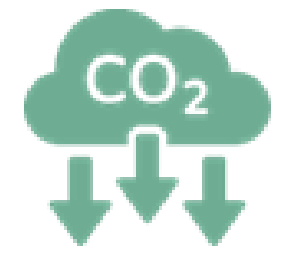
- Gas consumption (kWh) has decreased by 18%
- Grid electricity consumption (kWh) has increased by 8%; due to additional building C4 that became fully operational in June 2022, therefore impacting the FY23 carbon footprint. Emissions have actually decreased by 1 Tonne CO2e due to a reduction in carbon intensity of the grid.
- Slightly more fuel oil was purchased.
- Business travel milage has increased by 31%
- Transport milage (of product) has increased by 8% as business has grown.
- Staff commuting milage has increased by 7% and working from home decreased.
- Air conditioning gas replacement (Kg) has reduced by 73%.
- Purchases have increased by 53%, but capital spend is significantly lower due to new building C4 costs in FY22.

Equivalent emissions changes

Aspect	2022-2023			2021-2022			Change	
	Qty	Units	TCO ₂ e	Qty	Units	TCO ₂ e	TCO ₂ e	%
Mains Gas	43,512.7	kWh	9.3	53,198.4	kWh	11.4	-2.1	-18%
Electricity	626,501.6	kWh	167.6	578,922.3	kWh	168.6	-1.1	-1%
Fuel oil	859.9	Litres	2.9	500.0	Litres	1.7	1.2	72%
Business Travel	442,609.0	Miles	161.4	337,599.7	Miles	86.0	75.4	88%
Transport	256,153.0	TMiles	251.6	237,000.4	TMiles	197.4	54.2	27%
Staff Commuting	189,963.4	Miles	195.2	177,479.0	Miles	177.4	17.9	10%
Working from Home	0.0	kWh/Day	7.6	1.1	kWh/Day	9.7	-2.1	-22%
Waste	37.0	Tonnes	0.2	15.7	Tonnes	0.1	0.1	116%
Water & Sewerage	3,411.6	M3	1.3	3,411.6	M3	1.4	0.0	-3%
Air Con Cooling	11.2	Kg Gas	17.3	42.4	Kg Gas	65.7	-48.3	-74%
Purchases	11,376,623.6	£	1,449.2	7,417,323.0	£	1,346.5	102.7	8%
Capital Spend	76,186.8	£	2.4	2,746,247.4	£	323.0	-320.6	-99%
Total			2,266			2,389	-123	-5%

Electricity comparison

- Overall electricity consumption from the grid has increased by 8% due to the addition of a new building at the Hereford site (C4) which became fully operational in June 2022.
- The effect of the additional 141.96 kWp solar PV installation in May 2023, in addition to the existing 72.64 kWp already in place, will be seen in the FY24 Carbon Footprint Report (that will cover the period 01 June 23 to 31 May 24).
- Despite the increase in consumption, there is a drop in emissions from grid electricity. The main reason is the reduction in intensity of the grid electricity. The government issues figures annually that Carbon Lens input to the emissions calculator. Intensity of the grid is reducing annually as more wind and solar power is fed into the grid.

