

Net Zero, Carbon Offsetting & Removal, and Reporting

James Cadman, Action Sustainability

House Rules



Be present in the room! Cameras on please, mics off unless talking



'Raise your hand' or use the chatbox for questions



Share your feedback at the end



Slides will be shared later



The Context

Gill Danby – National Highways, Category Management Group Lead, Concrete Structures

Sarah Joliffe – BAM Nuttall, Carbon Reduction Lead



Workshop Overview

- ✓ Why are we reducing carbon?
- ✓ What is the target, response and progress?
- ✓ What is net zero?
- ✓ How do we reduce carbon?
- ✓ What do we do with residual carbon?
- ✓ Where do we report carbon?

There will be a break partway through







Why are we reducing carbon?

Global Temperature Anomalies in 2019



What is the response, target and progress?

The UK's Response – the Stern Review, 2006

52% Emissions from Buildings

27% Emissions from Transport

Government target of 80% by 2050

Doing nothing will cost 5%-20% of GDP

Taking action now could reduce this to 2% or further



The UK's Climate Change Act, 2008

- World-leading in legislation against climate change
- 80% reduction in emissions by 2050, vs 1990 baseline





Climate Change Act 2008





The Paris Climate Change Agreement, COP21, 2015

- Reduce emissions of the "basket of 6" Kyoto Protocol GHGs
- In line with a well-below 2°C or 1.5°C warming scenario
- Each nation to make Nationally Determined Contributions – NDCs – UK's = 68% by 2030 vs 1990

Nations Unies Conférence sur les Changements Climatiques 2015 cop21/CMP11

PARIS CLIMATE PARIS CLIMATE AGREEMENT SIGNING CEREMONY 22 APRIL 2016

IPCC Special Report, 2018



An IPCC control report on the reports of statistic services of 1.57C above pre-evolution levels and related global generations per emission probability. In the sector of above thereing the global response in the linear of closels sharing undefinition instrument, and offices is reducing probly.



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

- 2°C is not enough the impacts from a 1.5°C world are markedly less than a 2°C world: extreme weather events, impact on biodiversity, ice melt...
- "Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems.
- These systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options "
- [For] 1.5°C ... renewables are projected to supply 70–85% of electricity in 2050.

Updating the CCA, 2019

- UK Climate Change Act target of 100% reduction by 2050 – 'net zero'
- Scotland has legislated to hit net-zero by 2045
- Wales' target to reduce by 95% by 2050 but aiming for net zero
- Ireland has legislated to hit net-zero by 2050
- New intermediate target for UK of 78% by 2035 vs 1990 baseline







Source: BEIS (2020) Provisional UK greenhouse gas emissions national statistics 2019; CCC analysis Notes: Emissions shown include emissions from international aviation and shipping (IAS) and on an AR5 basis, including peatlands. Adjustments for IAS emissions to carbon budgets 1-3 based on historical IAS emissions data; adjustments to carbon budgets 4-5 based on IAS emissions under the Balanced Net Zero Pathway.

UK Gov't PPN06/21: 5th June 2021 Carbon Reduction Plans

- Bidders for any contract over £5m ex VAT per year from Central Government, their Executive Agencies and NDPBs
- Contractors will have to provide a carbon reduction strategy confirming their commitment to achieving Net Zero by 2050 in the UK
- Covers Scope 1, 2 and certain Scope 3 (Upstream transportation & distribution, Waste generated in operations, Business travel, Employee commuting, Downstream transportation & distribution)
- From 30th September 2021
- Plans for an 'embodied carbon law': The Carbon Emissions (Buildings) Bill, and Part Z of Building Regulations



Procurement Policy Note – Taking Account of Carbon Reduction Plans in the procurement of major government contracts

Action Note PPN 06/21

05/06/2021

Issue

1. The UK Government amended the Climate Change Act 2008¹ in 2019 by introducing a target of at least a 100% reduction in the net UK carbon account (i.e. reduction of greenhouse gas emissions², compared to 1990 levels) by 2050. This is otherwise known as the 'Net Zero' target. This Procurement Policy Note (PPN) sets out how to take account of suppliers' Net Zero Carbon Reduction Plans in the procurement of major Government contracts.

