Intensive Care Society

Our Carbon Footprint Report

Our total carbon footprint in 2022

Contents

Glossary of terms

Carbon footprint
A measure of the amount of carbon dioxide released into the atmosphere as a result of the activities of an organisation such as the Intensive Care Society.

CO2e/Carbon emissions
Units of carbon dioxide, measured in grams, kilograms or tonnes, released into the atmosphere as a result of a particular activity. For example 2.5 kg CO2e per hour would be 2.5 kilograms of carbon dioxide released per hour.

Downstream emissions
Emissions which are caused by the use and/or disposal of a product.

Greenhouse gas
Gases in the earth's atmosphere that trap heat, which in turn leads to the warming of the planet.

Scope 1 emissions
Emissions from sources that an organisation owns or controls directly, for example the fuel used in a vehicle.

Scope 2 emissions
Emissions that an organisation causes indirectly resulting from where the energy it purchases and uses is produced. For example, the emissions caused by the creation of electricity used to power an office space.

Scope 3 emissions
Emissions that are not produced by the organisation itself and are not the result of activities from assets owned or controlled by them, but by those that it's indirectly responsible for throughout its supply chain. For example, any goods purchased, used and disposed of are classified as Scope 3 emissions.

Upstream emissions
Emissions which are caused by the production of a service or product.

Introduction

In 2021 the Intensive Care Society published our Immediate Climate Strategy, in which we committed to measuring our carbon footprint. The goal of this work was to calculate the environmental impact of our usual activities and identify areas where we could make reductions.

Climate change is the greatest current threat faced by humanity, and we are determined not only to do our part to reduce its causes, but to lead the way for our peers to do the same.

Since 2021 we worked hard to facilitate sustainable change within intensive care. We have provided guidance on sustainable practice, have been working closely with our community to change behaviour relating to the use of PPE, and have begun to collaborate internationally on a sustainability guidance package for critical care. However, while much of our sustainability work is about helping critical care units minimise the environmental impact of their work, it is important that we also take steps to minimise our own.

Further to our Immediate Climate Strategy, in 2023 we released Your Society – Our Strategy – 2023-2027, which identified environmental sustainability as a critical enabler of all our work. As such, we made a commitment to reduce our carbon footprint by 50% by 2030.

To make this reduction we first needed to measure the footprint of our current activities. This will be an annual endeavour, and this initial report and the emissions it describes cover the period from 1 January 2022 to 31 December 2022.

With many organisations calculating their carbon footprint, there are now tools freely available for use in measuring carbon emissions. We used some of these tools to calculate ours in three separate stages; our office space and procurement, the impact of our staff working from home, and the carbon emitted as a result of our team commuting to our London office.

To measure the impact of running our office space we used a free tool available to all Small to Medium Enterprises (SMEs) called The Business Carbon Calculator, by Normative[1]. This tool uses our expenses data, divided and described according to the resource type it relates to. This calculation process is described in more detail on pages 6-11.

Introduction

In measuring the carbon footprint of our staff working from home we used government guidance, Greenhouse gas reporting: conversion factors 2022[2]. This tool provided us with emissions factors for both electricity and heating[3] for the average home office, which we combined with the frequency with which staff work from home to arrive at our total working from home emissions. The details of these calculations are described on pages 12-14.

The carbon footprint of our staff commuting to our London office was calculated using a variety of information sources, including the government guidance mentioned above and data available via Transport for London . We also conducted a survey of all staff regarding commuting distances and methods. These calculations are described in detail on pages 15-19.

The emissions described in this report include those relating to the everyday operation of our London-based office, the procurement conducted as part of our usual activities and our staff both working from home and commuting into our office. They do not include any of the emissions related to our annual State of the Art Congress (SOA) other than the staff travel to and from Belfast for the event in June 2022. We will begin calculating the emissions relating to our Congress during the planning and organisational phase of SOA 2024, which will take place in Liverpool.