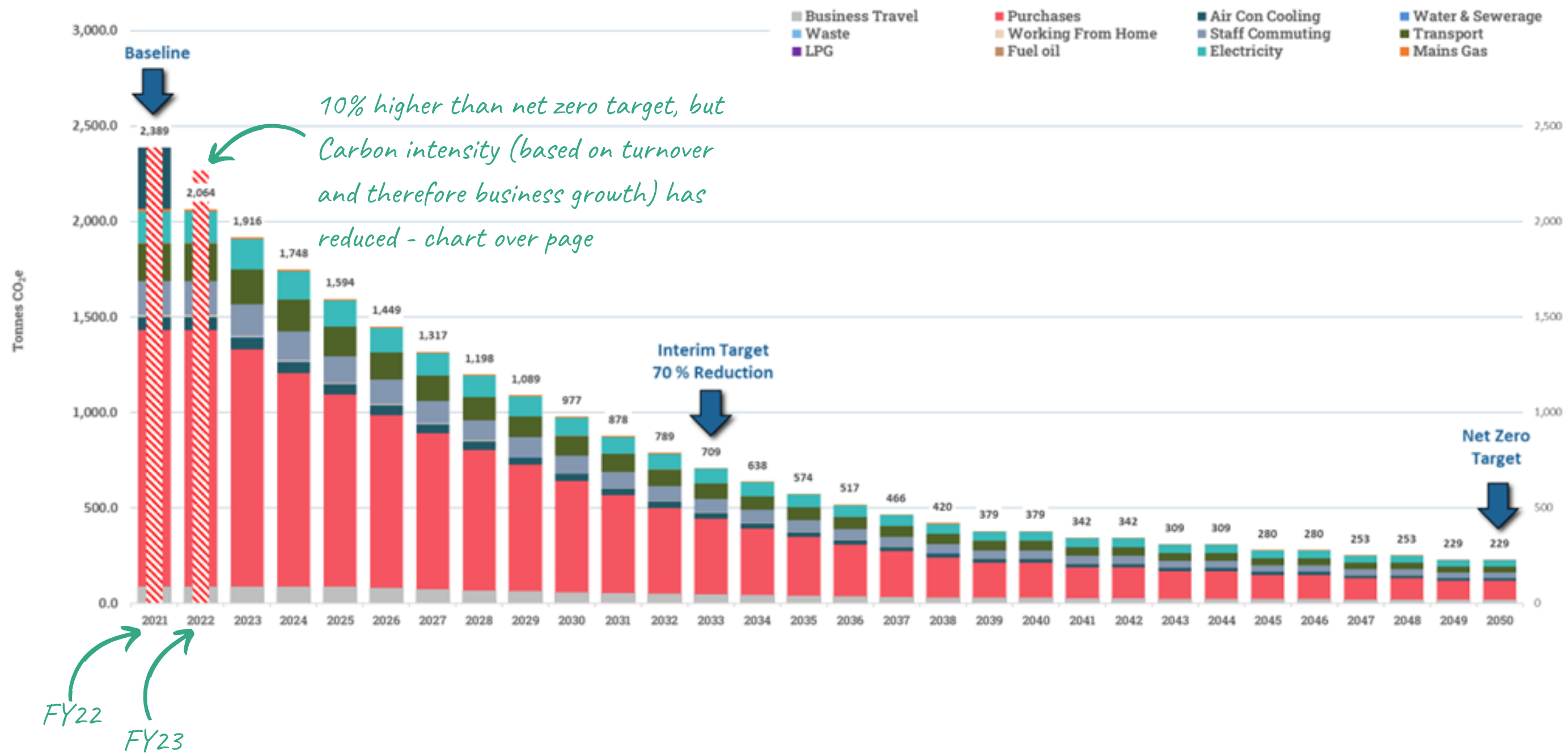


Net Zero Reduction Targets

The FY23 Report by Carbon Lens states:

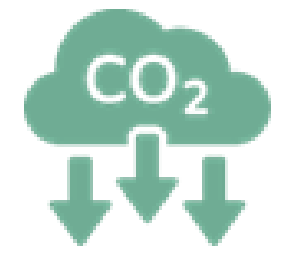
“To Achieve Net Zero status, ETL needs to remove emissions from its operations and wider business activities consistently each year until they reach a net-zero position equal to or less than 10% of the 2021 base year emissions by a target date before 2050. For the chart adjacent the target date has been set at 2050. This target has been set using the Science-Based Targets Initiative (SBTi) guidance. The target year for achievement of Net Zero, up to 2050 is a decision for the company.

For ETL to achieve net zero by 2050, a target of a 70% reduction in CO2e emissions by 2033 from the baseline position has been set. This is equivalent to a 1,680 tonnes reduction in CO2e by 2033.



Summary

- FY23 emissions (2266.05 tCO2e) are 10% higher than the net zero target using the 2021 (FY-22) baseline. This is expected with increased turnover. **Carbon intensity has reduced as shown on the following page, indicating improved carbon efficiency.**

