



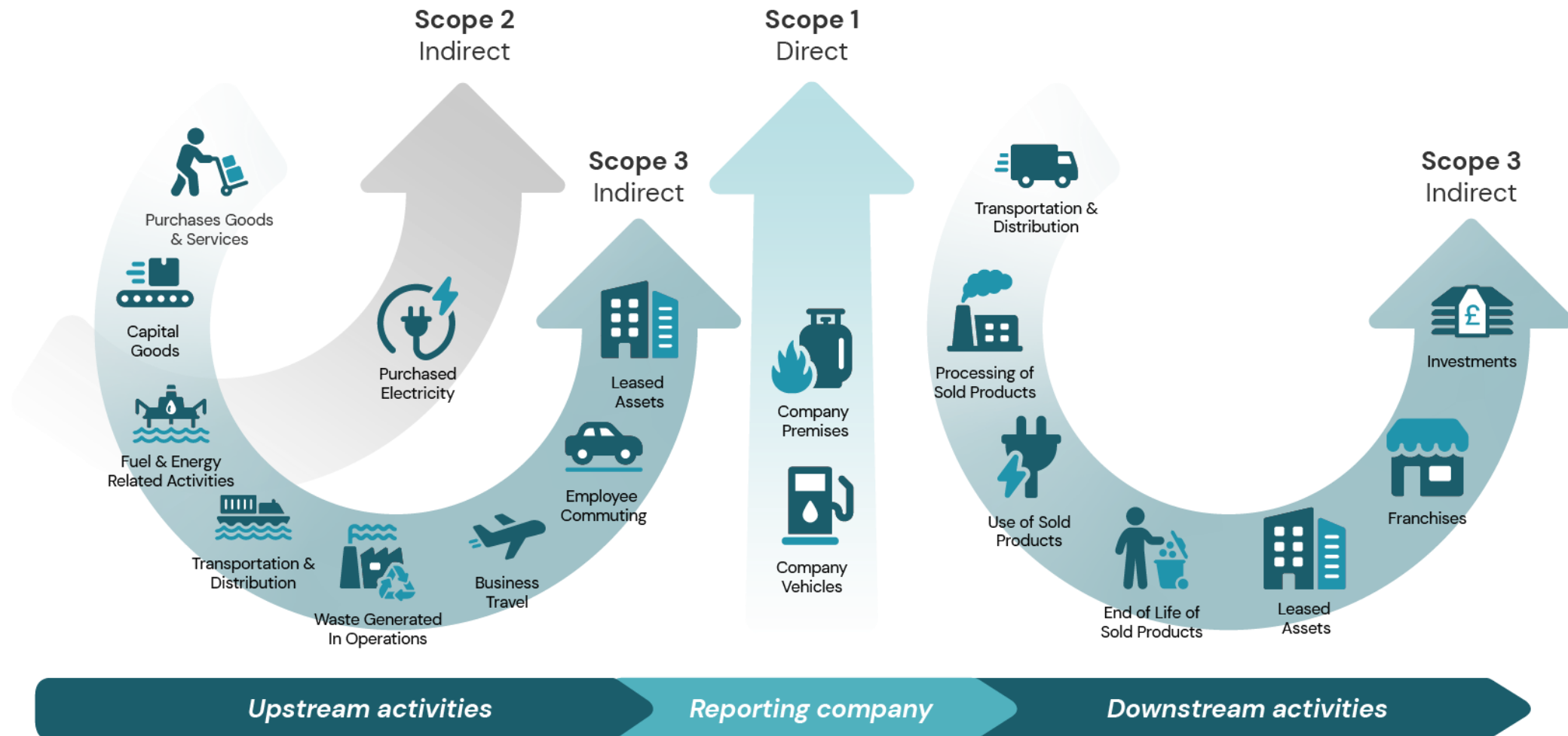
The journey to Net Zero starts today

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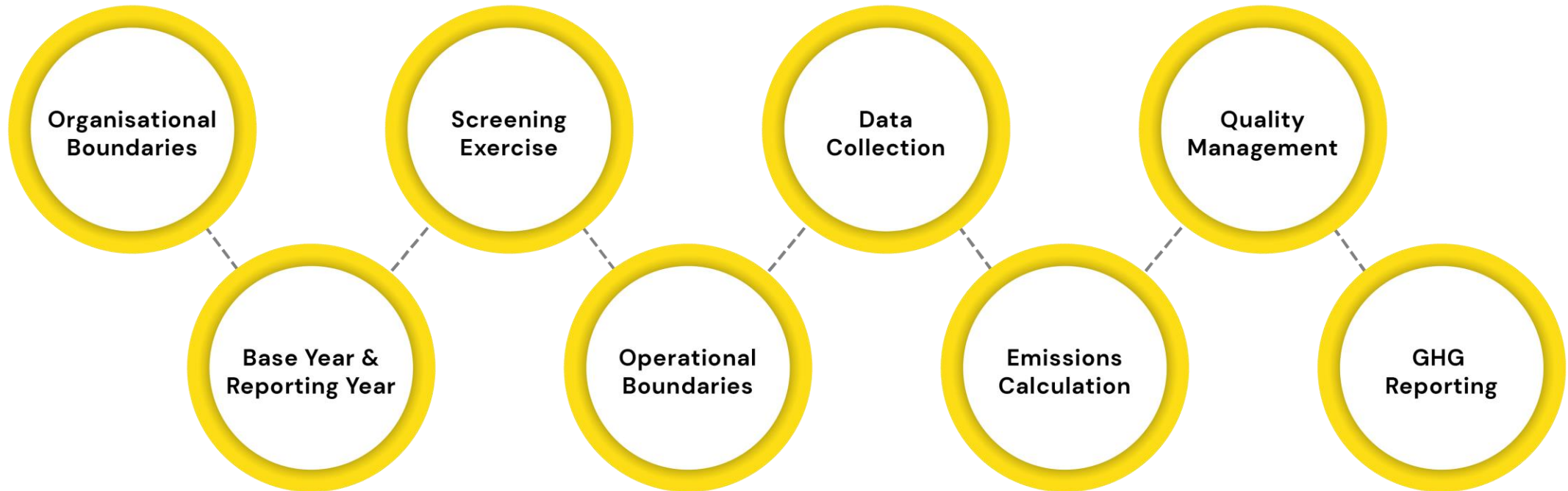
