

ENVIRONMENTAL
STANDARD

003

Carbon Reduction

Safe People
Happy People
Sustainable Business

Key messages

The Climate Change Act commits the UK government by law to reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050.

Bridges are committed to reducing the carbon emissions associated with the businesses activities and have set a target of a 30% reduction by 2027.

Everyone at Bridges has a role to play in helping Bridges reduce our carbon emissions.

Roles and Responsibilities



Definitions

Definitions	Greenhouse Gases	Gases in the earth's atmosphere that trap heat, they include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride
	Carbon Footprint	The total greenhouse gas emissions caused by an individual, event, organization, service, place or product
	Carbon Emissions	The release of carbon dioxide into the atmosphere
	Scope 1	Emissions from sources that an organisation owns or controls directly, for example while running boilers and vehicles
	Scope 2	Emissions that a company causes indirectly when the energy it purchases and uses is produced, for example the electricity or energy it buys for heating & cooling buildings
	Scope 3	Emissions the organization is indirectly responsible for, up and down its supply chain. For example, purchased goods and services, employee commuting, waste disposal etc.
	Carbon Neutral	When a process does not increase the overall amount of carbon dioxide in the atmosphere because it takes in as much carbon dioxide as it releases.
	Net Zero	Carbon emissions are balanced by removing carbon dioxide from the air
	Low Carbon	Causing only a small release of carbon dioxide into the atmosphere
	Zero Emissions	A process that does not release greenhouse gases into the atmosphere
	Climate Change	A change in the average temperature and cycles of weather over a long period of time
	Global Warming	The gradual increase in the temperature of the Earth's atmosphere
	Greenhouse Effect	The trapping of energy in the atmosphere due to greenhouse gases

1. Purpose and Scope

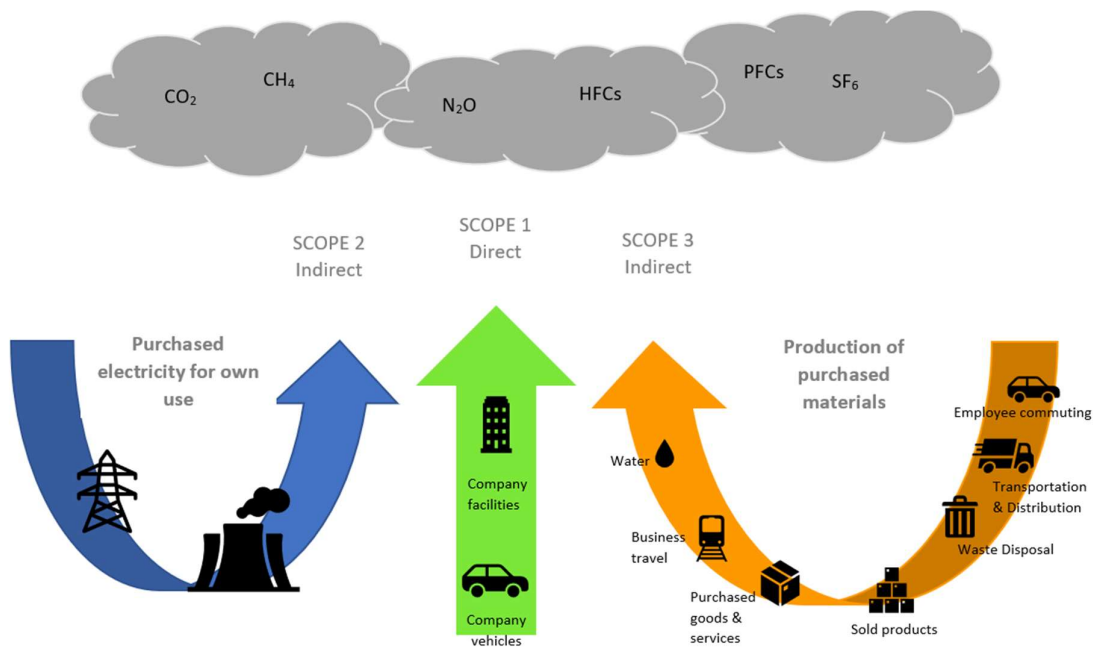
Bridges are committed to minimising the carbon emissions generated by the business's activities and the whole life carbon of the products and projects we deliver.

This standard sets out the actions that Bridges, its employees and subcontractors can take to help the business reduce its carbon emissions.