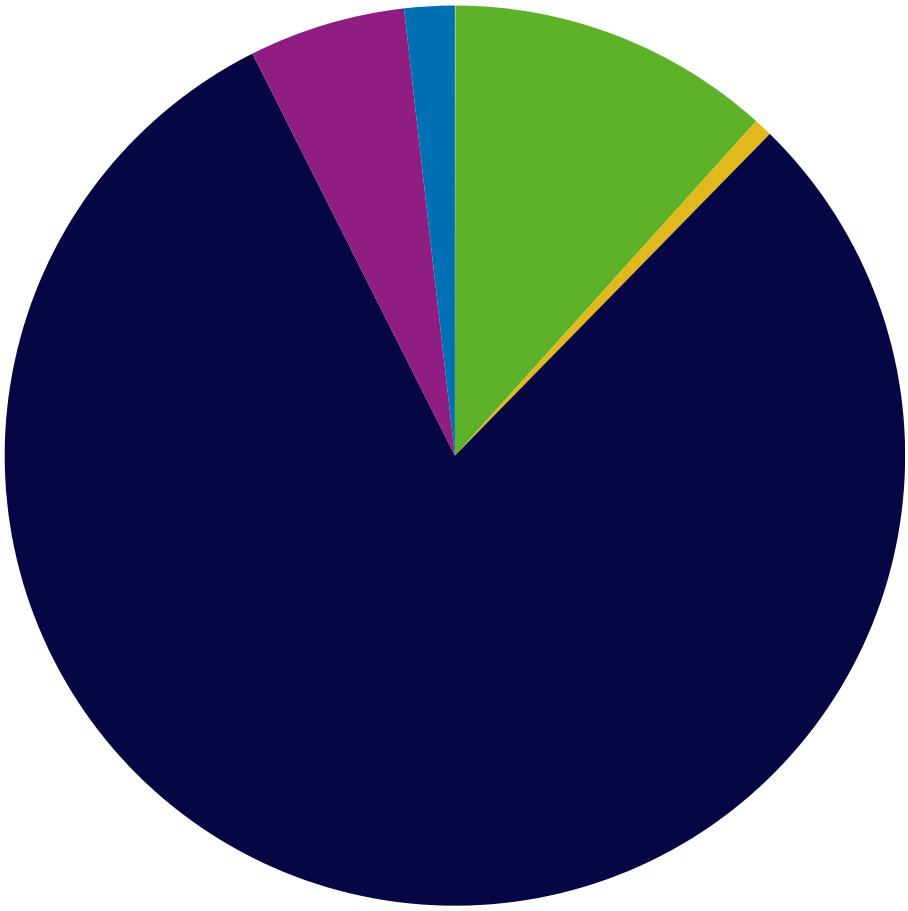
This report seeks to outline our emissions so we can begin the work to meet our 2030 goal of a 50% reduction.

We hope this report will encourage other organisations like ours to undertake their own calculations, and that it provides a roadmap for how they might do so.

Our total carbon footprint

Our total carbon footprint in 2022 was 84.79 tonnes CO2e. The breakdown of these emissions is detailed throughout this report according to Scope and activity type.

All numbers throughout this report are given to two decimal places.



