

The purpose of this guidance note is to assist Livery Companies in calculating their carbon footprint as a step towards formulating a more formal Climate Action Plan, with a view to reducing emissions over time.

Calculating your carbon footprint involves counting three sets of emissions, called Scopes 1, 2 and 3:

Scope 1 emissions are the direct emissions from activities owned or controlled by the Company

Scope 2 emissions are those from purchased energy. They are indirect emissions that are a consequence of your activities, but stem from sources that you do not control

Scope 3 emissions are indirect emissions from sources you do not own or control that are not covered in Scope 2. These may include waste disposal, purchased goods, business travel etc

There are a number of carbon-footprint calculators of varying complexity available on the internet. The City of London Corporation and the Bank of England have sponsored Heart of the City (<https://theheartofthecity.com/>) to produce a climate-action course which includes two recommended carbon-footprint calculators for small and medium-sized enterprises in the City, and for these purposes this includes Livery Companies:

<https://www.climateimpact.com/business-solutions/small-business-calculator/>

<https://theheartofthecity.com/climate-for-smes/heart-of-the-city-carbon-calculator/>

These Heart of the City calculators are free to use, and some support is also available. We recommend the use of their calculators and guidelines as an initial, relatively simple approach for most Companies. This would have the added advantage of aligning the work of Livery Companies with the approach adopted by the City of London Corporation. The Heart of the City climate-action course modules are likewise available free to Livery Companies and offer advice in developing climate-action plans.

Adopting the Heart of the City calculators and guidelines will give reasonable and comparable initial carbon-footprint estimates for those Livery Companies willing to use them. The two recommended calculators capture different types of emissions, but taken together they produce an overall carbon footprint for all Company activities.

Data Collection For Scope 1,2 and 3 Emissions

The Heart of the City carbon-footprint data collection guide offers advice on the information required for each category and where to obtain it:

<https://theheartofthecity.com/climate-for-smes/carbon-footprint-data-collection/>

Generally, Scope 1 and 2 emissions will apply only to those Livery Companies that own halls. If your Company uses other Companies' halls for events, then Scope 1 and 2 emissions will be accounted for by the owners of those halls (thus avoiding double counting).

Note that Scope 1 should include only emissions from company-owned vehicles. The transport emissions due to Company members and guests attending events should be included in Scope 3.

Calculating Scope 1 and 2 Emissions

For Scopes 1 and 2 use the Climate Care calculator

(<https://www.climateimpact.com/business-solutions/small-business-calculator/>).

Click on the dropdown menu (illustrated below) and choose the relevant category.



The relevant categories are highlighted here in red:

Scope 1

- Electricity -- on-site electricity generation: **4) Energy**
- Gas: **4) Energy - use energy type: natural gas**
- Transport -- company owned vehicles: **3) Road transport**

Scope 2

- Electricity -- purchased electricity: **4) Energy**

Calculating Scope 3 Emissions

Use the Climate Care Calculator (<https://www.climateimpact.com/business-solutions/small-business-calculator/>) to estimate Scope 3 emissions. The relevant categories are highlighted in red:

- Transport - employee commuting: **3) Road transport**
- Transport – business/events travel: **2) Flights and 3) Road transport**
- Meals – business/events meals: **7) Food**
- Accommodation – business/events accommodation: **6) Accommodations**
- Freight – Emissions from shipping or delivery: **8) Freight**
- Waste: **9) Waste**

Use these categories, as recommended by Heart of the City in their calculator guide, for all Company events including meetings, lunches and dinners, conferences and other events where officers attend on behalf of the Company.

NB Do not use Section 5 – Events in the Climate Care calculator as there is a risk you may get significantly different results. The Events section in this particular calculator uses only average travel distances to events and does not allow you to cater for mixed modes of transport, eg car to station, then train etc.

You will need to build a **data collection worksheet** (see [LCAG Carbon Emissions Calculator](#)) to record and calculate the total estimates for the various categories of emissions listed above. A simple example worksheet is included with this Guidance Note in the Example Calculation section. Enter the annual totals from your spreadsheet into the Climate Care Calculator as shown. Then make a note on your worksheet of the calculated carbon emissions displayed (do NOT use the add-to-basket facility or the other Climate Care boxes below).



3 | Road Transport
⌵

ROAD TRANSPORT

Calculate and offset your transport emissions here:

Transport Type:

Fuel Type:

Distance:

No. of Journeys:

CARBON EMISSIONS

0.69

tonnes of CO₂e

ADD TO BASKET

Then use the Heart of the City carbon calculator (<https://theheartofthecity.com/climate-for-smes/heart-of-the-city-carbon-calculator/>) for other Scope 3 emissions not covered by the Climate Care calculator, including an estimate of the emissions generated by water usage by those Companies with a hall. Similarly, estimate the emissions generated by purchased goods and services and company members working from home (see example calculation below).