Dissemination and Scope

2. This PPN applies to all Central Government Departments, their Executive Agencies and Non Departmental Public Bodies. These organisations are referred to in this PPN as 'In-Scope Organisations'. Please circulate this PPN within your organisation, drawing it to the attention of those with a commercial and procurement role.

3. In-Scope Organisations should take action to apply this PPN when procuring goods and/or services and/or works with an anticipated contract value above £5 million per annum³ (excluding VAT) which are subject to the Public Contracts Regulations 2015 save where it would not be related and proportionate to the contract.

4. This PPN applies to framework agreements and dynamic purchasing systems only where it is anticipated that the individual value of any contract to be awarded under the



01-12 NOV 2021 GLASGOW



IN PARTNERSHIP WITH ITALY





What is Net Zero?

The science-based route to a lower carbon world



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Net zero

- 'Net zero' is about reducing your GHG emissions as much as possible, following the carbon hierarchy and in line with Paris
- It covers the whole value chain upstream and downstream – to reduce carbon, not just your organisation, and includes everything you use: transport, products & services, waste, etc
- For many organisations, more than 80% of the carbon could be outside the business, i.e. scope 3!
- Only once emissions have been reduced can you balance any remaining *hard-to- decarbonise* emissions with GHG Removals



UKGBC Framework Definition of a Net Zero Carbon Building

Net zero carbon – construction: *"When the*

amount of carbon emissions associated with a building's product and construction stages up to practical completion is zero or negative, through the use of offsets or the net export of on-site renewable energy."

Net zero carbon – operational energy: "When the amount of carbon emissions associated with the building's operational energy on an annual basis is zero or negative. A net zero carbon building is highly energy efficient and powered from on-site and/or off-site renewable energy sources, with any remaining carbon balance offset."





Net Zero Carbon Buildings:

A Framework Definition



Net zero and carbon neutral

- Similar but different!
- Both are a zero-sum balance between GHG emitted and the same amount offset or sequestered – but different boundaries!
- 'Carbon Neutrality' generally focuses on Scopes 1 and 2. Scope 3 is optional but encouraged. It allows offsetting.
- PAS 2060 is the Standard for Carbon Neutrality



Some potential issues with 'net zero' and 'carbor neutral'

- Take care when organisations say they are 'carbon neutral' or 'net zero'. Is it their only their Scope 1 and 2, or is it Scope 3 also?
- Offsetting has its role to play with residual GHG emissions, and only after other actions have been taken – this is the carbon hierarchy





The UK's approach to Net Zero

Power Sector's role to date in decarbonising the UK

- Significant progress to reduce carbon intensity of the UK's grid electric
- Reduced 67% since 1990 when it was 900 gCO₂/ kWh (includes T&D, and WTT)
- But why? Two big reasons
- 'Dash for gas' in 1990's
- Five-fold increase in renewable energy production since 2010: on- & offshore wind, solar PV, and biomass



Reducing GHG to net zero

We should reduce emissions as far as possible, but

- Some activities and sectors are hard to fully decarbonise, for good reason
- Due to the nature of what they do, and the currently available technology to reduce emissions further
- Sectors in this space include agriculture, aviation, waste, the use of F-gases and some manufacturing



Source: CCC analysis.

Notes: Aviation and shipping pathways are lower in 2020 due to COVID-19. LULUCF = Land-use, land-use change and forestry.

Decarbonising Manufacturing & Construction

Combination of approaches

- Energy & resource efficiency
- Material substitution
- Non-fossil power: biofuel, electric, H₂
- Removal: CCS and BECCS

Figure 3.3.a Sources of abatement in the Balanced Net Zero Pathway for the manufacturing and construction sector



Source: BEIS (2020) Provisional UK greenhouse gas emissions national statistics 2019; CCC analysis. Notes: The abatement from BECCS in the graph does not include the carbon captured, which is accounted for the in the removals subsection of Chapter 3.





