

Haworth Tompkins Carbon Footprint Report 2022/2023

HT Carbon Footprint Report 2022/2023

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HT Carbon footprint report 2022/2023

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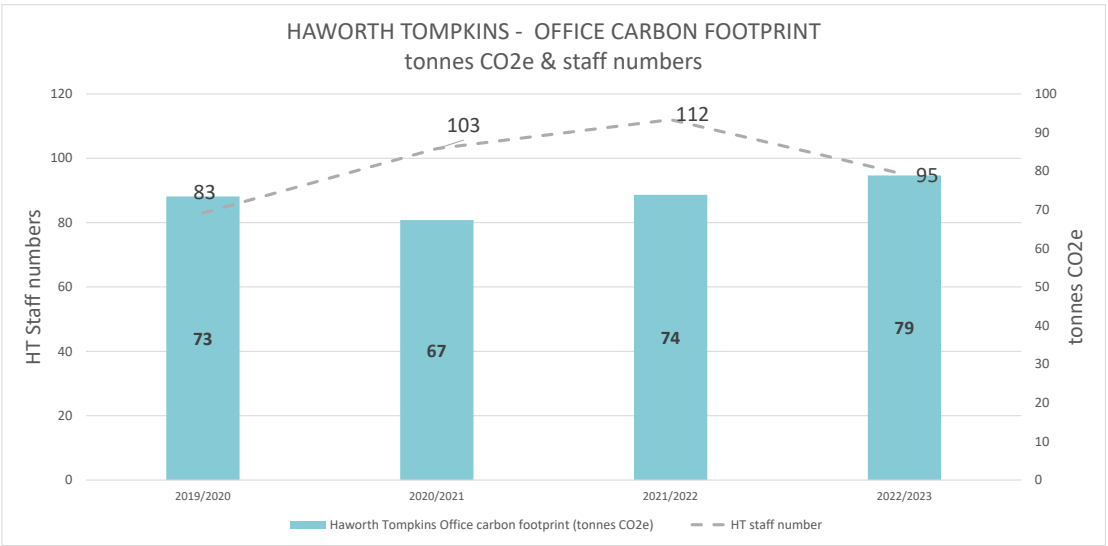
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Executive summary

Haworth Tompkins has signed up to the *Race to Zero challenge* via the SME Climate Hub (<https://smeclimatehub.org/sme-climate-commitment/>), aiming to halve their GHG emissions by 2030 compared to the 2019 baseline, offset the remaining emissions annually through efficient measures, and achieve net zero emissions before 2050.

The practice has adopted a hybrid working policy in the years after the Covid pandemic and have explored ways to reduce carbon emissions which contributed to the decision to move offices in 2023 (beyond the scope of this report).

The office carbon footprint during April 2022/April 2023 is estimated at 79 tonnes CO2e, or approx. 0.83 tonnes CO2e/person, which compares with 74 tonnes CO2e (0.66 tonnes CO2e/person) the previous year, and 73 tonnes CO2e (0.9t per person) in 2019 baseline (pre-pandemic), reflecting the increased accuracy of measurement and added detail since 2019 (especially scope 3 emissions, e.g. emissions linked to working from home, utilities distribution losses, and project-related transport).



HT Office carbon footprint: tonnes CO2e and no. of staff, 2019/2020 to 2022/2023

Haworth Tompkins

No. of employees 2022/2023 (average): 95

Governance: Employee Ownership Trust (EOT)

Environmental reporting:

Design work targets: START Toolkit

Business operations impact: HT Office Carbon Footprint

Reporting Period: April 2022 - April 2023

This report reflects the operations of HT London premises, Greenwood Place (GWP) and Holmes Road (HR).

The office carbon footprint during April 2022/ April 2023 is estimated at 79 tonnes CO2e, or approx. 0.83 tonnes CO2e/person.

This 2022/2023 Office carbon footprint analysis includes:

- Scope 1 emissions: gas - 2 offices
- Scope 2 emissions: electricity - 2 offices
- Scope 3 emissions: water use - 2 offices project related transport and couriers, staff commuting, staff home working, transmission & distribution losses, and ‘well to tank’ emissions linked to the supply of electricity and gas used in the office.