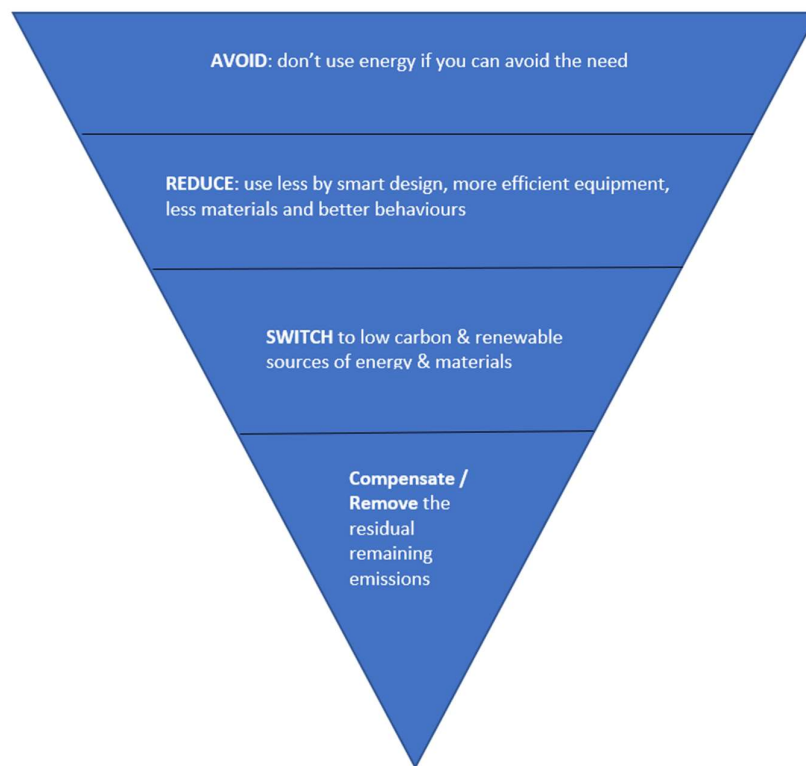
1. The Scopes

Scope 1, 2 and 3 is a way of categorising the different kinds of carbon emissions a company creates in its own operations, and in its wider value chain.

- Scope 1 emissions – covers emissions from sources that an organisation owns or controls directly, for example from burning fuel in our fleet of vehicles & for running boilers for heating.
- Scope 2 emissions – these are the emissions it makes indirectly, for example when the electricity or energy a company buys for heating and cooling buildings, and to charge electric fleet vehicles its being produced on its behalf.
- Scope 3 emissions – encompasses emissions that are not produced by the company itself and not the result of activities from assets owned or controlled by them, but by those that its indirectly responsible for, up and down its value chain. For example, purchased goods and services, employee commuting, waste disposal etc.



