

GCC

CARBON CALCULATOR INFORMATION & USER GUIDE

Version 1.
September 2021

Contents

	Page:
• Introduction	1
• Getting started	2
• Using the calculator	5
• Next steps	7
• Data protection / Security	9
• How the calculator works	10
• FAQs	14
• Further help / Contacts	17

Introduction

The GCC Carbon Calculator is a free online tool designed to help estimate the carbon footprint of your business and is based on metrics common to most art galleries in today's international art world. It aims to be easy-to-use and provide a quick breakdown of the main sources of greenhouse gas emissions.

It is the first of these carbon data tools to come from directly within the commercial art industry, and is therefore tailored specifically for galleries and related organisations to use.

From the research we conducted, it is clear that there are three main areas of carbon emissions associated with most galleries, institutions, artist studios and art sector businesses – Travel (by plane), Shipping (by air freight) and building energy consumption. These categories vastly outweigh others such as printing, local transport and packaging.

The decisions we make between now and 2030 will be critical in determining whether humanity will avert the worst effects of climate change. To make these decisions, we have to be informed about the industry's environmental impacts. Your carbon report will be the first step in understanding your carbon footprint and taking responsibility for the emissions produced. From here we can set science based targets and track our progress towards achieving the 50% reduction in carbon emissions needed by 2030.

The calculator has been designed and built by Artlogic founder and CEO Peter Chater, with help and guidance from Danny Chivers, an environmental researcher and climate change consultant who is part of the consultancy team working on the GCC.

We'd recommend watching the [Carbon Calculator Tutorial](#) before getting started on your Carbon Report.

Getting Started

- Data Gathering Process
- Checklist
- Data Collection Template

Data Gathering Process

It may seem like a big task at first to assemble all of the data, but your finance departments and registrars may already have most of it. Additionally, the bulk of your data will be recorded by the shippers and travel agents you use. It would be beneficial to let the companies you work with know you are doing your carbon report and will be requesting certain information. Please feel free to share this user guide with them should they have any questions.

For a pre-Covid baseline year, data should be collected for the latest financial year that ends before February 2020. For example, this might be April 2018 – March 2019, or October 2018 – September 2019. Alternatively, you could choose to use the 2019 calendar year if this is easier for any reason. In most countries, financial records must be kept for 6 years, so the data required will still be available via your organisation's finance team.

GCC advises that members form [Green Teams](#), which are groups of employees engaged in advancing sustainability within their organisation. In the case of smaller organisations, a Green Ambassador can take on the role. Managing carbon calculations is a primary

responsibility for these teams. Having a dedicated internal group working on the task will make the process significantly more efficient.

Checklist

Below is the Data Collection Checklist, which relates to the entry fields on the calculator and also corresponds to the [Data Collection Template](#) (to download your own copy of this, please go to File > Make copy OR File > Download).

Items 1–5 are **PRIORITY DATA** – this means that these categories relate to the activities with the greatest emission impact. Please make every effort to collect this information accurately.

Items 6–11 are **OPTIONAL DATA** – these categories relate to the activities with the lowest emission impact, which does not mean to say it is unimportant or changes do not need to be made in this area, but that ultimately these activities will represent a relatively low proportion of emissions and if you are pressed for time these areas should not be prioritised.

DATA COLLECTION CHECKLIST		
EMISSIONS SOURCE	DATA REQUIRED	WHERE TO FIND IT
1. TRAVEL – FLIGHTS	List of all flights taken and details about the journey: One-way / Return, origin > destination, flight class and number of passengers.	From travel agents, financial records and/or staff booking records
2. SHIPPING – AIR FREIGHT	List of all international air transport by airplanes and details about the journey: one-way / return, origin > destination, weight including packaging.	Direct from the logistics and shipping companies
3. SHIPPING – SEA FREIGHT	List of all international shipments made by sea and details about the journey: one-way / return, origin > destination, weight including packaging.	Direct from the logistics and shipping companies
4. SHIPPING – ROAD FREIGHT	List of all international shipments – consolidated or otherwise – made by truck or heavy goods vehicle (HGV) and details about the journey: one-way / return, origin > destination, weight including packaging.	Direct from the logistics and shipping companies
5. ENERGY	Electricity total (KWh), Piped gas total (KWh), % share of premises and	From energy bills, meter readings or financial records