Executive summary

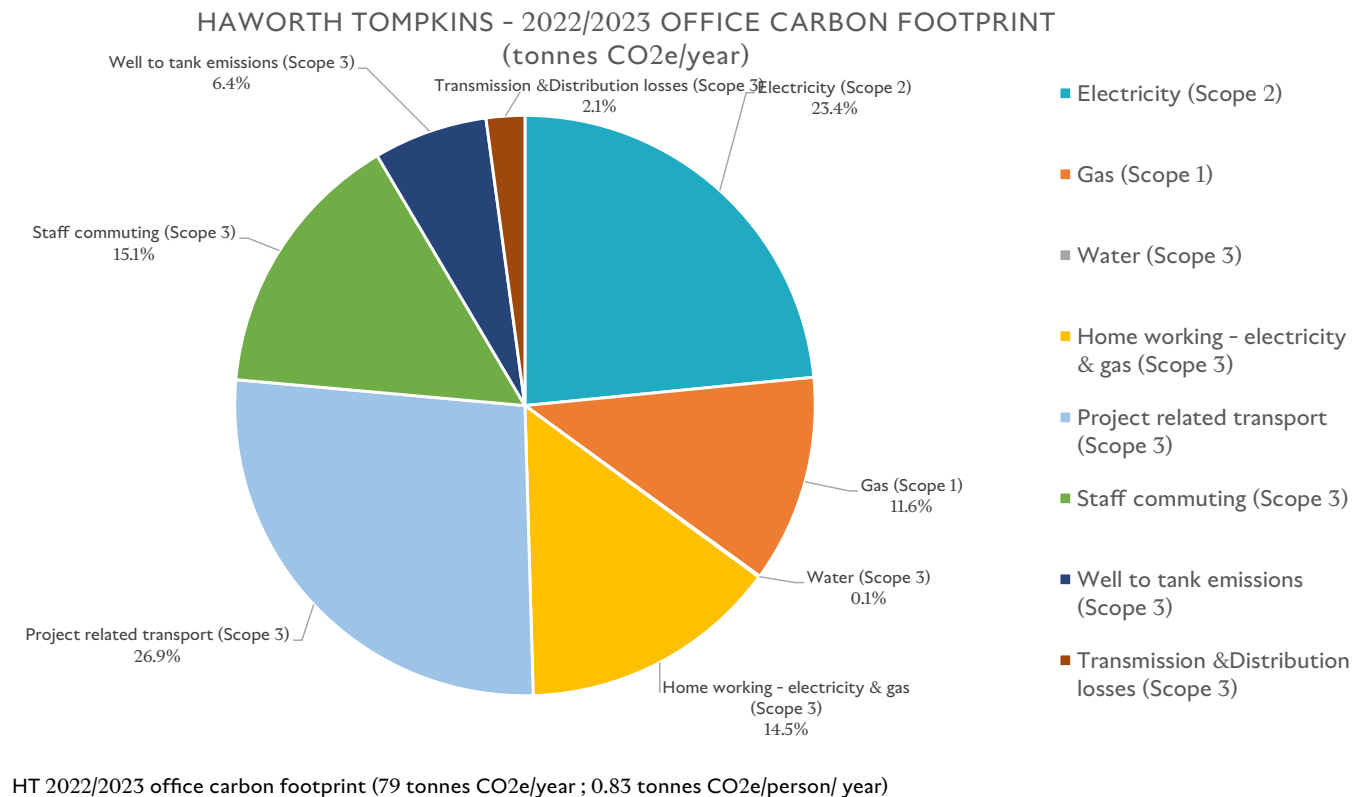
The aims of this report are:

- to identify the activities related to the majority of greenhouse gas emissions (GHG) linked to running the business operations, expressed in tonnes CO₂e emitted between April 2022 and April 2023.
- to compare to the 2019 baseline and propose carbon reduction solutions, in line with the *Race to Zero* commitments
- recommend ways to offset the GHG emissions emitted in 2022/2023 in a way that is meaningful for the environment.

Key findings

There are several important changes compared to the previous report of 2021/2022:

- increased carbon emissions linked to project-related travel, with more train journeys and flights during this period (21 tonnes CO₂e emitted, approx. 3.5 times increase from 5.7 tonnes the previous year, and coming close to the 2019 baseline of 26.5 tonnes)
- carbon emissions related to staff commuting have increased with hybrid working in the office, but also with remote staff commuting to work internationally (however these will be discontinued from end of 2023).



A. Introduction

Emergency response

As founding members of the Architects Declare movement, Haworth Tompkins is committed to acting promptly to reduce their carbon emissions arising from the projects they design and from running their offices.

Office carbon footprint

Since 2019, Haworth Tompkins have calculated their office carbon footprint to become more aware of its impact on the environment and the way the business is operating.

The current report covers the operations of HT's two London premises, Greenwood Place (GWP) and Holmes Road (HR), between 5th April 2022 and 5th April 2023.