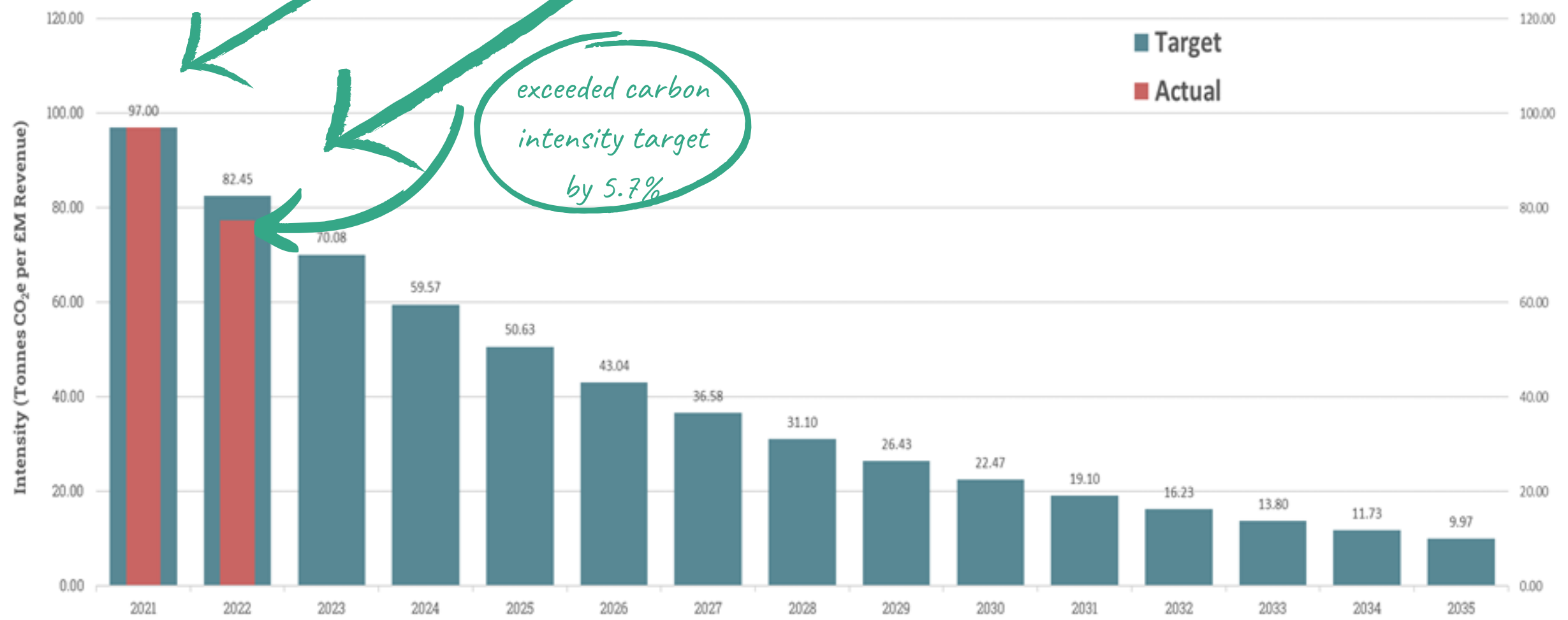


Net Zero Reduction Targets - Carbon Intensity

Summary

- Carbon intensity has reduced by 19% indicating improved carbon efficiency.
- Carbon intensity target of 82.45 tCO2e per £M Revenue has been exceeded by 5.7%, at 77.69 tCO2e per £M Revenue
- The **significant reduction in capital spend in FY23**, due to the C4 building project spend in FY22, is the main contributor to this reduction in carbon intensity.

Carbon Intensity - location based (per £M Revenue)			
	FY22	FY23	% change
Total tCO2e	2388.85	2266.05	-5.14%
Revenue	£24,723,556.00	£29,168,160.00	17.98%
Tonnes CO2e per £M Revenue	96.62	77.69	-19.60%

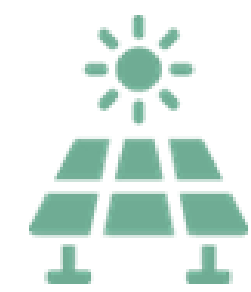


FY22 *FY23*

exceeded carbon intensity target by 5.7%

The UK Office for National Statistics has calculated a generic average intensity of 80 tCO2e per £M for the “Computer, electronic, communication and optical products” sector (SIC(07) group 26) - 2021 figures*.

*Source: <https://www.ons.gov.uk/file?uri=/economy/environmentalaccounts/datasets/ukenvironmentalaccountsatmosphericemissionsgreenhousegasemissionsintensitybyeconomicsectorunitedkingdom/current/atmosphericemissionsghgintensity.xlsx>



Review of grid consumption in Hereford post Solar PV additions in May 2023



Initiative: In May 2023 we almost doubled our solar PV in Hereford by installing panels on building C2 (all three roof pitches), C3 (2 additional roof pitches) and C4 (2 additional roof pitches). We already had solar PV on 2 of the roof pitches of building's C3 and C4.