How do we reduce carbon in line with science and net zero?

What can we do about it?

Mitigation

- Sustainable transportation
- Energy conservation
- Thermal mass / sinks for temperature regulation
- Insulation and heat recovery systems
- Renewable energy
- Energy & carbon efficient materials and products
- Improve vehicle fuel efficiency
- Capture and use landfill & digester gas

Adaptation

- Geotherma
- Green roofs
- Solar thermal
- District heating
- Building design for natural light & ventilation
- Tree planting & care
- Water harvesting & conservation
- Local food production

- Infrastructure upgrades: SUDS, sewers & culverts
- Residential programs: sewer backflow & downspout disconnection
- Health programs and help for vulnerable people
- Emergency & business continuity planning
- Coastal and river bank protection and flood plain maintenance









Mitigation: the globally responsible thing to do

Actions that reduce the emissions that contribute to climate change.

Adaptation: the locally responsible thing to do

Actions that minimize or prevent the negative impacts of climate change.



Carbon Reduction Actions

Avoid energy and carbon where possible, e.g.

- Teleworking and conferencing
- Passive design to reduce energy demand ٠

Use more efficient equipment and transport, e.g.

- Invest in energy-efficient equipment, e.g. lighting, plant & equipment, HVAC, IT
- Upgrade fleet to Euro 6 and plant to NRMM Stage V. Go further to electric / hybrid. Air quality benefits ٠

Consider the materials you are using, e.g.

- Take an eco-design approach to enable easier maintenance, repair and upgrade
- Use less material in absolute terms work with design and procurement teams
- Switch to alternative materials with lower embodied carbon impacts: innovation
- Increase reusable items and the recycled content of materials engage suppliers

Improve behaviours and systems, e.g.

- Energy Management Systems and automatic switches & sensors
- Offsite and lean construction ٠
- Train colleagues and suppliers in how to use equipment efficiently:
 - Choose the right equipment for the job don't overspec
 - Use correct power modes including in low / eco power modes
 - Turn off equipment that's not being used. Avoid machine idling

Switch to low and zero energy sources

- Make use of renewable power sources, such as GSHP/ ASHP, solar
- Low and zero carbon fuels: HVO, electric for vehicles



























Develop a Carbon Reduction Strategy



Goal and Scope

Agree the aim and set boundaries, base year and targets



Measure

Measure your footprint, identify hotspots and agree action plan



Reduce

Implement reduction actions, on hotspots first and then other aspects, using carbon hierarchy, and measure the reductions



Remove / Offset

Remove residual GHG emissions, but only after other actions have been taken Report

Disclose your emissions and reduction actions. Follow up with revising and continual improvement

Reporting matters

Use the Carbon & Energy Hierarchy



AVOID: don't use energy if you can avoid the need

REDUCE: use less by smart design, more efficient equipment, less materials, and better behaviours

SWITCH to low carbon and renewable sources of energy and materials

COMPENSATE/ REMOVE the residual remaining emissions when all other actions have been taken



Case study

Example: building a train tunnel





Different Engineering Options

Cast in-situ and partially precast reinforced concrete box (with twin cells) in open excavation (Cut and Cover)



- Variations on
 - Cut & cover and/or mining
 - Concrete and/or steel
 - Boxes and/or arches

Cast in-situ and partially precast concrete arch (with twin cells) in combined open excavation (Cut and Cover) and mining (SCL)





Carbon impacts for the options



- 1. Excavation
- 2. Backfilling
- 3. Soil disposal
- 4. Dewatering
- 5. Concrete
- 6. Reinforcement
- 7. Waterproofing
- 8. Mining

Carbon and Earthworks savings



Concrete and steel savings













Carbon Equivalency

- 33,000 tCO2e saved is equivalent to avoiding:
 - 1000 HGVs, each driving 24,000 miles; or
 - 40 full A380 flights from LHR to NYC; or
 - Emissions from grid electric and gas used in 10,000 UK homes for a year – roughly equivalent to a town the size of Aberdare, Pontypridd, Winsford, or Beverley





https://www.constructionenquirer.com/2021/11/16/hs2-hails-big-carbon-saving-on-uks-longest-rail-bridge/ https://www.pbctoday.co.uk/news/planning-construction-news/hs2-colne-valley-viaduct/101860/


Break for Tea – back in 10 mins







What do we do with hard to decarbonise residual carbon?

