CHSA
Cleaning and Hygiene Suppliers Association

Calculating your Carbon Footprint

The Greenhouse Gas Protocol

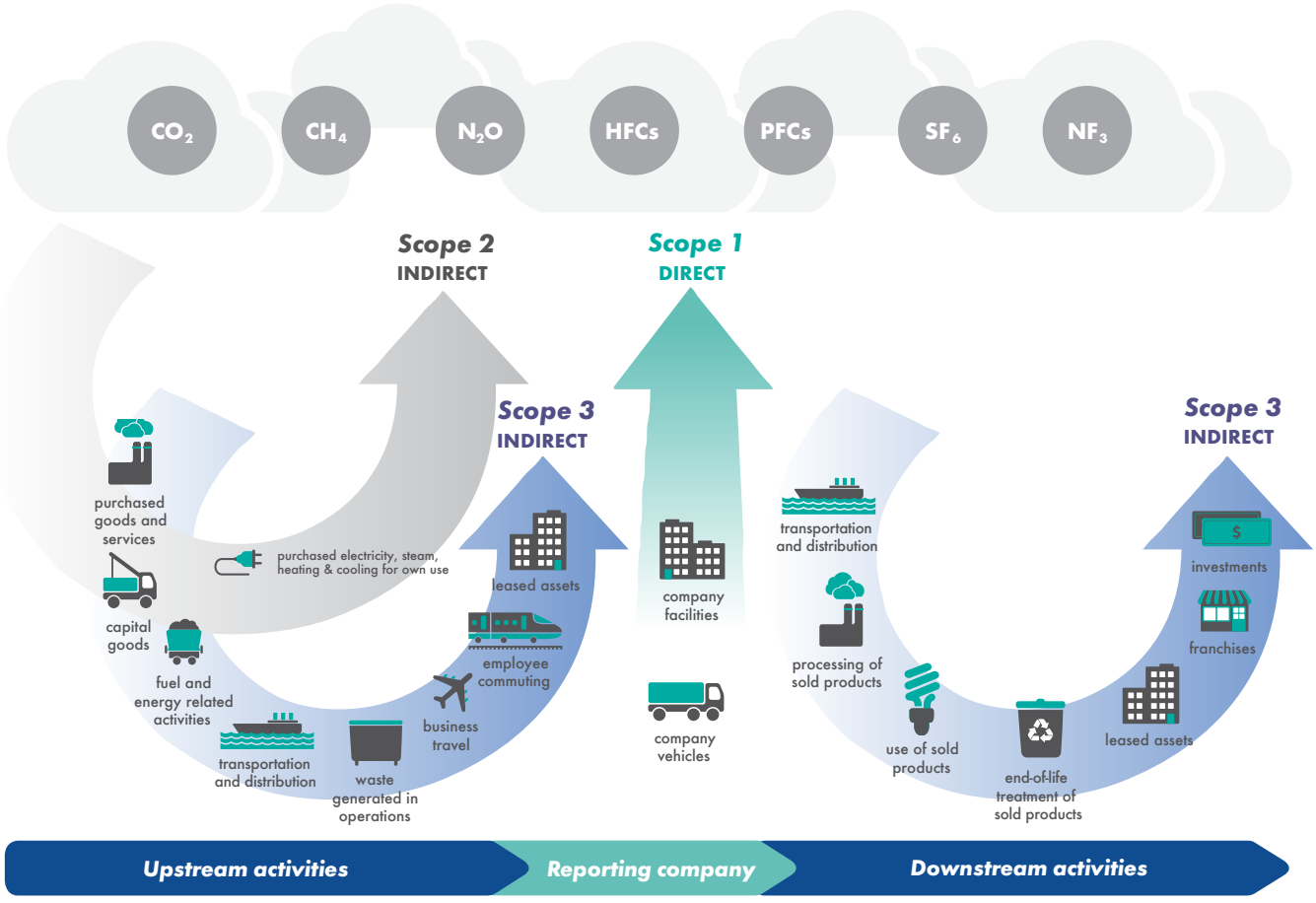
On the road to Net Zero businesses are looking to understand their carbon emissions in greater detail.