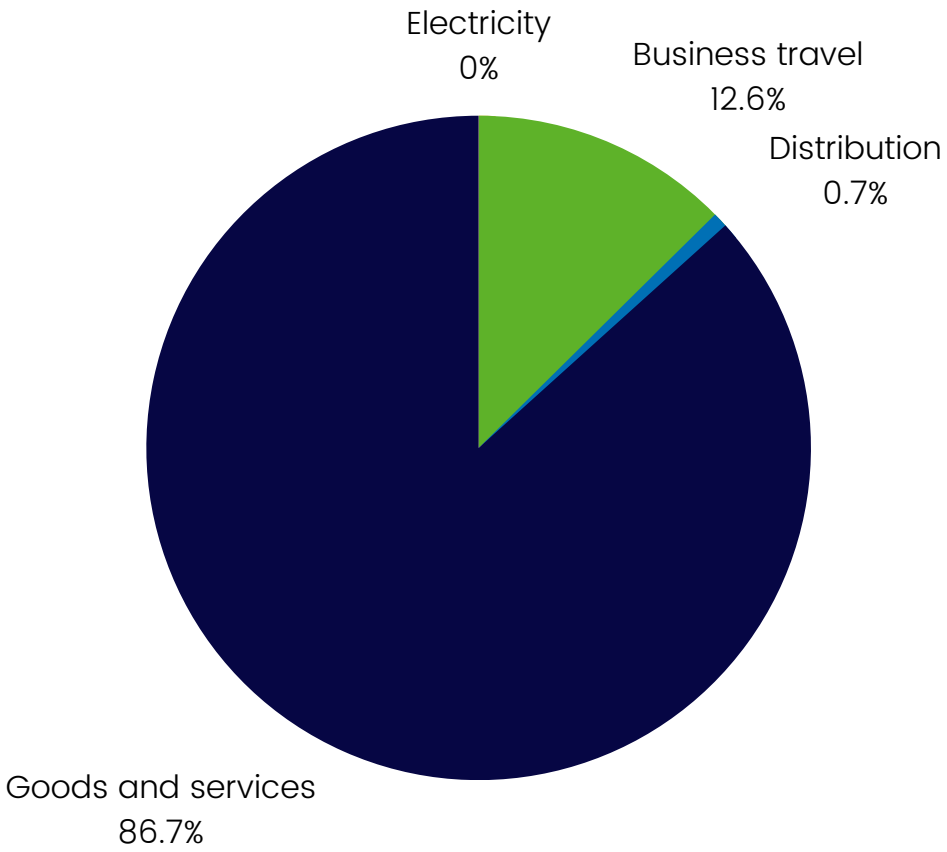
Not shown - Scope 1 emissions - 0 tonnes

Not shown - Scope 2 - Electricity - 0.01 tonnes

- Scope 3 - Business travel - 9.87 tonnes
- Scope 3 - Transportation and distribution - 0.56 tonnes
- Scope 3 - Purchased goods and services - 68 tonnes
- Staff working from home - 4.76 tonnes
- Staff commuting into London - 1.53 tonnes

Part one: Our ordinary activities

1.1 Our total emissions



Almost all the Society's carbon emissions relate to the running of our office space, and to the things we purchase as part of our day-today activities. These were the first emissions we calculated, and the resulting figure has been reached based on our total expenses for 1 January – 31 December 2022.

These emissions were calculated using The Business Carbon Calculator[1], a tool designed for SMEs to help them determine their carbon footprint using expenses information from the designated period. This tool is powered by Normative and supported by the SME Climate Hub.

The total footprint includes the heating and cooling of our 108m2 office space, and the electricity required to keep it running with 17 staff members throughout the year. The size of our team fluctuated in 2022, and has continued to do so in 2023, but as of December 2022 we had 17 staff members, including one staff member who worked from home full time.

Part one: Our ordinary activities

1.1 Our total emissions

In August of 2022 we relocated our office from the building owned by the Royal College of Anaesthetists at 35 Red Lion Square, London, to a building owned by the Royal College of Emergency Medicine at 7-9 Breams Buildings, London. While we only occupied our new, bigger, office space for half of 2022 our calculations for the full year are based on this location.

We made this move to give us more space for our growing team, and to allow us more control of the space we occupy now and in the future. As a result, our carbon footprint calculation includes the purchasing of furniture and other supplies required to support the activities of all employees, and to create a space conducive to work and collaboration. It also includes all other procurement, and therefore supply chain emissions, throughout the year.

These emissions have been grouped together for the purpose of this report as they are those the Society has direct control over. This means they will be the focus of our efforts to reduce our carbon footprint. They our outlined in greater detail according to Scope on pages 8 and 9 and in the chart on page 6.