	Supplier (optional).	
OPTIONAL DATA:		
6. TRAVEL – TRAIN	List of all rail and ferry journeys taken, ideally including the distances travelled.	From travel agents, financial records and/or staff records. Due to a lack of available data, this section is currently for UK or European businesses only.
7. TRAVEL – TAXI	Total distance driven and/or vehicle fuel purchased by staff and volunteers on gallery business	From financial records of mileage payments or fuel purchases
8. TRAVEL – CAR	Total distance driven and/or vehicle fuel purchased by staff and volunteers on gallery business	From financial records of mileage payments or fuel purchases
9. LOCAL FREIGHT	Total distance driven and/or vehicle fuel purchased by couriers or local transport businesses, moving artworks or other materials for the gallery	From financial records or direct from the courier companies
10. PACKAGING	Weight of packaging purchased in 2018/19, the materials each type of packaging is made from, and the recycled content (if known)	From financial records or from the packaging suppliers
11. PRINTING	The weight in kg of any paper used, whether that's paper purchased for internal use within galleries/offices, or external printing of brochures, books etc. Also, the recycled content of that paper (if known).	From financial records or from the printing companies – or by weighing any printed items (e.g. a brochure or book) and multiplying by the number of copies printed.

Data Collection Template

A data collection template spreadsheet is available to download [here](#). The document has entry fields that relate to each section of the carbon calculator. We advise members to collect info over the course of a year to avoid having a big task to do in one go.

We recommend that a version of this document is available for your Green Team leader, registrar and finance team to access so they may enter data.

Using the Calculator

General tips:

- Use the 'x' at the end of each row if you need to wipe that line of data.
- Data will be saved in your browser as you go along (unless your browser is in Incognito mode). It will be available the next time you return to the calculator on the same computer. If you are a GCC member, you can hit the save button and then be able to access your audit or draft entries across multiple devices just by logging into your account.
- You can also revert to the last saved version, if you have been experimenting with changing some of your data entered.
- Once completed, you must mark your audit as 'Final' in order to download your PDF report

Calculator Parameter Settings

Year end – Decide which year to assess by selecting an appropriate 'Year end' month. Make sure that all the data collected is from that year only. This could be a calendar year or a financial year. Be consistent in your time-frame year on year.

Status – This means the status of your report. While you are entering data, this should be in 'Draft'. When you have completed your calculation, you must select 'Final' in order to download your report PDF.

Units – Use the Distance, Fuel and Currency options to select which units you will be inputting. These can be changed as you go if needed. The calculator will do the conversion for you.

Currency – this is only used for the taxi and train travel sections, and we hope to include more currencies here in the future. You will still be able to complete the main sections of the audit if you are using a currency not listed here.

Calculating Flights

Enter the data into the columns. It's important to enter the location of your stopovers.

The calculator will populate basic information on the type and class of flight, and the amount of people that took the flight/how many times this route was taken. If you have duplicate flights you would like to include, you don't have to enter the information twice.

TIP: The calculator recognises airport three digit codes, which is helpful for quick data entry. You can also start typing out the airport name/location and a list of airports will pop up.

Calculating Shipping

The shipping section is divided into Air Freight, Sea Freight and Road Freight. Similar to the travel section, you need to add the route in the first column. It is also important to add the weight of the item you are sending, ideally including packaging, for a more accurate calculation. If you don't have this information stored in your records already, you should be able to obtain it from your shipping agent, who will have weighed the item in its packaging before it boards any carriers. You may be able to check your airway bills for this information too. You can select whether the shipment was one-way or return.

