

Standardised Emissions Data for Shipping Quotations and Invoices

Introduction

According to GCC members, the greatest obstacle to completing their carbon reports is shipping companies not providing the data relating to freight in a consistent and timely manner.

As part of the Sustainable Shipping Campaign, GCC is asking fine art shippers and freight handlers to include all the information required for emissions reporting to be clearly labelled on all invoices, allowing clients to efficiently collect the data for their emissions reporting.

There is currently a huge range of invoicing formats across the sector from some having most of the information required already available to others not even including the details of the artworks shipped. GCC hopes that by standardising the provision of emissions data on invoices and quotes the important process of carbon reporting will become widespread and much more efficient for everyone in the art sector supply chain, including shippers.

GCC acknowledges that this could require a systems update or adaptation of admin procedures for the shippers. This will not happen overnight but with several companies already offering this and an expected increasing demand from galleries and collectors, there will likely be market incentives to offer these services, in addition to environmental responsibility.

Increasingly, there are calls for more data transparency from suppliers about the environmental impacts of their activities (relevant to Scope 3 emissions measuring) and it is likely that at some point government legislation will be introduced in line with this increased demand.

In the meantime, and at the request of its members, GCC will be introducing a new system to guide galleries, artists, collectors etc. towards

the companies that are offering products and services in line with their reduction target. Published [Shipper Sustainable Services Survey](#) will be available later this year. In line with this, **this document specifically expands on Target 4 of the Sustainable Shipping Campaign:**

By **2024** – all freight companies to provide standardised emissions data:

- a.** as estimates on all quotations so that clients can make informed decisions on shipping options based on environmental impacts as well as cost and time*.
- b.** on all invoices allowing clients to efficiently collect the required data for emissions reporting**.

a. Emissions Estimates on Shipping Quotes

Introduction

GCC has been working with fine art shippers and freight handlers to develop new systems that would allow them to include comparative emissions information on all quotations in advance of order confirmation. This is so clients can make informed decisions on freight options based on emissions as well as cost and time.

GCC requests cooperative shippers to clearly label all quotations with CO₂e emissions estimates of a low emission alternative route (i.e. sea or road freight) as a standard on all quotes, where such routes exist. These figures can be easily generated by using the [GCC's free carbon calculator](#) or via the [Shipping Emissions Estimates for Common Freight Routes spreadsheet](#).

Whilst the inclusion of CO₂e emissions estimates will help clients select options based on environmental impacts, shipping duration and cost are obviously important factors in making decisions too. As both cost and

time can be highly variable, GCC does not expect comparative information for the alternative methods to be included. However, if it is possible for shippers to include this information GCC would encourage them to do so.

Offering these details will not only help clients make informed decisions but will also normalise both the emissions reporting process and non-air freight methods. This in turn could make the supply chain better informed and therefore more environmentally responsible.

Requested data to be included on all quotes:

1. Emissions estimate being quoted for air freight

i.e. Hong Kong > New York by air freight, 200kg = approx. **2.94**
tCO₂e

2. Emissions estimate for alternative freight method

i.e. Hong Kong > New York by Sea Freight, 200kg = approx. **0.09**
tCO₂e

This information should already be available either through the shipper's internal systems or can be generated by using one of GCC's free tools.

If there is no alternative lower emissions option for a particular route then this can be listed as 'Currently, no lower-emission alternative freight method available on this route'.

GCC requests shippers to include this information clearly and consistently on all estimates that they share with clients. An annotated example / template of a quote adhering to these changes can be viewed at the end of this document. The changes listed above are highlighted in the example in bold.

b. Emissions Data on Shipping Invoices

In addition to providing emissions estimates on quotations to help inform decisions, the Sustainable Shipping Campaign also calls for the provision of standardised data on all invoices in a format that is compatible with the most commonly used art sector carbon calculators. This would increase both the volume and accuracy of emissions measuring throughout the sector, which is a crucial step towards reaching reduction targets.

Requested data to be included on all invoices:

1. Total weight, including packaging

i.e. Crated sculpture – 375kg Gross Weight. *Further details on the different types of weight measurements later in this document.*

2. Weight and type of any packing

i.e. 1.5kg – Cardboard, Tyvek and paper tape.
Or 24kg – Newly fabricated wooden crate, polyurethane foam and hot glue.

Currently, packaging quantities and types is one of the hardest things to measure. GCC aims to improve member's awareness of the materials, their impact, best practice for use and disposal, and what they can do to reduce and improve the materials in circulation. Making this information available is essential for clients to understand what they are responsible for.