Carbon footprint report 2019/2020 - <https://www.haworthtompkins.com/studio/regenerative-design/our-carbon-footprint-report-2019>

Carbon footprint report 2020/2021 - <https://www.haworthtompkins.com/studio/regenerative-design/our-carbon-footprint-report-2020>

Carbon footprint report 2021/2022 - <https://www.haworthtompkins.com/studio/regenerative-design/our-carbon-footprint-report-2021>

A. Introduction

Location and premises

HT operates across two premises: Greenwood Place (GWP) - main office, and the Holmes Rd (HR) office. Both are included in this analysis.

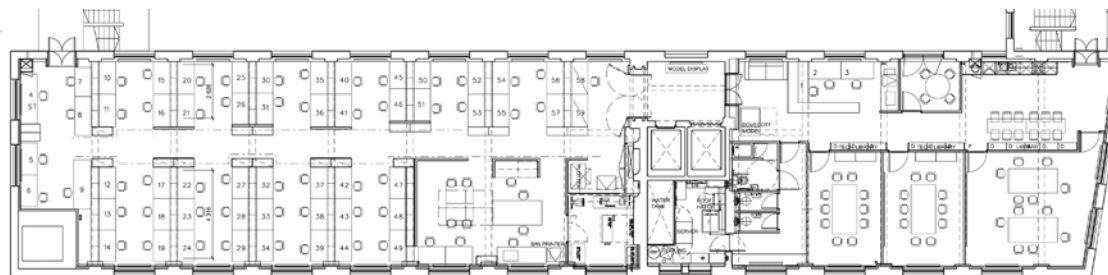
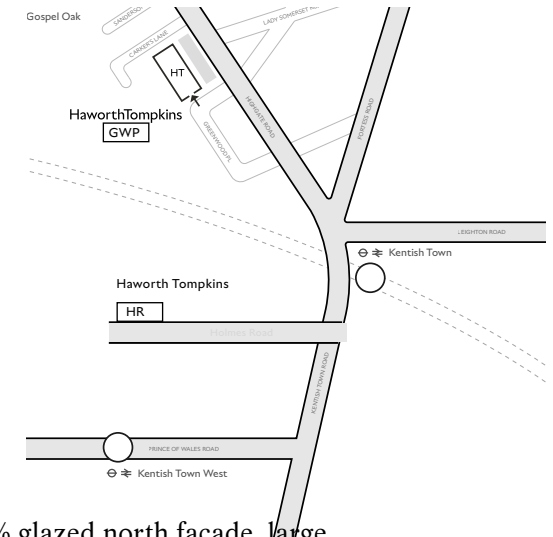
HT have been assessing options to bring all staff together in one location.

Greenwood Place (GWP)

- Former industrial building
- Entire 5th floor of a GF+5 storey building
- 513m² GIA
- Gas fired boiler with radiators; utilities included in rent, no control over utilities suppliers
- Natural ventilation via windows (single glazed, metal frame)
- Uninsulated solid brick walls, except the west facing wall which is internally insulated

Holmes Road (HR)

- Recent build
- Ground floor office with residential accommodation above
- 205m² GIA
- Gas fire boiler with underfloor heating; utilities included in rent, no control over utilities suppliers
- Natural ventilation through a couple of high level openable windows (double glazed with Alu frames); almost 100% glazed north facade, large % glazing on South East facade
- Overheating in summer can require localised fans and floor standing purifier units at times. Passive or low energy ventilation solutions are required as introducing air conditioning in the near future would increase the carbon footprint of the office



Greenwood Place office plan (GWP)