Based on previous carbon audits, an assumption has been made of an average of 40 km of road journey by truck at either end of each journey so trips to / from airport trips have been automatically accounted for and do not need to be entered, unless the journey is significantly more than this average.

Hopefully, the weight transported should be available in actual kg or tonnes. However, it is possible that your shipper may be only able to provide a figure in volumetric weight. In this case, you will need to convert this to an actual weight before adding it into the calculator. Based on previous art shipments by GCC members, we have calculated that, on average, volumetric weight is around 1.73 times higher than the actual weight of items shipped. So to make an approximate conversion, you can divide the volumetric weight by 1.73 to get the actual weight of your shipment. Please note this is only a rough calculation, and it's definitely worth trying to get more accurate weights if you can.

To calculate emissions of a sea freight shipment, start by entering the route or event name. Then add the distance of the journey in nautical miles. As this information is not likely to be something you have at your fingertips, we've added in a link to a sea distance calculator, which will calculate that for you.

A note on ports.com: Members have experienced trouble using this website on Google Chrome, so you may need to open it on Safari or another browser.

To calculate road freight emissions, add the route to the first entry point. This then creates a link to the same route on Google Maps. Google Maps provides the distance of the route, so you can add this data without having to look through any shipping paperwork.

Calculating Energy

There is an option for adding the % share of a premises. This is designed in case your gallery shares the premises with other businesses, should you only have access to the data for the whole building.

If you have more than one gallery, you can add a separate line for each.

Optional Sections

While we expect that most of the elements in this section will have a relatively small footprint, it's possible that some areas (particularly packaging and printing) might turn out to be more significant than expected. It's therefore definitely worth gathering data

for all these categories if you can, so you can be sure you are capturing the complete picture.

In this section, you'll be entering in the totals of train travel, rather than each journey line by line. The calculator has data on the average emissions of trains across the UK and continental Europe, so will calculate a carbon emission for you based on those prices.

For taxi travel, you don't need to enter every journey - just add up the amount spent on taxis in different locations, and use a single row for each location (e.g. the total spent on London taxis, the total spent on Hong Kong taxis, the total spent on US taxis etc).

There are options to add in any car travel. Here you can enter the fuel consumed, and the distance travelled.

The local artwork transportation is for shorter domestic journeys. You can use estimates if you don't have records of the exact number of car and van journeys per year.

There is also a section for packaging. This is data that your shipping agents should be able to provide for you.

If you print catalogues or other publications, we can calculate the carbon emission of these. Add in the print run, and weight per item, and it will add publications/brochures to your emissions tally.

Completing calculations

To complete your report you must set your calculation status to 'Final'. You will then be able to download a PDF for your results.

Congratulations - you have successfully finished an annual carbon report! Thank you for your work to get to this stage.

Next Steps

Once the carbon calculations have been completed, members should follow these steps:

- Publish data via GCC website
- Request Carbon Report Badges
- Calculate price per CO₂e tonnes & donate to Strategic Climate Funds (SCFs)
- Repeat process annually

Publishing data

GCC strongly encourages members to publish their results via the GCC website. Publishing carbon reports promotes transparency and collegiality across the sector. By making the results available for all to see it helps GCC to establish best practice, track progress, and build up a bank of data, which in turn allows us to refine and improve our tools and research. We cannot emphasise enough how important and useful this is to our collective effort.

In order to publish your data you must set your calculation status to 'Final' and then download the report PDF. This data sheet should then be emailed to: info@galleryclimatecoalition.org with permission for the results to be made public. The GCC team will then format your results in the standardised graphics to be used on the charity's website and social media platforms as well as relevant reports and articles, member's approval will be double-checked before posting.

Carbon Report Badges

GCC offers Carbon Report Badges to members who have completed an annual report. These can be displayed on the individual or organisation's website and social media channels, and are a way of recognising and celebrating the positive actions they have taken. Any gallery, artist studio, art sector business or individual who has submitted a carbon report either by using the free GCC carbon calculator or via a carbon audit with an external consultant are eligible to receive the badge.