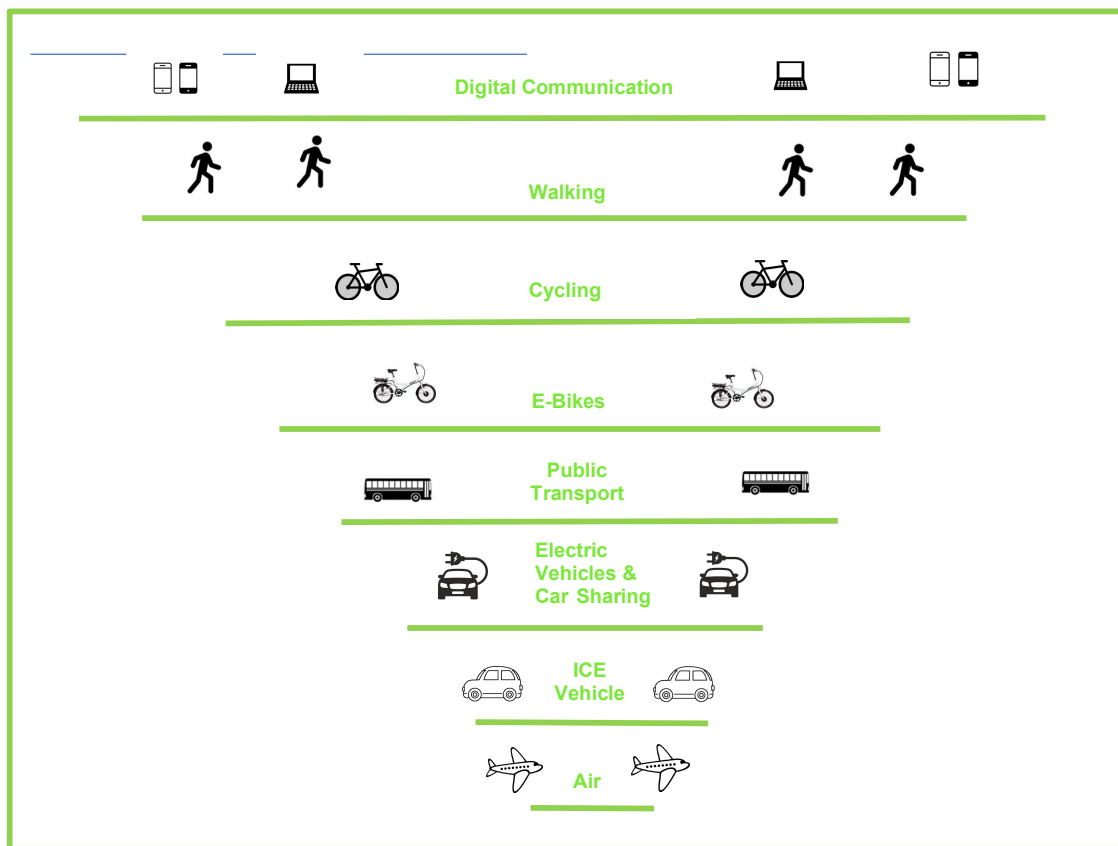
2. Carbon Management Hierarchy



The carbon management hierarchy approach prioritises the **avoidance** of carbon emissions to deliver lasting change. Using digital communication such as Teams avoids the need for people to travel to a location. Where avoidance of emissions is not possible then they should be **reduced** through the use of efficient equipment or a redesign. Reducing energy usage in buildings by replacing old lighting with LEDs. **Switching** from high carbon sources or activities with low carbon solutions including materials and products. Decarbonisation of our fleet by replacing diesel vehicles with electric vehicles. **Compensating or removing** carbon emissions through, offsetting should be considered as a last resort in target setting. This method is not sustainable.

3. Sustainable Travel

The sustainable travel hierarchy is a useful tool to help you think about improving the impact of your journeys. The higher up the hierarchy, the more sustainable and greener the travel option.



Digital Communication – consider whether you need to make the journey, can you use video conferencing instead?

Walking – Travelling on foot doesn't create any carbon emissions, so this is a sustainable and green way to make a journey.

Cycling – all that is required is a bike and helmet. Jumping on a bike is a great option if you want to cover short distances quickly. Bridges are part of the Bike to Work Scheme.

E-Bikes – while push bikes are greener than electric bikes, electric bikes are a more environmentally friendly

option than most other forms of transport, especially if the energy is from a sustainable, renewable source.

Public Transport – travelling by public transport rather than by car is a better lower carbon option. It also reduces traffic congestion and improves local air quality.

Electric Vehicles & Vehicle Sharing – electric vehicles are the greenest type of vehicles and produce far fewer emissions than their petrol & diesel equivalents. Bridges have a number of electric vehicles within the fleet. Bridges actively encourage and provide opportunities for employees to share transport to site to help the business reduce its carbon emissions

ICE Vehicles – ICE (internal combustion engine) vehicles include petrol & diesel vehicles. These contribute to local air pollution.

Air – air travel is the least sustainable method of transport.

4. Efficient Driving

Efficient driving is a driving style that reduces fuel bills, cuts carbon emissions and lowers accident rates. For electric vehicles, efficient driving also brings greater vehicle range.

- Drive smoothly – accelerate gently and read the road ahead to avoid braking unnecessarily
- Shift up early to a higher gear
- Avoid excessive speeds
- Check tyre pressures regularly - under inflated tyres increases fuel consumption
- Ensure your vehicle is well maintained
- Lighten the load – a heavier vehicle will use more fuel
- Stick to the speed limit – going faster uses more fuel
- Cut down on the electrics – turn off your rear window heaters, demister fan and headlights when you don't need them

5. Energy Efficiency in the Office & Workshops

5.1 Solar Panels

- 3,400m² of PV solar panels have been installed on the roof at our head office at Engineering House
- Monthly monitoring of electricity usage & financial & carbon savings

5.2 Use energy efficient lighting

- Ensure all lighting is supplied by modern LEDs
- Install motion sensors in areas such as corridors and toilets
- Turn off lights when no one is in the room



5.2 Turn things off in the office

- Turn off computers daily, do not leave them on standby mode



- Unplug printers, chargers and other office technology
- Activate power saving settings on computers & laptops for all staff
- Set printers to automatically power down
- Optimize the brightness of the screen

5.2 Office Kitchen

- Switch off the microwave at the plug after use
- Wait until the dishwasher is full before switching it on
- When purchasing new equipment, such as toasters and microwaves, buy A+++ rated ones
- Remove old food from the fridges

5.2 In the Workshop

- Ensure equipment is regularly maintained
- Turn off & unplug equipment when not in use