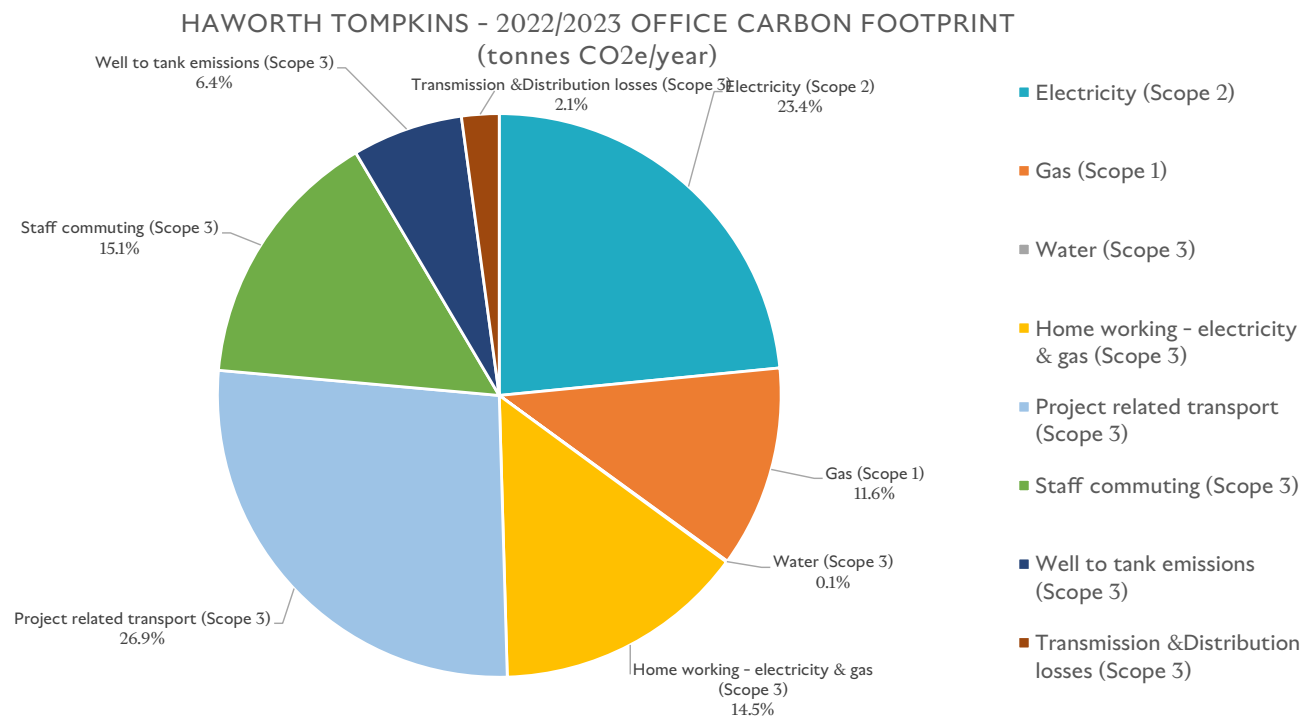


Holmes Road office plan (HR)

B. HT office carbon footprint

The analysis shows that the main sources of greenhouse gas (GHG) emissions expressed in CO2 equivalent (CO2e), between April 2022/April 2023 were:

- project related transport (including flights)
- electricity use
- staff commuting
- home working (electricity and heating, based on number of employees and using average estimates: <https://www.planetmark.com/how-to-measure-the-carbon-impact-of-working-from-home/>)
- gas use



The report reflects the current hybrid working arrangement compared to previous years and increased project travel, showing:

- an increase in project-related travel, especially trains and international flights (both long haul and short haul)
- electricity was slightly reduced to previous years (better management of remote computers use and reduced use of equipment such as the laser cutter)
- increased staff commuting (including international staff) and slightly decreased home working compared to previous years
- model making supplies were no longer included as HT no longer employ an in-house model maker

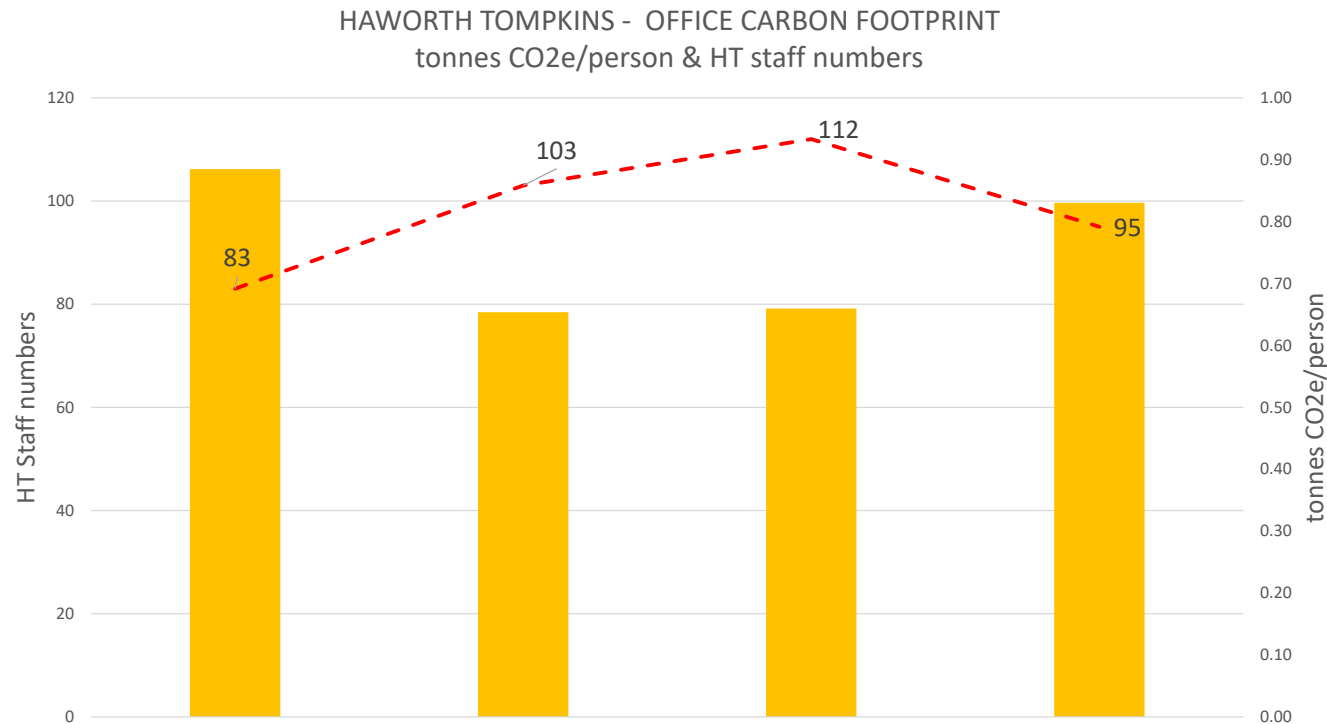
HT 2022/2023 office carbon footprint (79 tonnes CO2e/year ; 0.83 tonnes CO2e/person/ year)