Calculating a Carbon Footprint

CHSA Webinar
2nd July 2025

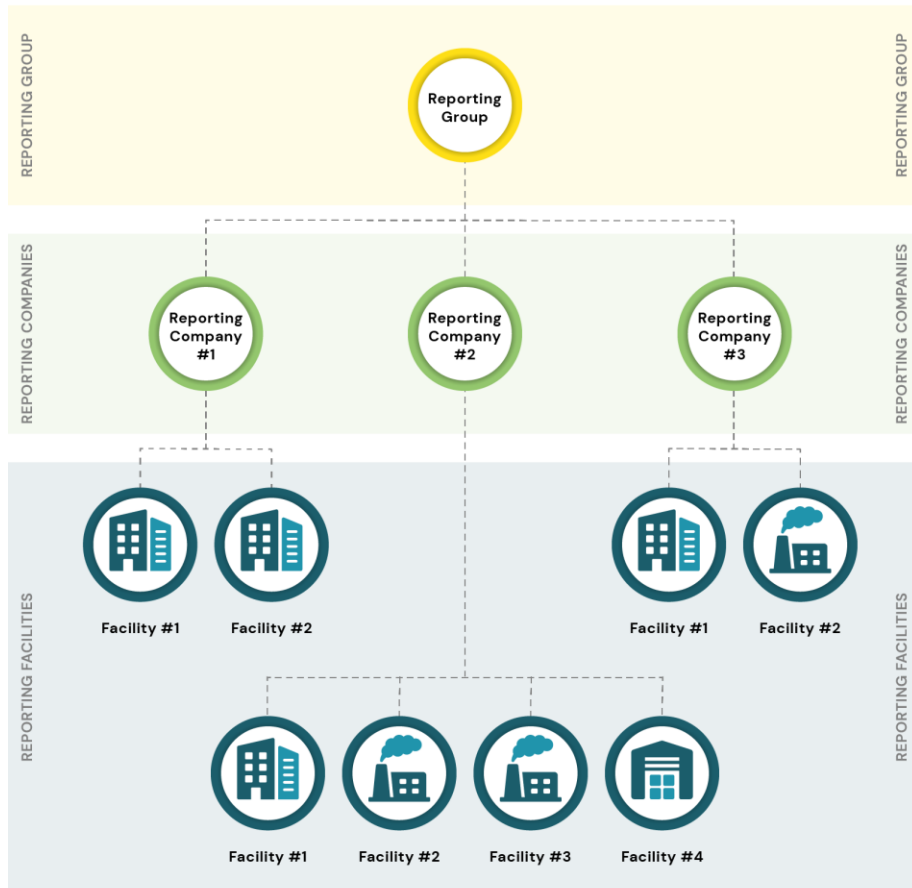
What is a Carbon Footprint?