What does 'carbon offsetting' mean?

- Compensating for GHG emissions that arise from an organisation, product or project in one place through GHG avoidance, reduction or removal activities elsewhere
- Achieved by investing in projects that will lead to lower carbon emissions overall when compared to a business-as-usual situation, that would not have otherwise happened without the investment





The benefits of carbon offsetting

- Provides a 'polluter pays' mechanism that affords a level of responsibility to the emitter and puts a price on carbon
- Helps investment in low and zero carbon schemes, reduces reliance on fossil fuels
- Other benefits: reducing poor air quality, improving health and wellbeing benefits, increasing biodiversity gain, creating jobs and social value
- The final piece of the carbon reduction strategy puzzle after reduction actions have been taken.

What does 'good' offsetting look like?

To be robust the offsetting needs to be

- Real (verifiable and traceable)
- Additional
- Measurable
- Permanent

Backed by a mechanism that is

Independent, transparent, inclusive, with robust governance, avoids double counting

Examples of carbon offsetting projects

Projects cover the whole carbon hierarchy

- Avoid / switch: renewable energy provision – zero carbon emitted compared to fossil fuels
- Reduce: methane capture (converting it to CO₂); efficient appliances and transport; drinking water
- **Removal**: reforestation, afforestation, carbon capture & storage

OREST MANAGEMENT

Practicalities

- Compare BaU baseline emissions (no offset project) against emissions with investment in project
- Measure reduction in emissions
- 1 tonne of CO₂e avoided or reduced = 1 carbon credit, or offset

BaU Emissions vs Offset Project Emissions 12 10 Emissions / tCO2e 8 6 4 2 0 0 1 2 3 4 5 6 7 8 9 10 Time Emissions BaU **Emissions Offset Project**

How much does offsetting cost?

Typical carbon offset costs

- \$10 / tonne, e.g. renewables likes wind and solar power
- \$15 / tonne, e.g. cook stoves
- \$25 / tonne, e.g. reforestation programme
- But they can cost more



Practicalities – two main options

- UNFCCC Clean Development Mechanism (CDM)
 - Truly global, backed by UN and Govts party to Kyoto Protocol
 - Public registry database of projects and credits
 - Separate validation of project and verification of emissions
 - CDM Projects can credit for up to 10 years; forestry 20+ years
 - Limited to developing nations to drive sustainable development
 - Offsets are called Certified Emissions Reductions (CER)



United Nations Climate Change Carbon Mechanisms

Practicalities – two main options

- Voluntary Carbon Markets Mechanisms
 - Many of them run by private organisations at international, national and regional levels.
 - Not all are equal! Check for RAMP! Robust examples include
 - Gold Standard https://www.goldstandard.org/
 - Verified Carbon Standard <u>https://verra.org/project/vc</u> program/
 - Plan Vivo <u>https://www.planvivo.org/</u>
 - Project owners can choose not to disclose publicly
 - Validation of project and verification of emissions done in parallel
 - Projects can credit for up to 10 years; forestry up to 100 years
 - Projects can be anywhere developing or developed nations
 - Offsets are called Verified Emissions Reductions (VER), Voluntary Carbon Units (VCU), or similar names







Going further: GHG Removal

Greenhouse gas removal

Actively removing GHG from the atmosphere

- Goes further than compensating for emissions in one place with reduced emissions elsewhere by actually removing the carbon from the atmosphere
- Variety of different routes and technologies to sequester carbon
- Some more developed than others
- Required for true, deep decarbonisation and net zero targets

THE ROYAL SOCIETY



Going further: GHG Removal



Afforestation, reforestation



Wetland, peatland and coastal habitat restoration

Biochar



Soil carbon sequestration



Going further: GHG Removal

Building with biomass





Reporting mechanisms for carbon

Key Reporting Mechanisms

Legislative

- Streamlined Energy & Carbon Reporting (SECR)
 - Including Mandatory Company Reporting
- Energy Savings and Opportunities Scheme (ESOS)