Part one: Our ordinary activities

1.2 Scope one emissions

According to the Business Carbon Calculator, Scope one emissions are "direct emissions from the combustion of fuel in assets that a company operates, such as fuel emissions from company-owned cars, diesel generators, gas boilers and air-conditioning leaks." [1]

As we do not operate any of the above, we did not have any Scope One emissions in 2022. This will likely continue in 2023 unless assets such as company vehicles are purchased, for which there are no current plans.

1.3 Scope two emissions

Scope two emissions are "indirect emissions from the generation of energy purchased from a utility provider, such as heating, cooling, steam, and electricity." [1] Our scope two emissions are those related only to the electricity used to run our office space, including for both heating and cooling.

These emissions are a tiny proportion of our total carbon footprint. At only 0.01 tonnes of CO2e they represent less than 0.02% of our total emissions.

As we rent our office space and do not have direct control over our energy supplier, we are limited in the actions we can take to reduce this figure further. We will work with our landlords to make sure we are obtaining our electricity in the greenest manner possible, and encourage them to do the same at their other premises.

Our Scope two emissions may be low, but this does not mean we should not work to reduce them further.

Part one: Our ordinary activities

1.4 Scope three emissions

Almost all our carbon emissions in 2022 were scope three emissions. These are "all indirect greenhouse gas emissions that do not fall under scope 2 - upstream and downstream." [1] The Business Carbon Calculator includes "upstream emissions from purchased goods and services, capital goods, upstream transport and distribution, and business travel" [1] calculated from our expenses.

Of these emissions, most (about 87%) relate to purchased goods and services. This includes activities associated with hosting and running our website, all production of digital and printed materials, the creation of branded merchandise, and the procurement of all the furniture and equipment required for our office space following our August 2022 move.

Our Scope three emissions also include all business-related travel undertaken by our staff and Council and committee members when required. This represented almost 13% of all our Scope three emissions in 2022.

When travelling for the Society's work all staff and Council members are encouraged to choose the most environmentally friendly method available, almost always travelling by train unless in exceptional circumstances. However, in June 2022 eight staff members travelled by plane to SOA in Belfast. As a result, our Scope 3 emissions were higher than in previous years when staff have not been required to travel internationally.

This air travel is not likely to be repeated in future.

Part one: Our ordinary activities

1.5 - Summary

The carbon footprint of our office space and regular activities in 2022 was 78.5 tonnes of CO2e. This figure was likely higher than in previous years, due to the procurement of furniture and other supplies relating to our office move, and to travel undertaken by staff and Council members to facilitate our State of the Art Congress in Belfast.

Regardless of these out of the ordinary activities it is important we work to reduce our overall footprint wherever possible, based on the calculations completed for the year.

We do not foresee any immediate need to make a further office move, which in turn means we won't be procuring furniture or large amounts of other office equipment or supplies. We have also invested in quality products, to negate the need for excessive future purchases.

We also plan to ensure our travel policy reflects our desire for staff and Council members to always travel in the most sustainable way available, as well as the most economical. We already assess this on a case by case basis, but will ensure the policy is updated prior to our 2024 State of the Art Congress.

We have also already significantly reduced the amount of printed products we commission or purchase and instead produce all our documents as digital versions only, with the exception of landmark publications. We will continue this in future, and look at other areas we can reduce our purchasing of these products, or choose sustainable options.

Our one-day event are also now hosted virtually, negating the need for speakers, staff and delegates to travel to meet the education needs of our community. We plan to continue to deliver them in this way for the foreseeable future.

Some of the emissions related to our work in 2022 were unavoidable. With only eight members of staff prior to the COVID-19 pandemic, but 17 returning to the office following the lifting of restrictions, it was important the Society obtained an office space large enough to house our full team.

Part one: Our ordinary activities

1.5 - Summary

We will continue to make our home at Breams Buildings for the foreseeable future, so are committed to making that home as environmentally friendly as possible.

We're also conscious of the other contributors to our carbon footprint, and will continue to educate staff about what this means, and how it necessarily effects operational decisions as we work to reduce our carbon emissions.