As the data for the GCC calculator is submitted voluntarily and completed in good faith, we are not able to check the calculation for every individual report. These badges, therefore, function as acknowledgements of a member taking positive action and not as a verification of accuracy or sustainability certification. The badges will not be awarded to members who have only submitted partial data for individual projects or specific areas of emissions.

To receive your Carbon Report Badges contact info@galleryclimatecoalition.org.

Donating to Strategic Climate Funds (SCFs) & Calculating your price per CO₂e tonnes

Compensation schemes should be a last resort after reducing as much of your CO₂e emissions as possible. However, GCC strongly encourages members to take responsibility for emissions that cannot be avoided by donating to approved environmental charities and sustainability schemes covering areas where urgent climate action is needed, including keeping fossil fuels in the ground and defending and expanding forests and wetlands and their inhabitants.

These strategic donations will not make your emissions impacts disappear but they are an effective way to support organisations that will have a positive impact within our 2030 timeline.

In order to donate you must first calculate your CO₂e price per tonne. There is considerable debate over exactly how to do this and guidelines vary on who you ask. GCC advises: £50-100 / \$70-140 / €60-115 per tonne of CO₂e. We recommend choosing

a figure within this range based on what is affordable, while also being high enough to act as a useful spur to reduce emissions.

For more information about Strategic Climate Funds (SCFs) vs conventional 'offsetting' as well as GCC approved schemes, [visit SCF page on the website](#).

Annual reports

Members should make carbon reporting an annual task, similar to tax returns or general financial record keeping.

By submitting yearly data, you will be able to effectively track the impact of implementing GCC Effective Actions as your emissions reduce towards your ultimate reductions target.

Data protection / Security

Data storing & sharing:

By using our calculator, you are committing to sharing your data with us. This data will be stored by Artlogic and will only be retrievable anonymously by Artlogic's engineers. The data you enter will be absolutely anonymous and will not be linked to any one organisation or individual in particular. Your anonymised data will be useful in a few key ways:

- Collated data allows for a clearer picture of the carbon footprint of the art-world.
- It allows for more accurate advice and guidance across a range of scales and sectors—as well as in continually refining the accuracy of GCC tools.
- It allows for the development, and publishing, of innovative research based upon this data. This data may be shared anonymously for research purposes.

How the Calculator Works

- Carbon Factors
- Accuracy
- Regional variation
- Annual updates
- What isn't included, and why

Carbon Factors

“Carbon factors” are the amount of greenhouse gas emissions per km, per litre, per KWh etc. Most of the conversion factors utilised in this calculator are taken from the UK Government’s official annual set of Greenhouse Gas Reporting Conversion Factors, provided by BEIS. Some data is taken from other sources around the world where available.

Wherever possible, we have used the same factors as the sustainable arts charity Julie’s Bicycle in their online carbon tools, to allow compatibility between footprints calculated by both their tool and ours. For example, we have not included the extra emissions from extracting and delivering fossil fuels to their point of use, known as “Well To Tank” emissions, because Julie’s Bicycle does not include these.

For flights, there is an extra chunk of global warming caused by burning aviation fuel at high altitude, that makes air travel particularly polluting. There are a range of estimates for the impact of this extra warming. To be consistent, we have used an “uplift” figure of 1.9, as used by the UK government, Julie’s Bicycle and many others (i.e. the impact is assumed to be 1.9 times greater than the impact of the plane’s carbon dioxide alone). Note that some carbon calculators use a higher figure than this, while others don’t include it at all, which explains why different flights calculators can give very different carbon footprint results.

Accuracy

In this calculator, we have tried to strike a balance between ease of use and accuracy.

For most art sector organisations, business flights, long–distance shipping and building energy use will make up the majority of the carbon footprint. We have therefore focused on these three elements and tried to make them as accurate as possible, while still providing some short–cuts to make the calculator easier to use.