Finally, Companies will need to talk to their fund managers to obtain an estimate of the Scope 3 emissions from their investments.

The Scope 1, 2 and 3 emissions for all the above categories can then be entered into the annual summary of the [LCAG Carbon Emissions Calculator](#) spreadsheet to give a final total emissions figure for the Company. Livery Companies may wish to add sub-categories to the template so that they can monitor changes in travel modes, food and accommodation year to year.

Example Calculation For A Livery Company Without A Hall – Company X

SCOPE 1 AND 2 – Zero

SCOPE 3

Committees and Events Emissions

Calculate total transport miles by train, car, taxi and journeys by plane using the [LCAG Carbon Emissions Calculator](#). Enter figures into Sections 2 and 3 of the Climate Care calculator to get the total emissions per year. Similarly, calculate the total number of meals and accommodation nights in Sections 6 and 7.

TRANSPORT, MEALS AND ACCOMODATION	No. Events	Av. No. Attending	Total Train mls	Total Diesel Car mls	Total Petrol Car mls	Total Electric Car mls	Total Taxi mls	Total Plane Journeys	Meals - Meat	Meals - Veg.	Accom. Nights
Company Lunches & Dinners	6	80	38400	1500	600	300	50	0	420	60	60
Company Committee Meetings	4	8	2560	100	60	0	0	0	28	4	4
Charity Committee Meetings	4	10	3200	140	80	0	0	0	36	8	0
Social Events	10	15	12000	500	250	0	0	0	120	30	2
City Events	110	1.5	13200	550	275	0	40	0	100	10	15
Totals			69360	2790	1265	300	90	0	704	112	81
Calculated Emissions tonnes CO2e			3.92	0.78	0.37	0.02	0.02	0.00	1.67	0.21	18.07
Total Meals tonnes CO2e	1.88										
Total Transport tonnes CO2e	5.11										
Total Accom. tonnes CO2e	18.07										
Grand Total tonnes CO2e	25.06										
Average Train Journey mls	80										
Average Car Journey mls	5										
Average Taxi Journey mls	5										

Total emissions for Committees and Events = 25.06 tonnes of CO2

Working From Home

Enter data on hours worked from home by Company officials and members in the Heart of the City calculator:

	Employee name	Average number of days worked per week	Average number of days worked from home per week	Average hours worked per day	Number of days off per year, including annual leave, 8 days for bank holidays, sick leave and furlough leave	Total yearly business working from home kgCO2e	Total yearly business working from home tonne CO2e
2	Clerk	3	3	8	20	2272.74	2.27
4	Master	5	2.5	8	30		
5	3 No. Wardens	6	3	8	0		
6	10 Court Assistants	5	2.5	8	0		
7	9 Trustees	6	6	8	0		

Total emissions due to working from home = 2.27 tonnes of CO2

Goods and Services

Enter data on the amount spent on goods and services into the Heart of the City calculator:

Company X spent a total of £12,300 on goods and services for the year.

Total emissions due to Goods and Services = 6.52 tonnes of CO2

Value of goods and services purchased annually (£)	12,300
Emissions factor kgCO ₂ e per £	0.53
Total purchased goods and services emissions kgCO₂e	6519
Total purchased goods and services emissions tonnes CO₂e	6.519

Annual Summary – Company X

The above figures can then be entered into the annual summary of LCAG Emissions Calcs spreadsheet ([LCAG Carbon Emissions Calculator](#)).

Until these can be combined in a single spreadsheet, you will need to keep the results from the [LCAG Carbon Emissions Calculator](#) spreadsheet and the Heart of the City Calculator for each year as a record of calculations made.

	Metric used	Value	Tonnes CO ₂ e
Scope 1			
Electricity	kWh		0
Gas			0
Refrigerants (optional)			0
Company owned vehicles			0
Scope 2			
Electricity	kWh		0
Scope 3			
Meals			1.88
Business travel			5.11
Business travel accommodation			18.07
Employees working from home			2.272
Water	m ³		0
Waste from operations			0
Purchased goods and services	£		6.519
Investments			0
Total kgCO₂e			
Total tonnes CO₂e			33.85
Total Scope 1 kgCO₂e			0.00
Total Scope 2 kgCO₂e			0.00
Total Scope 3 kgCO₂e			33.85

Hence the total carbon footprint for Company X is 33.85 tonnes of CO₂ per annum. The most significant emission for Company X is hotel accommodation at 18.07 tonnes of CO₂ per annum.