Analysis: To see the effect this is having on our energy consumption from the grid, here we are comparing Hereford energy consumption in 2023 vs 2022 after completion of the solar PV installation in May 2023

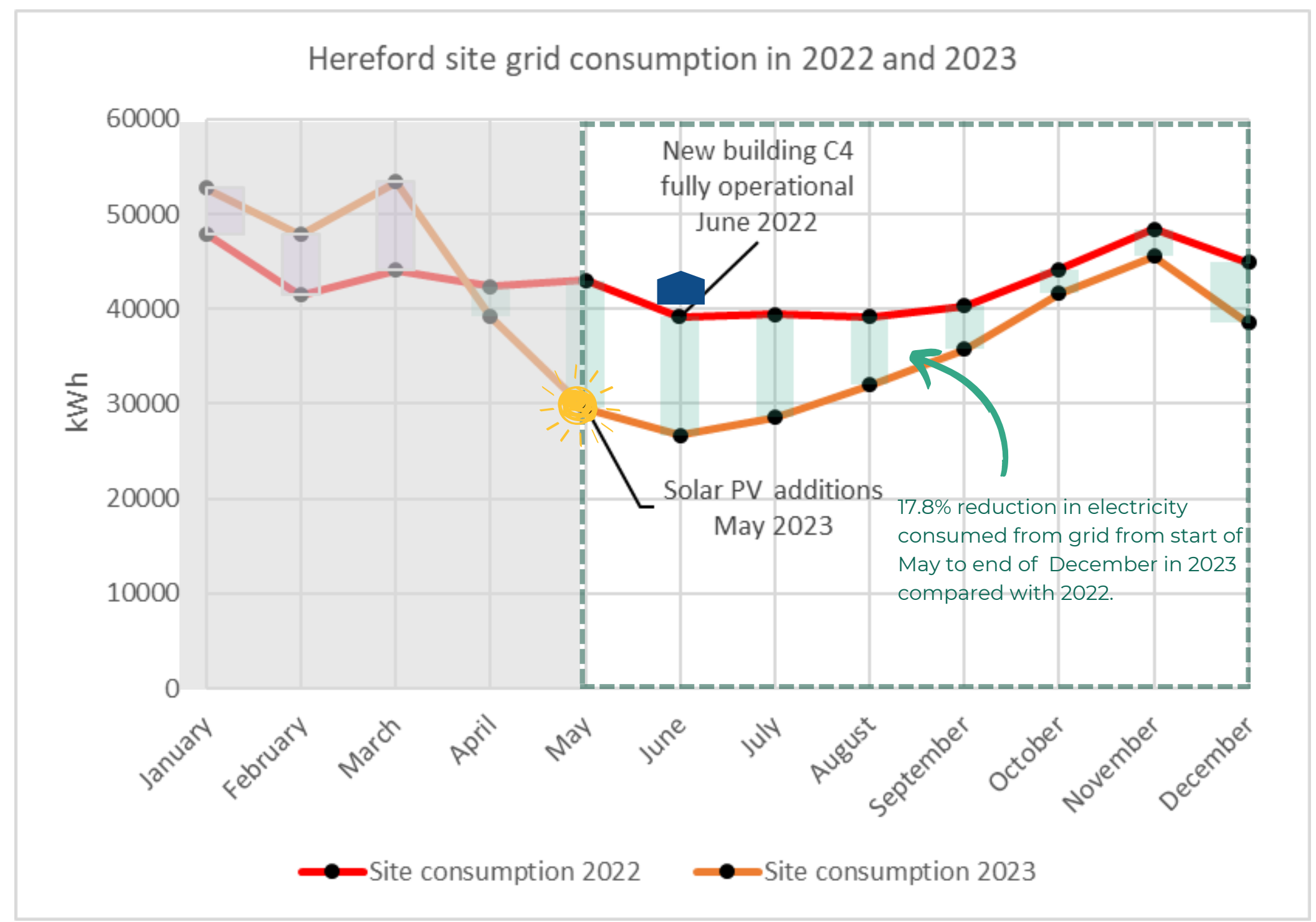


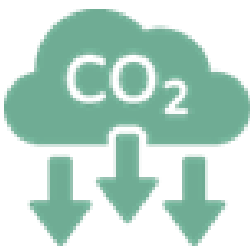
Result: 17.8% reduction in electricity consumed from grid from start of May to end of December in 2023 compared with 2022.



Next steps: In 2024 we are closely monitoring electricity usage on our new visible energy monitoring system and will be identifying where savings can be made, especially when the solar is not generating at night and over the winter months.