Part two: Working from home

In March 2020 our staff team began working from home during the COVID-19 pandemic. In April 2021 some staff began working from the office periodically, but did not consistently return until July 2021. As pandemic conditions eased we established a hybrid working environment and will maintain this in future.

At present, staff must work from our office one day per week, and are otherwise able to work from home if they prefer. Our calculations in this section have been made based on staff working from home all four days during which they are not mandated to be in the office.

As such, the total carbon footprint of our staff working from home in 2022 was

4.761 tonnes of CO2 emissions

This total has been reached using figures outlined in Government guidance, Greenhouse gas reporting: conversion factors 2022[2]. We have not kept records relating to the number of days individual staff members worked from the office or from home in 2022 so we have made some assumptions to reach this figure, and our calculations are outlined below.

At the end of 2022 the Society had 17 members of staff, and following our office relocation all staff were required to work from the office on one corporate day per week. While some staff worked in the office more frequently, as only one day was mandated our calculations reflect each staff member working from home four days per week.

All our team members are entitled to five weeks of annual leave per year, so our calculations accounted for 47 working weeks. With four days working from home per week we reached a total of 188 days working from home in 2022. An 8-hour working day gave us a total of 1504 total working from home hours per employee.

47 working weeks x 4 working from home days x 8 hours = 1504 working from home hours per employee

Part two: Working from home

The Government's guidance on calculating greenhouse gas emissions gives the total CO2 emissions of home office equipment as 0.03168 kg/CO2e per hour, and the total emissions of heating as 0.30907 kg/CO2e. As most people do not heat their homes in the warmer months, we have assumed that while home office equipment would be in use for all 188 working hours, heating would only be in use for about half of this time. Therefore, our calculations have factored in the use of heating for 94 days of the year. Accounting again for 8 working hours per day, we reached a total of 752 working hours of heating use.

Using the figures from Greenhouse gas reporting: conversion factors 2022[2], we calculated each team member's home working footprint to be 280.067 kg/CO2e. This was calculated as:

1504 hours office equipment use x 0.003168 = 47.65 kg/CO2e
752 hours home office heating x 0.30907 = 232.42kg/CO2e

47.65 kg/CO2e + 232.42 kg/CO2e = 280.07

Multiplied by 17, this gave us a total of 4761.15 kg/CO2e for all employees.

The inherent assumptions in this calculation, such as that all staff only work from the office one day per week, or that all staff heat their homes exactly half of the year, mean this it is an estimate. While we've used the most accurate data available to us, there is various other information which would enable us to be more accurate. In future calculations we will gather more detail about the frequency with which staff attend the office and their energy and heating consumption while working from home.

These emissions have been measured separately because as an organisation we do not have direct control over them. As our hybrid working policy only requires staff to attend the office on our singular corporate day each week they are free to work from home at other times. Home heating and electricity form part of our carbon footprint as they facilitate our team working from home, but as they are owned by the individual, it isn't something we're able to control. Additionally, reducing this part of our carbon footprint will have an impact on other areas, such as the carbon emissions resulting from our staff commuting into our office.

Part two: Working from home

Lowering this element of our footprint will rely on educating staff about their carbon emissions and the causes of them. Sustainability is already a focus of our activities and something we discuss regularly as a team, and all staff will receive a copy of this report along with a personalised breakdown of their own carbon emissions.

As we continue to educate staff about their carbon emissions, and facilitate them making changes, we hope to see a reduction in this section of our carbon footprint.

Part three: Commuting

As outlined in section two, in 2022, after our office relocation, we implemented one corporate day per week, which means our team commute into the office at least once a week.

Based on information provided by our team and outlined below the total carbon footprint of our staff commuting is 1529.76 kg/CO2e.

To reach this figure we used Greenhouse gas reporting: conversion factors 2022[2], information made available by Transport for London[3], data from Lime on the emissions of e-bikes[4], and information we collected by conducting a staff survey.