Voluntary

- Science Based Targets Initiative (SBTi)
- Supply Chain School's Climate Action Group



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Streamlined Energy & Carbon Reporting (SECR)

- In force as of: 1st April 2019 (and replaces the CRC)
- Qualification:
 - All quoted companies: LSE, EEAS, NYSE, NASDAQ (builds on Mandatory GHG Reporting – Director's Report)
 - Large unquoted companies (LUQC) & Limited Liability Partnerships (LLP): ≥ £36m turnover, balance sheet ≥ £18m, ≥ 250 or more employees (2 of 3)
- Scopes and Process:
 - Calculate Scopes 1 and 2 from for which they are responsible
 - Location-based Scope 2 electricity is mandatory; market-based is optional if using renewable power sources
 - Scope 3 business travel for LUQC & LLP responsible for purchasing fuel. Other scope 3 encouraged
 - Include underlying energy of gas, electricity, fuels and transport
 - Global for quoted; UK for LUQC & LLPs
- Additional requirements:
 - At least one intensity ratio (productivity), e.g. emissions per £ turnover, or GIFA, etc





Streamlined Energy & Carbon Reporting (SECR)

- Additional requirements, cont.:
 - Previous year's energy, GHG and intensity figures for comparison • (but not for first year)
 - Calculation method, e.g. GHG Protocol, ISO 14064
 - Info on energy efficiency actions taken, e.g. smart metering, more efficient equipment, installation of renewables, training
- Reporting:
 - Annually for FY starting on or after 1st April 2019
 - In Director's Report filed with Companies House
 - No obligation to audit / verify carbon and environmental reporting, but strongly encouraged
- Exceptions/ Voluntary reporting:
 - Energy use less than 40MWh per year
 - Subsidiaries below qualification threshold may be exempt
 - Scope 3 is voluntary (see above)
- URL: <u>https://www.gov.uk/government/publications/environmental-reporting-</u> guidelines-including-mandatory-greenhouse-gas-emissions-reportingguidance





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Energy Savings & Opportunities Scheme (ESOS)

- In force as of: 17th July 2014, from EU Directive 2012/27/EU
- Qualification:
 - Large undertaking: ≥ 250 or more employees, or ≥ £44 million turnover and a balance sheet ≥ £38 million, or
 - Is part of a larger organisation which meets the above criteria and the highest UK parent acts as a 'responsible undertaking' and ensures the whole group complies.
 - An overseas company with a UK registered establishment which has 250 or more UK employees
- Scopes and Process:
 - Calculate energy use from assets and activities for which they are responsible, i.e. buildings, industrial processes and transport (scopes 1 and 2)
 - Identify significant areas of consumption, covering 90% of consumption
 - Appoint a lead assessor to carry out ESOS assessment, an employee or a third party, but they must be a member of an approved professional body listed in the ESOS lead assessor register
 - Audit criteria: 12 months' continuous data; analyse energy consumption and efficiency; identify energy saving opportunities that are practicable and cost effective to implement (estimated whole life costs & benefits – cost per unit energy saved); and include a representative sample of site visits







Energy Savings & Opportunities Scheme (ESOS)

- Scope and Process:
 - Submit an online *Notification of Compliance* to Environment Agency and keep records (no set format)
 - The Environmental Regulator can impose civil sanctions and fines for noncompliance
- Reporting:
 - Every 4 years. 3rd compliance period (ESOS phase 3): 05.12.19 05.12.2023
 - Organisations report to the Regulator for the country where their offices are registered: Environment Agency for England, Natural Resources Wales, Northern Ireland Environment Agency, and SEPA in Scotland
 - Fines can be applied for failing to: Notify the Regulator, maintain records, undertake an audit, or making a misleading statement
- Exceptions:
 - If your organisation fully has ISO 50001 Energy Mgmt. you comply with ESOS
 you only need inform the EA. Display Energy Certificates (DECs) also recognised
- URL: <u>https://www.gov.uk/guidance/energy-savings-opportunity-scheme-esos</u>