The calculator should give good enough results on these three elements to give you a sense of where the largest parts of your carbon footprint lie, and help you to set targets and make action plans to tackle them. However, the calculator still uses some averages and short–cuts in these areas, such as:

- Using a standard assumption that artworks are transported 40 km in an average truck at either end of a flight.
- Calculating flights based on the average footprint per km of the average plane, rather than assessing the specific planes used on particular routes by particular airlines.

- Estimating road transport based on average trucks, and ocean transport based on average ships, rather than requiring details on the precise vehicles used in each case.

For a more accurate assessment of these kinds of details, we'd recommend commissioning a more detailed audit from a professional carbon consultant.

For other elements of the footprint such as packaging, printing, taxis etc., the calculator asks for very basic information in order to calculate a rough ballpark figure based on averages. We expect these elements to make up only a small part of your footprint (around 5%). If you find that these figures look larger than expected, we'd recommend calculating a more detailed footprint using Julie's Bicycle's free online carbon tools, or by commissioning a full carbon audit.

Regional variation

We've tried to make the calculator as international as possible, and include carbon factors relevant to different countries and regions. This is particularly important for electricity use, which is generated by different methods in different countries, creating a large amount of variation, which is why it's so important to select the correct country from the drop-down menu here.

However, some of the smaller areas of the footprint (e.g. road transport) are based exclusively on UK government figures for the typical fuel use of the average truck etc. These figures do vary somewhat from country to country based on local regulations and vehicle standards, so by using UK figures we are losing a small amount of accuracy here. However, we expect road transport to only make up a small percentage of the footprint and we feel this is a reasonable estimate to make, in return for keeping the calculator as simple to use as possible. If you're outside the UK, road transport makes up a significant part of your carbon footprint and you'd like to improve the accuracy of the factors used here, let us know and we'll help if we can.

Annual updates

Carbon factors change from year to year. The carbon footprint of electricity grids may fall as coal power stations are replaced with wind and solar farms; vehicles may get more efficient, or airlines may pack more passengers into their planes. To reflect this, we've included a different set of carbon factors in the tool for the years 2018, 2019 and 2020 (and will continue to add more as the years progress).

Make sure you select the correct year for your carbon footprint, so the calculator will select the right factors. If your footprint year straddles two calendar years, please pick the year that the majority of your footprint falls into (for example, for Oct 2018 – Sept 2019, you would select 2019).

What isn't included, and why

In technical language, carbon footprints are divided into 3 Scopes:

Scope 1 = Greenhouse gases directly emitted by the organisation, such as from gas burned to heat a building or petrol purchased to burn in a car.

Scope 2 = Emissions from electricity purchased directly by the organisation.

Scope 3 = Emissions from goods and services purchased by the organisation, and other "indirect" emissions. This includes everything that the organisation spends money on, from taxis to flights to printing to shipping.

These categories come from the most widely-used set of carbon accounting guidelines, the Greenhouse Gas (GHG) Protocol, which sets the standard for carbon footprinting worldwide.

All carbon footprints are expected to include Scopes 1 and 2 as standard. For Scope 3, the items to include are usually determined on a case-by-case basis, based on which parts of the footprint are most significant and the accepted standards of the specific sector. The important thing is to be transparent about what is and isn't included.

The GCC calculator includes all of an arts organisation's significant Scope 1 and 2 emissions (building energy use), and then for Scope 3 it focuses on the parts of a user's carbon footprint that are:

- Measurable
- Significant
- Within the gallery's responsibility and control

In other words, the calculator purposely excludes areas of the Scope 3 footprint that would require an excessive amount of work to calculate, compared to their likely impact and the member's ability to actually do something about it.

The areas of the Scope 3 footprint that are included in the footprint are business travel, shipping, packaging, and printing. These are all areas that can be calculated without too much difficulty and where the gallery has the ability to make a difference.