B. HT office carbon footprint

A comparison with the carbon footprint of previous years reflects the changes since the 2019/2020 baseline:

- staff numbers have decreased to a level comparable to the 2019/2020 baseline (in dotted red line below), after having increased by almost 40% in previous years
- lower carbon emissions per person (in yellow bars below) compared to the 2019/2020 baseline
- higher carbon emissions per person in 2022/2023 compared to the previous year (2021/2022)

A detailed analysis of sources of absolute carbon emissions between the 2019/2020 baseline and following years is shown on next pages.



HT Office carbon footprint: tonnes CO2e/person and number of staff, 2019/2020 to 2022/2023

B. HT office carbon footprint

The analysis of carbon emissions between the 2019/2020 Baseline and following years (see next page) indicates:

- Electricity: energy use and carbon emissions decreased (implementing a better management of computers with ability to be turned on and off remotely, and less use of the laser cutter for model making in the office)
- Gas: decreased use to previous years (showing the change to a modern building meter, less office use in the winter with hybrid working and paying attention to thermostat settings in GWP office during previous winter)
- Home working: not applicable for the 2019/2020 baseline analysis, and estimated afterwards based on rough estimates and new hybrid working patterns; slight decrease to previous years linked to hybrid working patterns adopted in the office
- **Project related travel: increasing sharply compared to previous years (3.5 times more than previous report), almost to pre-pandemic years**
- **Staff commuting: increase due to hybrid working, and contribution of international staff (however this will be discontinued from end of 2023). Without the contribution of emissions linked to international staff commuting, the overall carbon footprint would be approx. the same as the 2019/2020 baseline, at 73tonnes/CO2e.**

During the period covered by this report, both electricity and gas use decreased overall.

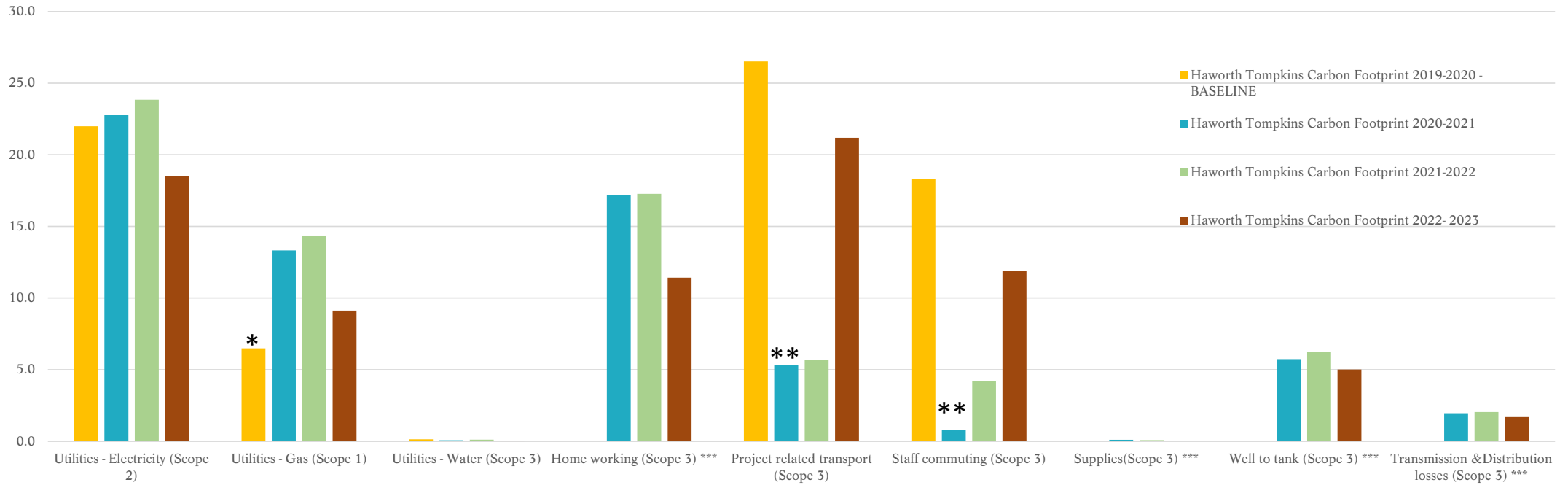
The office energy use has been a major concern since the carbon footprint analysis has started in 2019/2020, which led in 2023 to the move of HT offices from the 2 offices in Kentish Town to a new office in London (analysis to be covered in the next report, 2023/2024).