Footprint Stages



Setting the Organisational Boundaries

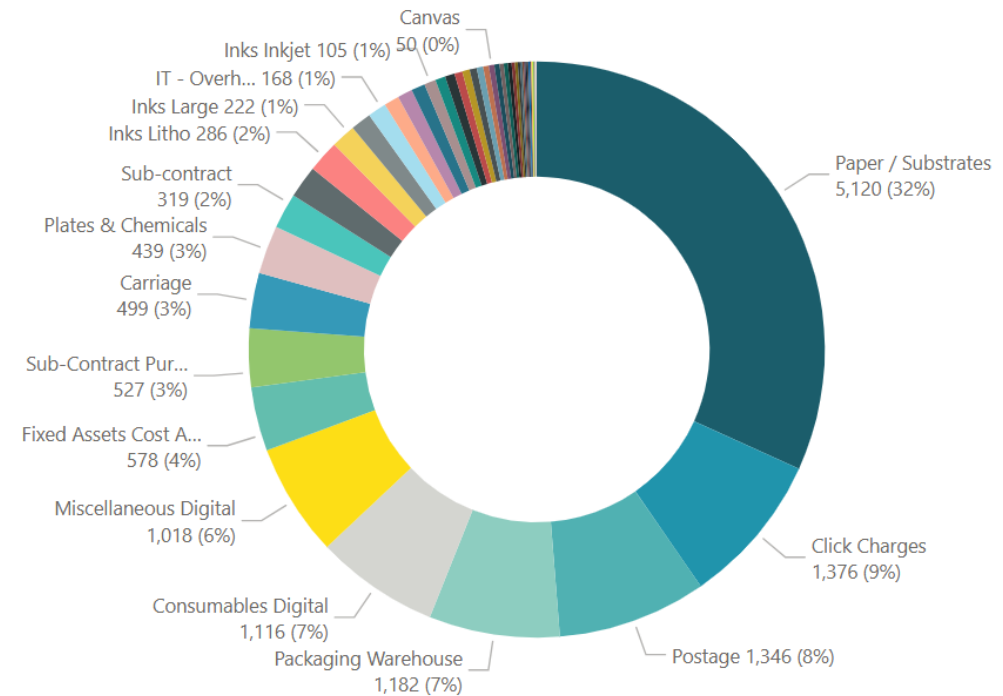


- Determine which operations to include in the inventory
- Choose a boundary approach:
 - **Equity share** – Report emissions according to ownership percentage
 - **Control** – Include operations you control, either:
 - Financial control – You can direct financial and operating policies
 - Operational control – You manage day-to-day operations and policies
- Apply the same approach consistently across the group

Conducting a Screening Exercise

- A high-level, indicative emissions mapping exercise
- Categorise ALL spend by Relevance, Emissions Category, and SIC code
- Apply average spend-based emission factors to estimate carbon by supplier
- Identify carbon hotspots for deeper analysis e.g. using mass or volume instead of spend data
- Supports prioritisation for data refinement and supplier engagement in later stages