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Science Based Targets Initiative (SBTi)

- Who they are and their purpose:
 - A partnership between CDP, the UN Global Compact, the World Resources Institute and the World Wildlife Fund
 - A method for any organisation to set carbon emissions reduction targets in line with the Paris Climate Agreement that has long term goals for the planet and global economy
 - Identify opportunities to reduce carbon and cost, and report to your clients











- Boundaries (organisational and operational)
 - Set at parent company level and must include at least 95% of your company-wide scope 1 and 2 GHG emissions, consistent with GHG Protocol.
 - State whether location- or market-based accounting for scope 2.
 - Can include procurement of **renewable electricity** for scope 2 target
 - Must do a **scope 3 screening exercise** to understand significance
 - If scope 3 emissions (up- or downstream) accounts for 40% or more of your total GHG emissions (scopes 1, 2 and 3) then must include at least 67% of your scope 3 emissions.
 - Indirect scope 3 emissions are encouraged but outside the 67% min coverage for the target boundary.
 - Fossil fuel <u>sales</u> sector MUST include scope 3 at 1.5C ambition. Fossil fuels production sector can <u>not</u> get a SBT
 - Biogenic emissions also <u>must</u> be reported (out of scopes)
 - But **avoided, reduced and carbon credits** (offsets or removals) can <u>not</u> be counted for SBTi (SBTi NZ Standard)







SBTi Criteria and Recommendations TWG-INF-002 / Version 4.1 April 2020







Ambition for minimising temperature rise

- Til 14th July (v4.2):
 - For scopes 1 and 2 it must at a minimum be consistent with the level of decarbonization required to keep temperature increase to well-below 2°C (WB2D) or ideally 1.5°C.
 - For scope 3 it must, at a minimum be aligned to a **2°C warming** scenario
- From 15th July (v5):
 - For scopes 1 and 2 it must at a minimum be consistent with the level of decarbonization required to **keep temperature increase to 1.5°C.**
 - For scope 3 it must, at a minimum be aligned to a well-below 2°C warming scenario
- Gather data for the baseline year for targets
 - Base year of earlier than 2019 if submitted in 2022, otherwise 2015 is earliest base year



SBTi Criteria and Recommendations



October 2021







SCHOL

• Timeframes

- Til 14th July (v4.2):
 - Set medium term targets between **5 to 15 years** into the future
- From 15th July (v5):
 - Set near term targets between **5 to 10 years** into the future
- Progress
 - Both the target timeframe ambition (base year to target year) and the forward-looking ambition (most recent year to target year) must meet the ambition criteria.
- Communicate, Disclose and Recalculate
 - Publicly communicate SBT within 6 months of approval
 - Publicly report GHG emissions inventory and progress against SBT on an annual basis
 - Recalculate target at least every 5 years, or sooner if significant change
- Develop an action plan
 - The actions you will take to ensure you hit your reduction target in the 5 – 10 year near term timeframe, including your supply chain (this is NOT assessed by SBTi as it is company-specific)

SCIENCE BASED BASED BUILD BASED
SBTi Criteria and
Recommendations TWG-INF-002 Version 5.0 October 2021
SCIENCE



😧 www. facilitat.com/scienced.argeta

SBTi Criteria and Recommendations TWG-INF-002 / Version 4.1 April 2020







The Absolute Approach means everyone reducing emissions, absolutely, by the same percentage reduction. Any organisation can do this except power.

The Sector Decarbonation Approach means everyone in a given sector reducing emissions, relatively, to a given industry average emissions intensity. Aluminium, cement, commercial buildings, iron & steel, and pulp & paper, as well as some other non-construction sectors, can take either the SDA or Absolute Contraction Approach. Power can only do SDA.