The main concerns were:

- the lack of influence over utilities providers (enabling HT to move towards renewable energy providers)
- limited opportunity to improve the offices fabric or services

The office move in August 2023 brought about improved fabric, better services (heat pump and heat recovery ventilation, LED lighting) - the impact of which will be visible in next years' carbon footprint reporting.

HAWORTH TOMPKINS OFFICE CARBON FOOTPRINT COMPARISON 2019/2020 - 2020/2021 - 2021/2022 - 2022/2023 (tonnes CO₂e/year)



* 2019 Gas for GWP based on pro-rata use from utility bills (estimated readings), vs. pro-rata use from building meter manual readings in 2020 and 2021

** Difference reflects absence of flights, other project travel, and reduced staff commuting in pandemic years (2020 and most of 2021), hybrid working since 2022

*** Not included in 2019 Baseline

Comparison between HT office carbon footprint 2019/2020 Baseline vs following years up to 2022/2023

C. Reduction measures and Climate Action Plan: Race to Zero

Haworth Tompkins have signed up to the *Race to Zero challenge* via the SME Climate Hub (<https://smeclimatehub.org/sme-climate-commitment/>), aiming to:

- halve its GHG emissions by 2030 compared to the 2019 baseline, and offset the remaining emissions annually through efficient measures
- achieve net zero emissions before 2050, and
- disclose the progress made on a yearly basis

The HT Climate Action Plan included in last year's report and further detailed below focuses on the key elements that have the largest impact on the office carbon emissions (utilities and project related travel - especially flights).

The SME Climate Commitment

Recognising that climate change poses a threat to the economy, nature and society-at-large, our company commits to take action immediately in order to:

1. **Halve our greenhouse gas emissions before 2030**
2. **Achieve net zero emissions before 2050**
3. **Disclose our progress on a yearly basis**

In doing so, we are proud to be recognised by the United Nations Race to Zero campaign, and join governments, businesses, cities, regions, and universities around the world that share the same mission.