Each staff member was asked to calculate the distance they travel to and from work and report the method they use, including if they sometimes use a different route or transport type or if they sometimes travel to or from somewhere else.

Of the 17 members of staff working with the Society at the end of 2022 we surveyed 13 who are still part of our team and commute into our office weekly. A further member of staff is based in another part of the UK and works from home for the Society two days a week, so does not commute at all. This means we needed to account for three members of staff who are no longer with the organisation.

To do this we found the average commuting carbon footprint for our other staff members and used this figure for all three former members of staff. To find this average we used the figures outlined in table 1 on page 16, excluding the footprint of team member eight who commutes to London from the South West of England about 50% of the time, and staff member 14 who does not commute at all. This gave us a figure of 60551.42g of CO2e per unaccounted for employee.

Part three: Commuting

Table one

	Travel method	Distance in kilometres	Emissions in grams	Total emissions
Team member 1	London Underground - 100%	12.6	41	24280.2
Team member 2	e-Bike - 90%	9	63.8	24288.66
	London Underground - 10%	9.2	41	1772.84
Team member 3	London Underground - 100%	19.8	41	38154.6
Team member 4	Cycling - 80%	5.2	0	0
	Walking - 20%	5.2	0	0
Team member 5	TfL Rail - 80%	18	12	8121.6
	London Underground - 20%	18.68	41	7199.27

Part three: Commuting

Table one

	Travel method	Distance in kilometres	Emissions in grams	Total emissions
Team member 6	London Overground - 50%	16	29	10904
	National Rail train - 50%	672.8	35.49	561125.29
Team member 7	London Underground - 100%	29.6	41	57039.2
Team member 8	National Rail train - 100%	94	35.49	156794.82
	London Underground - 100%	8	41	15416
Team member 9	London bus - 100%	5.4	99	25126.2
Team member 10	Docklands Light Rail - 100%	24	33	37224
Team member 11	London Overground - 100%	13.2	29	17991.6

Part three: Commuting

Table one

	Travel method	Distance in kilometres	Emissions in grams	Total emissions
Team member 12	National Rail train - 100%	62	35.49	103417.86
	Car - 100%	26	168	205296
Team member 13	London Underground - 100%	28	41	53956
Team member 14	No commute	N/A	N/A	N/A
Team member 15	N/A	N/A	N/A	60551.42
Team member 16	N/A	N/A	N/A	60551.42
Team member 17	N/A	N/A	N/A	60551.42

Part three: Commuting

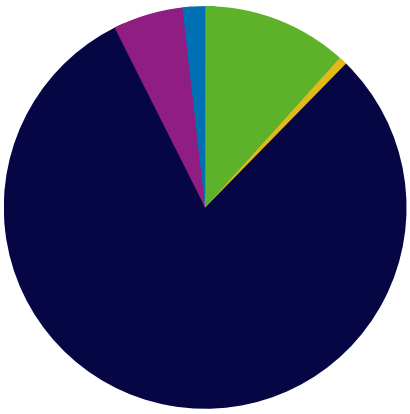
We chose to exclude team members eight and 14 from our calculations when determining the average footprint of our team members as both are statistical outliers, with one based permanently at home and the other commuting a significant distance about half the time. With all other employees based full-time in greater London or within 50km of our office, both figures would have significantly skewed our data and given us too inaccurate a total footprint.

The carbon emissions relating to the commuting of our staff have been calculated separately as the Society does not have direct control over these emissions. All members of our team are part of our sustainability efforts, and regularly briefed on our ongoing work, however, without information relevant to commuting emissions readily available it can be difficult to choose sustainable options.

Alongside the publication of this report we will make each staff member's footprint available to them, as well as the information we used to create this report. We hope this will enable each member of our team to make informed decisions about their travel to and from the office.

Part four: Conclusion

The Society's total carbon footprint for 2022 was 84.79 tonnes of CO2e.