Emissions Screening, by Nominal
Sum of Emissions (tCO₂e) by Category



Setting the Operational Boundaries

☑ Scope	☑ Category	📄 Activity	📄 Description	☑ Preferred Frequency	☑ Relevance	📄 Describe how data is/will be collected
1	Stationary Combustion	Natural Gas	Combustion of natural gas for heating and production processes	Monthly	Relevant to all Reporting Companies	We receive monthly gas statements from our utility supplier. These are manually entered into a centralised internal spreadsheet that captures both consumption and cost data.
1	Stationary Combustion	Propane	Combustion of propane heating and production processes	Monthly	Relevant to all Reporting Companies	Quantities of propane purchased are recorded via supplier delivery notes and invoices. Monthly totals are extracted and entered into our tracking spreadsheet for reporting purposes.
1	Stationary Combustion	Biomass	Combustion of biomass feedstock for the generation of heat and electricity	Monthly	Not Relevant	
1	Stationary Combustion	Diesel	Combustion of diesel in stationary plant or equipment (generators, sprinklers etc.)	Monthly	Not Relevant	
1	Mobile Combustion	Diesel	Combustion of diesel in company-owned passenger and delivery vehicles	Monthly	Relevant to all Reporting Companies	Fuel card reports are downloaded monthly and detail litres purchased per vehicle. These are used to populate our emissions tracking sheet alongside odometer readings where available.
1	Mobile Combustion	Petrol	Combustion of petrol in company-owned passenger and delivery vehicles	Monthly	Relevant to all Reporting Companies	Fuel purchases are tracked via fuel card systems and receipts. Data is compiled monthly, recording litres purchased and associated vehicle use.
1	Mobile Combustion	LPG	Combustion of LPG in forklifts	Monthly	Relevant to all Reporting Companies	LPG usage for forklifts is recorded based on delivery receipts or tank top-up logs. Quantities in kilograms are entered into the inventory spreadsheet each month.
1	Fugitive Emissions	Refrigerant Gases	Additions of refrigerant gases recharged into HVAC systems during the year	Annually	Relevant to all Reporting Companies	HVAC contractors provide annual service reports indicating the type and quantity of refrigerant gases added during system servicing. This is manually entered into the inventory once a year.
2	Purchased Electricity	Purchased Electricity	Consumption of electricity purchased from suppliers (e.g. not generated on-site)	Monthly	Relevant to all Reporting Companies	We receive monthly electricity invoices from our suppliers, which include kWh consumption per site. These are entered into our emissions tracking spreadsheet, and cross-checked with smart meter data where available.
3	Purchased Goods and ...	Substrate	Purchases of paper, plastic and other substrates in the printing process	Annually	Relevant to all Reporting Companies	Quantities of paper, plastic, and other substrates are calculated monthly from procurement data and invoices. Where possible, we also cross-reference these with internal production records. Costs are captured in £ spent, and weights in kilograms for key materials.

- Following the screening exercise, a complete list of all relevant activities can be determined
- Grouped by Scope and Category
- Acts as a “Recipe” for all the activities making up the carbon footprint
- Records how data is collected for transparency and ease of hand-over to colleagues
- Ensures all activities are repeated every year

Choosing the Right Carbon System

- Whether you develop your own system or use a third party, a robust GHG system is key for ensuring:
 - **Accuracy** – Emissions are quantified correctly using reliable data and methodologies
 - **Completeness** – All relevant scopes and sources are captured
 - **Transparency** – Assumptions, exclusions, and data sources are clearly documented
 - **Consistency** – Methods are applied uniformly over time for valid comparisons
 - **Relevance** – The system supports business goals and informs decision-making



There is no such thing as a **perfect** carbon footprint!



Start simple, start now

Your first carbon footprint won't be perfect, and that's okay. The goal is to *begin measuring*, not to wait for perfection.



Use the best available data

But don't let gaps or estimates stop progress. Document assumptions clearly.



Be transparent

Explain your boundaries, exclusions, data quality and any known limitations. Stakeholders value honesty over false precision.



Build iteratively

Each year your footprint will get stronger as your data systems and supplier engagement improve.



Set near-term reduction targets

Even before you have the full picture. Use footprinting to identify quick wins.



Choose widely accepted standards

Like the GHG Protocol or ISO 14064-1, to ensure consistency and credibility.



Focus on influence, not just ownership

Especially for Scope 3. Prioritise hotspots you can meaningfully impact.



Don't go it alone

Use sector guidance, peer support, and trusted consultants.

The Journey to Net Zero Starts Today

At Nero, we're here to make carbon reporting simpler, clearer, and more impactful. We work with organisations of all shapes and sizes to help them understand their carbon footprint and take meaningful steps to reduce it. Using our bespoke tools – built in-house and aligned with the leading standards like the GHG Protocol and ISO 14064 – we've now supported 100 companies with the measurement and reporting of their emissions.

Get in touch: enquiries@nero-carbon.com