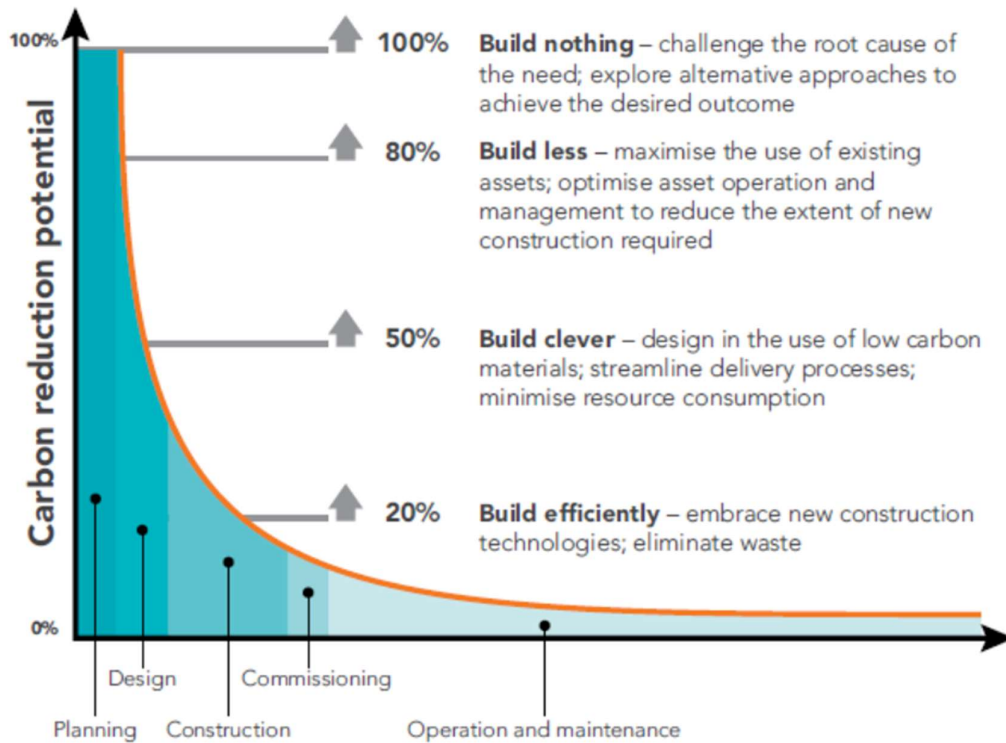
5.2 Heating

- Do not have the windows open when the heating is on
- Ensure thermostats are set correctly, 19°C is sufficient for office environments
- Ensure that radiators are free from obstructions
- Report any draughts
- Insulate pipes



6. Planning & Design

The greatest opportunities to reduce carbon emissions exist at the earliest stages of a project, during the planning & design. The below figure from UK Green Building Council shows the relevant carbon reduction potential across the project lifecycle.



7. On Site

There are a number of ways carbon emissions can be reduced on site including:

- Sourcing local materials/suppliers
- Only order the materials required – do not over order
- The three Rs of waste management, reduce, reuse, recycle
- Share transportation to site
- Use alternative materials – for example low carbon cements
- Use energy efficient equipment
- Use our off-site build facilities
- Do not let plant & equipment idle
- Switch to electric equipment – welfare powered by electricity is preferably to welfare powered by diesel
- Storage containers can be powered by solar panels
- Ensure all equipment & plant is serviced & maintained regularly
- Turn off lighting & heating in welfare when not in use



8. Fleet Policy

In order to reduce carbon emissions associated with our fleet a number of measures have been put in place:



- A number of electric and hybrid vehicles are now incorporated within the fleet
- Electric & hybrid vehicles have been made available across the company car list
- Employees are encouraged to opt for a hybrid or electric car when their diesel cars are due for replacement
- As part of the decarbonization of the fleet, electric vans have been incorporated into the fleet
- When ordering replacement vans, the size of the van is challenged. In the past larger vans have been leased, these vans are now being replaced with small vans which provide better fuel efficiency
- All leased vehicles must be Euro 6 compliant, this standard sets out the acceptable limits for exhaust emissions

9. Training & Awareness

Employees will undergo training & awareness on carbon emissions, carbon reduction and ways in which they can help the company achieve the reduction targets and ultimately net zero. This will be undertaken in a number of ways including:

- Inclusion in new starter inductions & site inductions
- Carbon reduction & energy efficiency toolbox talks
- Campaigns
- Training



9. Carbon Reduction Plan & Low Carbon Route Map

Bridges have developed a reduction plan & low carbon route map, these set out the businesses targets to reduce carbon emissions associated with its activities.

