



Guide to Using CIEEM's Carbon Recording Template

Since 2019, quoted companies must report on their global energy use and large businesses must disclose their UK annual energy use and greenhouse gas (GHG) emissions. The government encourages all other companies to report similarly, although this remains voluntary¹. But, with the urgency of the climate emergency and biodiversity crisis and the need to keep temperature rises as close to 1.5 °C above pre-industrial levels² as possible, action from each and every one of us is more important than ever. As part of our Action 2030 project³, we have committed to reaching net-zero emissions by 2030 as an organisation, and are urging our members to take action to reduce their own operational impacts.

We have published a carbon recording template and this guide to support members in taking their first steps to recording and reducing GHG emissions from their activities. We would welcome feedback from members on this as we are continually updating our Carbon Reduction Plan and monitoring methods.

CIEEM's Carbon Recording Template spreadsheet is based on our own carbon calculator that allows us to record our GHG emissions for all of our activities, in line with our Carbon Reduction Plan⁴. Our calculator varies to what many of our members will need due to our different activities, such as holding conferences and training, while members will need to include emissions related to site visits and surveys for example. However, there will be a lot of overlap, so we have published a version with the basics included that our members can remove and add to as needed.

¹ <https://www.gov.uk/guidance/measuring-and-reporting-environmental-impacts-guidance-for-businesses>

² IPCC (2018) Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland, 32 pp.

³ <https://cieem.net/i-am/action-2030/>

⁴ <https://cieem.net/resource/cieem-carbon-reduction-plan/>

What to record and how

It is good practice to report your Scope 1, 2 and 3 emissions separately. The scopes are defined by the Department of Environment, Food and Rural Affairs (Defra)⁵ as:

“Scope 1 (Direct emissions): Activities owned or controlled by your organisation that release emissions straight into the atmosphere. They are direct emissions. Examples of scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles; emissions from chemical production in owned or controlled process equipment.

Scope 2 (Energy indirect): Emissions being released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of your organisation’s activities but which occur at sources you do not own or control.

Scope 3 (Other indirect): Emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions. Examples of scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal, or purchased materials or fuels.”

As mentioned, the reporting template is split into Scope 1, Scope 2 and Scope 3 emissions, with the addition of home working calculations for organisations with staff that work from home (which of course has become much more common through the COVID-19 pandemic) using EcoAct’s Homeworking White Paper methodology⁶. We have set the template up on a calendar year basis, but for organisations you may wish to alter this to operational year (April-March).

As a minimum, organisations should record Scope 1 and 2 emissions, but it is strongly encouraged that Scope 3 is recorded as fully as possible.

Each year, Defra publishes conversion factors⁷ that are used to convert activity data (e.g. km travelled) into an estimate of GHG emissions for that activity by multiplying the two figures. This means that in order to get your total GHG footprint for each year, you need to define and record your organisation’s activities that produce or indirectly produce GHGs, determine the appropriate conversion factor to be multiplied by, and then sum the totals of these calculations.

The conversion factors spreadsheet comes in a basic and more advanced version, and offers guidance on how to use it. It is mostly a case of determining what range of factors are available and reading the guidance at the top of each page thoroughly to determine which best suits your activity.

⁵ Department of Environment, Food and Rural Affairs (2009) *Guidance on how to measure and report your greenhouse gas emissions*, p. 10. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69282/pb13309-ghg-guidance-0909011.pdf

⁶ <https://info.eco-act.com/en/homeworking-emissions-whitepaper-2020>

⁷ <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

Start by defining your scopes – Scope 1 will include any owned activities e.g. burning of gas by an onsite boiler in your main office (if you own it), and fleet vehicles owned by the company. Scope 2 includes purchased electricity (although it is important to note the Government guidance states you don't have to include this if 100% renewable electricity is purchased, however it is still good practice to record the amount you are using to reduce energy use overall), and hired vehicles for direct use. Scope 3 is the more difficult scope, as it includes the supply chain for products, transport by staff/governance committees on vehicles that you do not control e.g. public transport/taxi, water treatment, waste and a small electricity distribution factor which is to be recorded whether you purchase renewables or not.

You will need to decide amongst your organisation who is responsible for recording what (and there is a column in the spreadsheet to note this) and how that will be recorded e.g. at CIEEM we are each responsible for recording individual travel as part of our work activities, and we record whether we commuted to the office or worked from home on any particular day.

When inputting activity data into the spreadsheet, it is important to note the correct units to record in. These are given in the column heading. Often Defra will provide conversion factors for alternative units, e.g. miles instead of km, so be sure to swap them out if you would prefer another method.

For transport, we have included the most common types used at CIEEM, but there may be others or you may use a large car/courier, for example. Make sure to check all your bases are covered.

We have included the metrics we use for our events, as many of our members' organisations will hold occasional external events or training etc. We ask our venues whether they can provide a value for the GHG emissions associated with our event, but unfortunately this is not yet commonly available. There is a conversion factor available based on £ spent on venues and catering which can be used as a proxy. Of course, this is much more of an estimation and so we always ask for an accurate value first. We currently record delegate travel by asking them to use an online carbon calculator to input their distance travelled and by what method, and reporting their emissions value to us, which is then added to our total GHG footprint value for the year (reported as kgCO₂e/yr).

The 'Totals' sheet allows you to monitor the GHG emissions in each scope over several years, and calculate tonnes of carbon equivalents which is useful if you will be donating to an offsetting project (you will need to purchase carbon credits to cover the number of tonnes of carbon for that year, however the price currently varies significantly by project). See our Carbon Reduction Plan⁴ to find out about our offsetting principles.

Finally, there is lots of guidance available on best practice for reporting emissions, and we would particularly recommend reviewing the official guidelines produced by HM

Government⁸ and Government's small business guide⁹. It may seem overwhelming at first so it is best to start on the Scope 1 and 2 emissions, and expand your scope as you get used to using the conversion factors and put processes in place for recording – and remember that every action helps!

If you have any questions on the above, or would like to offer feedback, please get in touch using policy@cieem.net. We would be very happy to hear from you!

⁸ HM Government (2019) *Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance*. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/850130/Env-reporting-guidance_inc_SECR_31March.pdf

⁹ Defra (2012) *Small business user guide: Guidance on how to measure and report your greenhouse gas emissions*. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69494/pb13310-ghg-small-business-guide.pdf