As this initiative was carried out at the end of FY23, the effects of this will be seen in the FY24 Carbon Footprint Report





Carbon reduction focus actions 2023



Energy Monitoring

Energy Monitoring System installed at Hereford headquarters to capture overall consumption and a breakdown of electricity used by key equipment (including air conditioning, solar PV and plant facilities)



LED outside lighting

Installation of LED lights in car park at Hereford site to replace all older non-led lighting



Solar PV expansion

May 2023 installation of an additional 141.96 kWp of solar PV at our Hereford site, in addition to the existing 72.64 kWp already in place.
Over the summer months approximately 41% of building C2, C3 and C4's electricity consumption has been drawn from the solar PV since this additional installation,



Recycling initiatives

Plastic bags/bubble wrap and foam in Production segregated for separate collection by local recycling company and diverted from general waste



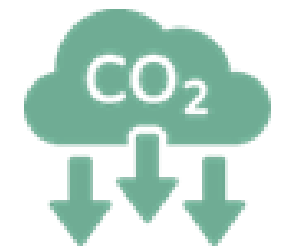
Energy champions

Good uptake of staff bringing forward energy saving ideas (including equipment settings and recycling)



Air conditioning settings

Monitoring and adjustment of settings to increase operating efficiency of air conditioning. For example, switching off the air con in our main production building (C4) at 16:00 instead of 18:00 resulted in a circa. 8% reduction in grid energy consumed over this time for the period that it was measured.



Carbon reduction focus actions 2024

Electricity: 7.4%



Supplier engagement

- Supplier surveys to determine status of carbon awareness.
- Collaboration with top 12 suppliers re emissions reduction.
- New Supplier Code of Conduct launch to support supplier engagement and propagate good practice.

64% FY23



Purchases footprint Scope 3

- Procurement strategy to be reviewed for purchases contributing to highest proportion of scope three purchases emissions (electronics (51.3%) and metal (29.9%) by means of increased engagement/ understanding of main suppliers' carbon intensities.

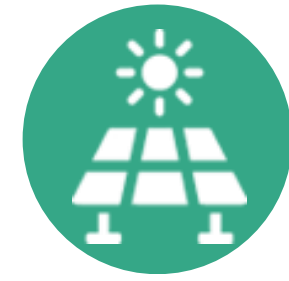


Visible energy reporting

FY23 footprint

Scope 2 & 3

- Visible energy use with regular reporting from our new Energy Monitoring System.
- Using the energy monitoring system to see where and when we are using energy, identifying where we can save energy, and monitoring the impact of changes made. Particular focus will be given to the times when the solar PV is not generating (night and winter)



Renewable energy

- Analysing how the Solar PV is working and exploring options such as battery storage and whether this would be a feasible option for the business.
- Monitoring solar PV in line with reduction measures to save energy at night when the panels are not generating.
- Exploring renewable energy tariffs.



Freight Transport

11.1% FY23

footprint Scope 3

- Engagement with main freight companies re emission reduction plans



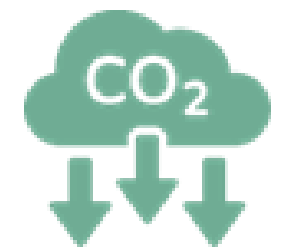
Staff commuting and business travel

15.7% FY23

footprint

Scope 1, 2 & 3

- Increasing staff participation in Green Travel Scheme which promotes active travel and car sharing to reduce commuting emissions.
- Promotion of use of company electric vehicles for staff business trips.



Conclusion

- Total location based emissions in FY23 (2,266.05 tCO₂e) are calculated to be:
 - 5% lower than in FY22
 - 10% higher than the net zero target using the 2021 (FY22) baseline. This is expected with increased turnover.
- Carbon intensity (based on turnover and therefore business growth) has reduced from 96.62 to 77.69 tCO₂e per £M Revenue; i.e. by 19%; indicating improved carbon efficiency.
- Carbon intensity target of 82.45 tCO₂e per £M Revenue has been exceeded by 5.7%, at 77.69 tCO₂e per £M Revenue
- The most significant reduction was capital spend (scope 3), due to the C4 building project that was factored into the FY22 emissions.
- The effects of the solar PV expansion in May 2023 will be seen in the FY24 Carbon Footprint Report. The grid consumption analysis shows a 17.8% reduction in electricity consumed from the grid from the start of May to the end of December in 2023 compared with 2022 (Hereford site).
- Supplier engagement, purchases, freight transport, energy monitoring and staff travel are key focus actions in FY24.

References:

This Executive Summary has been prepared by ETL Systems Ltd and is based on the following reports issued by Carbon Lens Ltd:

- *Carbon Footprint Report for ETL Systems 2023 Version 14*
- *Carbon Footprint Report for ETL Systems FY22 Rebaseline Feb 24 V2*