Race to Zero - SME Climate Hub Commitment

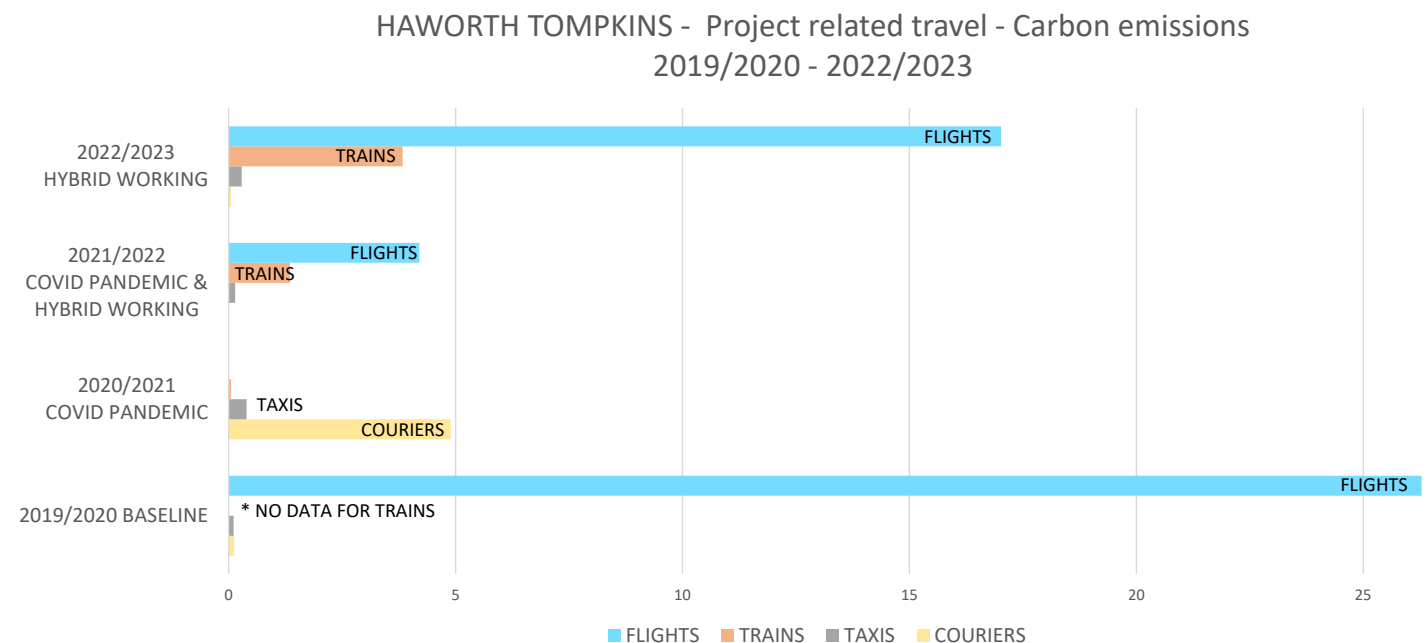
C. Reduction measures and Climate Action Plan: Race to Zero

HT Climate Action Plan

The decision to move to new offices in mid-2023 will show a significant impact on reducing office energy use, however raising the proportion of project related travel to almost pre-pandemic years (especially flights) signals a need for a practice-wide policy to manage carbon emissions linked to this item in coming years. HT has increasingly taken on more international projects. However, 2020 has shown that effective communication with local architects and clients can be carried out via remote technology, while recognising the need to visit the project sites and meet the local teams in person.

Recommendations

- Practice policy to limit the number of annual flights for international projects: e.g. no more than a maximum two long haul return flights plus a maximum of two short haul return flights per year, OR a combination of alternative travel options leading to similar annual carbon emissions to the above
- Improve and use remote collaboration technology in the office to avoid travel, for instance online conference calls and adequate individual meeting areas with acoustic treatment
- Diversify sectors to expand UK/ local projects
- Setup local office for duration of long international projects, improve collaboration with local architects



Comparison between HT project - related travel carbon emissions between 2019/2020 Baseline and following years up to 2022/2023



D. Conclusion

This report relates to the operations of our two London premises, Greenwood Place (GWP) and Holmes Road (HR), between 5th April 2022 and 5th April 2023. This analysis includes:

- Scope 1 emissions: gas;
- Scope 2 emissions: electricity;
- Scope 3 emissions: water use, project related transport and couriers, staff commuting, staff home working, transmission & distribution losses and 'well to tank' emissions linked to the supply of electricity and gas used in the office.

The office carbon footprint during this period is estimated at 79 tonnes CO₂e, or approx. 0.83 tonnes CO₂e/person. This compares with 74 tonnes CO₂e (0.66 tonnes CO₂e/person) in the previous financial year. The analysis shows that the main sources of carbon emissions between April 2022/April 2023 were:

- project related travel**
- electricity use**

The emissions will be offset via a mix of measures (tree planting, Gold standard schemes).

A comparison to the previous year's carbon footprint reflects the changes in work patterns post pandemic:

- slightly lower energy use in the office
- sharp increase in carbon emissions linked to project-related travel, almost to pre-pandemic levels
- reduced emissions linked to home working and slightly higher emissions linked to staff commuting, reflecting a hybrid working approach implemented since previous years, plus additional staff commuting emissions linked to remote staff working abroad visiting the office (to be discontinued within the next reporting period).

The practice has signed up to the Race to Zero challenge via the SME Climate Hub (<https://smeclimatehub.org/sme-climate-commitment/>), aiming to halve its emissions until 2030.

As the office moved into new premises in late 2023 (outside the timeline of this report), the proposed office carbon emission reduction measures will focus on:

- implementing a project travel strategy (especially international flights) that allows the practice to provide architectural services at a high level of design while ensuring reduced carbon emissions and protecting the environment.**

A business decision on maximum number of annual international flights will be key in reaching the proposed GHG emissions reduction targets.