The following areas of the Scope 3 footprint are likely to have only a small relative impact, but would require a significant amount of work to collect the necessary data and so have been excluded:

- Materials purchased for framing, displaying and exhibiting artworks
- Use of hotels by staff
- The footprint of data services

- Waste disposal
- Water supply and disposal
- Other purchased materials (furniture, office equipment, etc.)
- The footprint of investments, pensions and banking
- Refrigerant use (in air conditioning etc)

The following areas of the Scope 3 footprint may have a significant impact in some cases, but would require a significant amount of work to collect the necessary data and are not under the full responsibility or control of the gallery:

- Staff commuting
- Energy used by staff when working from home
- Transport of artwork and materials to the galleries by third parties, not paid for by the gallery
- Visitor travel, especially of invited guests to events, launches, sales etc.

None of the above elements are included in the carbon calculator, and we do not expect most members to measure or set specific targets against them. However, we would encourage all members to keep these elements in mind and make the lowest-carbon choices possible in relation to them, even though these will not show up in the calculated footprint.

We'd also encourage any members which have the means to investigate these footprint elements where possible. In the medium to longer term, it would be great to get some typical/average figures for these footprint elements that we could share within the network.

There are also some "one-off" events, such as the construction/refurbishment of a new gallery, that could have a significant footprint but wouldn't fall into the typical annual activities of a gallery and so aren't captured in the calculator. Again, we'd suggest these should be investigated on a case-by-case basis so members can make the lowest-carbon choices possible.

FAQs

How accurate is the calculator?

The carbon figures this calculator provides for passenger flights, air freight (transportation of artworks) and building energy should all be reasonably accurate – depending on the quality of the data entered. These three categories will almost certainly make up the great majority of the carbon footprint of a gallery, institution,

auction house, artist studio or art-sector business. For a more complete figure fill in the other sections – but note that these are optional, and fairly approximate.

We designed this calculator to be reliable and robust, and recommend that you use it to give you an idea as to what your first steps on climate action should be. Knowing what is causing the majority of your emissions will help guide immediate decisions on what to do first. However, this is only a first step and if you are interested in moving beyond a general overview for target-setting and developing long-term plans, or for external reporting, then we suggest you commission a more comprehensive carbon audit. Feel free to contact us for more advice on how to do this.

How long will it take to complete?

This depends on many variables. How large is your organisation? Is your business mostly international or local? How many staff do you have? Is your staff member appointed to this task working on this full time or sporadically? Additionally, entering data is quite quick but waiting for data from colleagues and suppliers is what takes time.

As a rough guide:

- An artist studio with 3–6 staff and largely city based operations could wrap up their calculations within 2–3 weeks.
- Whereas a mid-size arts organisation with 15–20 staff might have to wait on data from suppliers making the whole process take 1–2 months.
- A very large commercial gallery or institution will have a large amount of data to collect and sift through and realistically, without a dedicated [Green Team](#) managing it, a retrospective carbon report might end up taking several months.

However, for any organisation, a little forward planning can go a long way:

- Make sure you have a dedicated colleague or team responsible for the report. GCC advises that members establish [Green Teams or Green Ambassadors](#) within their organisation. Managing carbon reports would be one of their primary responsibilities.
- Collate data throughout the year (using the [Data Collection Template](#)) to avoid having to retrospectively find the information.
- Start the conversation with your suppliers, contractors and shippers as soon as possible so that they are aware of the work you are doing and are able to provide appropriately formatted data when required.

All of these points will cut down on the time it takes to complete your report.

How often should I do a report?

GCC recommends members return annual carbon reports. This will give the clearest and most accurate information about emissions and the efficacy of the best practices as they are implemented. We suggest that carbon reports are thought of in the same way as annual tax returns – they must be done annually by a pre-appointed staff member. At

the moment this is voluntary but in the future carbon reporting may be legally required. Get a head start for your business now!

What if I wanted to do a carbon report for before 2018?

Please let us know if you would like to do this. If there is demand for it, we can update the calculator to include previous years.

I have a Green Energy Tariff, does this mean my energy consumption is carbon free?