3. Detailed Route of Shipment

i.e. **Air Freight:** Gallery collection > Agent warehouse (if a shipper has multiple warehouses please specify) > LHR (via road feeder to LUX) > Istanbul > Miami.

Or **Road Freight**: London SW1 > agent warehouse (if a shipper has multiple warehouses please specify) > Brussels > Amsterdam.

Ideally, the full route including stopovers should be listed on invoices. Providing details of the exact route an artwork has taken would allow galleries to make their reporting more accurate. If possible, it would also be beneficial to provide distances (km or miles) for each leg of the journey but this is not expected as standard.

4. CO₂e emissions for the job being invoiced

i.e. 5.5 tCO₂e

Again, this can be calculated using the GCC's calculator. If you do include a carbon figure, please state where it has come from, especially if it comes from somewhere other than the GCC calculator

GCC requests shippers to include this information clearly and consistently on all invoices that they generate for clients. An example of an invoice adhering to these changes can be viewed at the end of this document. The changes listed above are highlighted in the example in bold.

As with the metrics used for quoting, this information should already be available either through the shipper's internal systems or can be generated by using one of the free tools listed here.

Clarification on Method of Measuring Weight

The weight of an item being shipped is the most important metric when considering the associated emissions. There are two major methods for reporting the weight of an object for freighting, which may be used interchangeably by different shippers or in different parts of the world or for different freight methods.

Weights should be clearly labelled by shippers as either 'Gross Weight', or 'Volumetric Weight', and the amount of packaging (in kg) added by the shippers should be clearly indicated. Please use metric units wherever possible.

In terms of calculating CO₂e emissions, 'Gross Weight' (the total real-life weight including packaging and pallets etc) is the weight metric used by the UK government statisticians who developed the carbon factors that GCC uses for calculating the emissions from air freight. Gross Weight is therefore the correct weight type to use in these calculations. Gross weight is typically required by airlines for calculating safe loading weights and so should already be available for reporting on invoices for air shipments.

However, GCC understands that gross weight is not always recorded as standard for road freight, as 'Volumetric Weight' – based instead on the space taken up by the shipped materials – is more frequently required by road freight operators. In cases where gross weight is not available, Volumetric Weight may be reported instead, although Volumetric Weight must be multiplied by 1.3 to convert it into an approximate 'Gross Weight' equivalent before using it in carbon footprint calculations. This formula is based on analysis of hundreds of shipments which compared the average differences between Gross and Volumetric weight measurements of similar items¹. Please state clearly whether this calculation has been carried out or not – for example, 'Volumetric Weight 2 tonnes (2.6 tonnes Gross Weight equivalent)' or 'Volumetric Weight 2 tonnes (not converted to Gross Weight)'.

If volumes are only available in cubic metres rather than in kg of volumetric weight, they can be converted as follows:

1 cubic metre = 200 kg of volumetric weight

The term 'Chargeable Weight' can create some confusion here. We understand it is a term used by shippers to refer for whichever of the two weight types (Gross Weight, or Volumetric Weight) is being charged for – usually whichever is the highest. We would request that shippers avoid

¹ This average may be updated and improved with new data soon.

using the term 'Chargeable Weight' if possible, and instead state clearly whether the weight in question is Gross or Volumetric Weight (or at least put 'Gross' or 'Volumetric' in brackets after the term 'chargeable weight').

Weight Measurement Methods in Order of Preference For Emissions Reporting:

1. Gross Weight.

Actual weight of packed cases, including artwork

2. Volumetric Weight.

The space an object (artwork or crate) takes up. Usually calculated as follows: Height x Width x Depth of an object (in cm), divided by 5,000 to give kg of volumetric weight. If a different method has been used to calculate your volumetric weight, please note this on the invoice.

Please only use the term 'chargeable weight' if it is clearly labelled as either gross or volumetric weight.

Target Footnotes:

* Clearly labelled CO₂e emissions estimates for a low emission alternative route i.e. sea or road freight, as standard on all quotations, where routes apply. These figures can be generated by using GCC's free carbon calculator. As cost is highly variable GCC does not expect this to be provided as standard but averages for time and CO₂e emissions will be accurate enough to inform decisions.

** In addition to the final cost of the shipment, information on these additional criteria should be provided in a clear and consistent manner. We will be providing examples on this in due course. Weights should be clearly labelled as either gross weight or volumetric weight, and the amount of packaging (in kg) added by the shipper should be clearly shown. This will allow customers to easily capture the details needed for carbon reporting.