The Greenhouse Gas (GHG) Protocol provides a framework. Accounting for carbon emissions using this framework can be done on various levels:

- Product level: quantifying the total GHG emissions associated with the product's life cycle.
- Organisational level: quantifying the total GHG emissions associated with the organisation's activities, directly and indirectly, in a specified timeframe.
- Individual level: estimating an individual's GHG emissions in a specified timeframe.

The GHG Protocol categorises emissions into Scopes 1, 2 and 3.

By accurately measuring and reporting emissions across these scopes for the selected level, organisations will gain a better understanding of environmental impact and so work towards Net Zero.



Scopes 1, 2 and 3

Scope 1

Direct emissions that result from activities within your organisation's control. This might include onsite fuel combustion, manufacturing and process emissions, refrigerant losses and company vehicles.

Scope 2

Indirect emissions from any electricity, heat or steam you purchase and use. Although you're not directly in control of the emissions, by using the energy you are indirectly responsible for the release of CO_2.

Scope 3

Any other indirect emissions from sources outside your direct control. Typically, this is the most difficult scope to calculate.

Some of the data required can be collected from your finance, supply chain, sales and hr teams, along with your suppliers and contractors.

The process

Step 1

Understand the Scopes and which elements are relevant to your business. Speak to people in your organisation to find what information is available.

Step 2

Find a third party to work with who can assist you in your data collection and calculations.

Many tools exist to help to make this process pain free. *DEFRA provides emission factors to allow you to calculate this on your own.*

Step 3

Collect your data.

Step 4

Seek third party independent verification on your calculation. There are international standards such as ISO 14064:2018 (Specification with guidance at the organisation level for quantification and reporting greenhouse gas emissions and removals).

Step 5

Create a reduction plan and act. Your calculation partner can usually assist in this.

High level methodology for data collection

Scope 1

- Company Facilities: for most businesses this is gas usage. This is usually calculated by looking at utility bills and identifying your yearly kwh consumption.
- Company Vehicles: for most companies this is potentially split into 2 key categories.

  A) Company Cars & Trucks: this is usually measured by the vehicle / engine type and total distance travelled.

  B) Fork Lift Trucks: usually calculated by the volume of gas purchased.
- Refrigeration gases

Scope 2

- Purchased Electricity: This is usually calculated by looking at utility bills and identifying your yearly kwh consumption. Note there may be more than one meter to account for on your site.

Scope 3

- Purchased Goods & Services: this is usually calculated by either spend or weight of goods or services purchased within the period across a variety of categories.
- Transportation and Distribution:
  - Goods In: this can be calculated by the weight and distance travelled of goods purchased within the period.
  - Goods Out: this can be calculated by the weight and distance travelled of goods sold within the period.
  - Downstream Transportation: this is the potential transportation from your customer to their customer. This can be calculated using the same methodology as above.
- Waste Generated in Operation: this is usually calculated by weight of material type and disposal method.
- Capital Goods: this is usually calculated in terms of spend within the period across a variety of categories.
- Business Travel: this is the usually calculated by the distance and vehicle type (car / train / plane etc). Note that for car usage this is for cars not owned by the company (for example, a person uses their own car to travel to a customer or supplier).
- Employee Commute: this is usually calculated by the total number of employees, vehicle types and average distance from the place of work.
- Note that there are additional categories in Scope 3 that can also be calculated.

For further information on calculating your carbon footprint, visit the website of the Greenhouse Gas Protocol for more information:

https://ghgprotocol.org

https://ghgprotocol.org/blog/you-too-can-master-value-chain-emissions

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CHSA
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Albany House, 14 Shute End, Wokingham, Berkshire, RG40 1BJ **T** 0800 243919 **W** chsa.co.uk **E** secretary@chsa.co.uk