Green tariffs are a complex and contentious issue, and can differ between territories. Currently, there is no country where a 'green' tariff equates to carbon free energy. Unless you receive your power directly from a renewable source, such as your own solar panels, then your energy will be coming via the national grid with electrons from coal plants mixed in with electrons from wind farms making all electricity coming out of your sockets as clean or as dirty as anyone else's despite paying for a green tariff. Having said this, it is still very important to change your supply to a responsible energy producer. As consumers we can collectively make significant change but showing there is a demand for renewable energy. Over time this will make energy grids cleaner and greener. The metrics that underpin our carbon calculator will be updated annually to reflect this until eventually a fully renewable electricity grid will equate to (nearly) carbon free.

When changing suppliers, be aware that some tariffs that are sold as "green" may not actually be doing much to support renewable energy. There's more information about this – including tips on what to look for in a green supplier – in our [energy report](#).

Does the calculator measure Scope 3 emissions?

Yes and no. For a full answer to this question please refer to the User Guide section *How the Calculator Works: What isn't included, and why*.

What should I do if shippers won't provide data, or try to charge for it?

So far, most shipping companies have been happy to provide data to GCC members. However, there have been examples of shippers who have stated that they cannot provide this information as standard, and have asked for extra payment. In these cases, we'd suggest letting your shipping company know that this is not usual practice, and not just among shipping companies – many other types of supplier (such as travel agents and printing companies) have been providing data for carbon footprints as standard for years now, and this practice will only become more common and expected as organisations across the art world step up their climate commitments over the next few years. You can also let us know at GCC, so we can figure out which suppliers are maybe not yet up to speed on this and speak to them about it.

In the meantime, if your shipper genuinely seems unable to provide you with data, then it's worth speaking to your procurement and/or finance team and checking what internal

records you have about the shipments that you've booked. It's possible that you could have most – or all – of the information you need within your own records.

If your own internal records aren't providing you with the answers you need, then please get in touch and we'll do our best to suggest some workarounds or ways to estimate any missing data.

Can I enter data for more than one year at the same time?

Currently the calculator only allows users to enter information for one year at a time. However, this function will be made possible in a future update.

Should I be collecting my data as I go, or retrospectively harvesting it at the end of a calendar or financial year?

We would wholeheartedly encourage members to collect data throughout the year. Depending on the type of organisation and the available staff, data could be collated in a shared spreadsheet accessible to your registrar, green team and finance department so that when it is time to submit your carbon data you do not have to wait on suppliers or other third parties to provide you with information.

If I am struggling for time and resources, then would it be OK to only input air freight in the shipping section? Of course it would be good to input sea and road freights, but I wondered if the result would still be fairly accurate?

If the great majority of your shipping is by air, then this is probably OK – but we'd strongly recommend at least making estimates (even if they're *very* rough) for your ocean and road freight. For example, if you don't have time to check through every shipment by road, you could think through the major events/exhibitions in the given year and decide "we probably transported a medium-sized exhibition between London and Scotland four times, so let's plug in four return journeys taking 500 kg from London to Edinburgh". And repeat for any other major shipments that you know happened by road or by sea. This will at least give you a ballpark figure to compare with your air freight figure.

Can I include data for waste emissions in the calculator?

This is not a feature we currently offer as the CO₂e emissions associated with waste disposal are both very small and challenging to measure, compared with the other categories. However, we are working to include a waste entry field as part of our future revisions of the calculator. If you are able to accurately calculate emissions associated with waste and share the source and figures with GCC, we will be able to include this in the final report data graphics.

Further help / Contacts

GCC regularly hosts Carbon Calculator and Data Gathering Workshops for members. Information about these events will be available via the website Events page. If you can't see an upcoming workshop and would like to request one, please contact: aoife@galleryclimatecoalition.org

For any further queries relating to the carbon calculator, or if you have any suggestions or feedback please get in touch: info@galleryclimatecoalition.org

We would like to thank Peter Chater and the team at Artlogic for their ongoing provision of expertise, services and support, without which the free provision of GCC's Carbon Calculator would not have been possible.

The GCC is grateful to our Environmental Consultants Danny Chivers and Harris Kuemmerle for their advice on emissions calculations.