Appendix A. Methodology

The carbon footprint has been calculating using 2022 UK Government GHG Conversion Factors for Company Reporting (<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022>):

Conversion_Factors_2022_-_Full_set__for_advanced_users_.xlsx

Data x carbon factor kgCo2e = Total kilograms Co2e

/ 1000 = total tonnes

/ number of employees = total tonnes per person

Electricity

- In GWP there is a meter installed on the 5th floor (HT office) which accurately monitors the consumption of the office. Readings are recorded manually by HT on a monthly basis.
- In HR there is a meter installed by the utility provider that accurately monitors the consumption of the office. Monthly readings are recorded manually by HT on a monthly basis.

Gas

- In GWP there is one meter for the entire building. HT have taken annual gas meter readings and assigning a pro rata use for the HT office (entire 5th floor). Data from bills was used in 2019, which included estimated readings. Utilities are included in the rent.
- HR has a meter installed by the utility provider that accurately monitors the consumption. Monthly readings are recorded manually by HT on a monthly basis.

Water

- In GWP there is one meter for the entire 5 storey building. HT have taken annual meter readings and assigning a pro rata use for the HT office (entire 5th floor). Data from bills was used in 2019, which included estimated readings. Utilities are included in the rent.
- HR - Annual readings are recorded manually by HT in 2021 and going forward.

Commuting

- Commuting distances and mode of transport were calculated through an office survey.

Haworth Tompkins Carbon Footprint 2022-2023 (April to April)

Scope	Category	Item	Units	Greenwood Place	Holmes Road	Total	Carbon Factor (kg CO2e)	Carbon Factor Reference	Carbon Footprint (tonnes CO2e)	Carbon Footprint per person (tonnes CO2e)	Category 2020/21	Comments
Scope 2	Utilities	HT offices - Electricity	kWh	79793.30	15842.20	95635.50	0.19338	S2, UK Electricity, F24	18.49	0.19	27.7	
Scope 1		HT offices - Gas	kWh	28660.66	16425.87	45086.53	0.20227	S1, Fuels, E41	9.12	0.10		
Scope 3		HT offices - Water	m3	264.10	71.51	335.61	0.149	S3, Water supply, E18	0.05	0.00		
Scope 3	Home working	Home working - Electricity	kWh			6018.84	0.19338	S2, UK Electricity, F24	1.16	0.01	11.4	estimate based on average no of staff and online data
Scope 3		Home working - Gas	kWh			50692.00	0.20227	S1, Fuels, E41	10.25	0.11		
Scope 3	Project related transport	Trains	km			108014.34	0.03549	S3, Business travel - land, E87	3.83	0.04	21.19	
Scope 3		Flights	km			114918.67	varies	varies	17.02	0.18		
Scope 3		Taxis	km			1925.82	0.14876	20, S3, Business travel - land, E71	0.29	0.00		
Scope 3		Couriers	km			361.06	0.14876	20, S3, Business travel - land, E71	0.05	0.00		
Scope 3	Staff Commuting	Car	km			0.00	0.16800414	S3, Business travel - land, E49	0.00	0.00	11.89	
		Flights	km			43084.00	varies	varies	6.46	0.07		
		Motorbike	km			4184.29	0.1009	S3, Business travel - land, E61	0.42	0.00		
Scope 3		Bus	km			5113.21	0.07936	S3, Business travel - land, E80	0.41	0.00		
Scope 3		National rail	km			12469.20	0.03549	S3, Business travel - land, E87	0.44	0.00		
Scope 3		Overground,Light rail and tram	km			32704.45	0.02861	S3, Business travel - land, E89	0.94	0.01		
Scope 3		London Underground	km			61375.23	0.02781	S3, Business travel - land, E90	1.71	0.02		
Scope 3		Bicycle	km			72405.03	0.021	European Cyclists Federation	1.52	0.02		
Scope 3	Modelmaking Supplies	Modelmaking Deliveries	km			0.00	0.16800414	S3, Business travel - land, E49	0.00	0.00	0.00	
Scope 3	Well to tank	Well to tank- Electricity	kWh	79793.30		79793	0.05048	S3, WTT UK electricity, F24	4.03	0.04	5.02	only for GWP. HR supplier provides 100%renewable energy
		Well to tank- Gas	kWh	28660.66		28661	0.03446	S3, WTT Fuels, E40	0.99	0.01		
Scope 3	Transmission &Distribution losses	Transmission &Distribution losses - Electricity	kWh			95636	0.01769	S3, Transmission&dist	1.69	0.02	1.69	applies to all electricity provided
										0.00		
	TOTAL (tonnes CO2e)								79	0.83		

HT 2022/2023 carbon footprint calculation

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