SBTi Tool



1.5 degree scenario (1.5C)

Review all target modeling data

	Base year (2019)	Target year (2034)	% Reduction
Scope 1 emissions (ICO2e)	500	185	63.0%
Scope 2 emissions (ICO2e)	300	111	63.0%
Scope 1+2 emissions (tCO2e)	800	296	63.0%





Route to Setting a Target: SMEs

Commit to a target 1.5°C aligned option "_______ commits to reduce absolute scope 1 and scope 2 GHG emissions __% by 2030 from a 20____ base year, and to measure and reduce its scope 3 emissions." □ 50% from a 2018 base year □ 46% from a 2019 base year □ 42% from a 2020 base year Well-below 2°C option "□ ______ commits to reduce absolute scope 1 and scope 2 GHG emissions __% by 2030 from a 20_____ base year, and to measure and reduce its scope 3 emissions." □ 30% from a 2018 base year □ 20______ base year, and to measure and reduce its scope 3 emissions." □ 30% from a 2018 base year □ 20_______ base year, and to measure and reduce its scope 3 emissions." □ 30% from a 2018 base year □ 25% from a 2020 base year

The Target-setting Letter for SMEs is at

https://sciencebasedtargets.org/resources/files/SBT-SME-Target-Setting-Letter.pdf

- Special, quicker route for SMEs (less than 500 employees and not part of parent company)
- The SME can go straight to setting a SBT for their scope 1 and 2 emissions.
- The business must choose one of temperature pathways, and within that choose one of the three pre-defined base-year options (2018, 2019 or 2020) in the Target Setting Letter
- Whilst the SBTi does not approve SME's scope 3 targets, the SME does have to commit to measuring them
- Oil & gas companies and financial institutions cannot set targets through the SME's route
- As with large organisations, SMEs must communicate their targets and publicly disclose their emissions inventory and progress against targets on an annual basis.
- Costs \$1,000 to get validated.



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Climate Action Group

Introduction to the Carbon Tool

Version 2.0





The Climate Action Group will help you to...





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<u> </u>		

MEASURE YOUR CARBON IMPACT

Assess your carbon impacts through a wide range of metrics and indicators through the Carbon Tool IDENTIFY HOTSPOTS FOR ACTION

Understand the biggest contributors to your carbon footprint and uncover potential areas for improvement

REAL SAVINGS & EFFICIENCY OPPORTUNITIES

Use robust data and learning support from the wider School to identify real savings and efficiency opportunities and improve your ability to respond to carbon.





The Carbon Tool – main features



A free, online tool with functionality to calculate carbon emissions based on the activity data provided by supplier organizations Functionality to enable suppliers to distribute a percentage of their carbon emissions among their clients, based on revenue. a) Simplified report for organizations who already know their carbon footprint can go straight to the apportionment section
 b) Full report to help organizations calculate their

carbon footprint based on activity, and apportion emissions among their clients Monthly, quarterly and annually. Annual reporting is the minimum requirement.

- a) Suppliers: organization's carbon footprint by scope and source of emissions
- b) School Partners: carbon data apportioned by suppliers by scope and source of emissions





FULL REPORT

Sustainability Tool measuring performance				Reports Submitted	Help 🔻 My account 🔻
Carbon reporting for period - 1st Jan 20 to 31st Jan 20 🗸					
Report and apportionment					
Company transport 🚣 Fugitive emissions 🗸 Electricity 🛆 Materials 🗸 Third party transport 🛕	Waste 🗸	Water 🗸			
Metric	Units	Value	Comments		N/A
Diesel (average biofuel blend - forecourt)*	Litres		This field is required	li	
• Gas oil (aka red diesel)*	Litres		This field is required	Ì	
Hydrogenated Vegetable Oil (HVO) *	Litres		This field is required	li	
• Natural gas (grid)*	kWh		This field is required	10	
• Petrol (average biofuel blend - forecourt)*	Litres		This field is required		
Propane/LPG*	Litres		Required field	li	
▼ Would you like to add data on OTHER fossil fuels?	Yes	N/A No			10
				🗌 Mar	rk section as complete

<< Previous Next >>

Option to include additional information

Thank you!
Thank you!

James Cadman • Lead Consultant • Action Sustainability • 07884 654827 • www.actionsustainability.com

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