Not shown - Scope 1 emissions - 0 tonnes
Not shown - Scope 2 - Electricity - 0.014 tonnes

- Scope 3 - Business travel - 9.87 tonnes
- Scope 3 - Transportation and distribution - 0.56 tonnes
- Scope 3 - Purchased goods and services - 68 tonnes
- Staff working from home - 4.76 tonnes
- Staff commuting into London - 1.53 tonnes

In our most recent strategy, we made a commitment to reducing our carbon footprint by 50% by 2030. This will mean reaching a target of no more than 42.3705 tonnes in 2030. We hope to reach this goal before the deadline set, which means we will need to reduce our emissions significantly over the course of the next seven years.

This work starts now, with the publication of this report.

While our 2022 carbon footprint calculations do not include calculations for our national Congress, State of the Art, our report on our 2024 emissions will include these figures. We are also committed to reducing the footprint of our flagship event by 50% by 2030, so this calculation will be vital.

We have not calculated this footprint for 2022, nor will we do for our 2023 report, due to the scale of the work involved and the lack of available resources.

Part four: Conclusion

We are aware that this Congress represents our most carbon-intensive activity and are committed to calculating and reducing its footprint to bring it as close to zero as is possible. While this presents a challenge, we believe it is our responsibility to do all we can.

We have already taken steps in recent years to minimise the environmental impact of our Congress. These include but are not limited to:

- Ensuring all catering is plant-based and locally sourced
- Hosting the event in a different city each year in the United Kingdom where we have larger contingents of members
- Offering hybrid attendance so delegates do not need to travel for the event
- Working with our sponsors, exhibitors and suppliers to ensure they share our ambition to host an environmentally sustainable Congress and are taking appropriate action in their own activities

In order to reduce our overall carbon footprint in line with our 2030 target we will:

- Reduce our procurement of carbon intensive materials, including printed collateral
- Limit our staff and Council travel where possible, and ensure we're choosing the least carbon intensive option when travel is essential
- Continue to hold our Council and Trustee Board meetings virtually, except in exceptional circumstances, so members are not required to travel to attend in person to fulfil their obligations
- Continue to host virtual or hybrid events, so members of our community are not required to attend in person
- Complete calculations each year to make sure we identify all areas where reductions can be made
- Begin measuring the carbon footprint of our State of the Art Congress in 2024, to identify areas for reduction

Our footprint for 2023 will be calculated at the beginning of 2024, using the tools described in this report. We will use updated government guidance and figures from Transport for London, and will ensure the information we provide Normative is as accurate and specific as possible in order to ensure the validity of the final figure.

Part four: Conclusion

We will also conduct a new staff survey, collecting responses from all staff working with the Society at the end of 2023, encompassing both commuting and working from home habits, to ensure the information we use for our calculations is accurate and makes as few assumptions or estimations as possible.

We are committed to calculating, reporting and reducing our carbon footprint, not only to reach our goal of a 50% reduction by 2030, but ultimately to operate as a carbon neutral organisation. This report is the first step on that journey.

Part five: References

1. Normative. Business Carbon Calculator [Internet]. London: Normative; c2023 [updated 2023; cited 26 July 2023]. Available from: https://businesscarboncalculator.normative.io/en/

2. Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy. Greenhouse gas reporting: conversion factors 2022 [Internet]. London: Government of the United Kingdom; 2022 [updated 20 September 2022; cited 11 August 2023]. Available from: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022

3. Transport for London. FOI request detail - Carbon footprint measure [Internet]. London: Mayor of London; 2022 [updated 22 November 2022; cited 18 August 2023]. Available from: https://foi.tfl.gov.uk/FOI-2292-2223/FOI-2292.pdf

4. Lime. Shared e-scooters reduce carbon emissions, finds leading German research institute Fraunhofer ISI [Internet]. California: Lime; 2022 [updated 24 October 2022; cited 18 August 2023]. Available from: https://www.li.me/blog/shared-e-scooters-reduce-carbon-emissions-finds-leading-german-research-institute-fraunhofer-isi

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