Practical solutions to achieve net zero emissions for business

Simple steps to achieve net zero emissions and get you thinking about your own business while inviting you to practice on a real business case study.

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What we will cover in this session

Introductions TBLA/ MC

Carbon Accounting for SMEs: What is it and why it is needed.

Analysis of Carbon calculators designed for SMEs

Case study: TBLA's 2020 carbon footprint

- You tell us what TBLA could do to reduce its business carbon footprint

Offsetting – good or bad?

Net Zero Policies or Narratives

Accreditations – good or bad?

Q and A (10 minutes)

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Triple Bottom Line and Maple Cone Environmental and Social Impact measurement and Narratives

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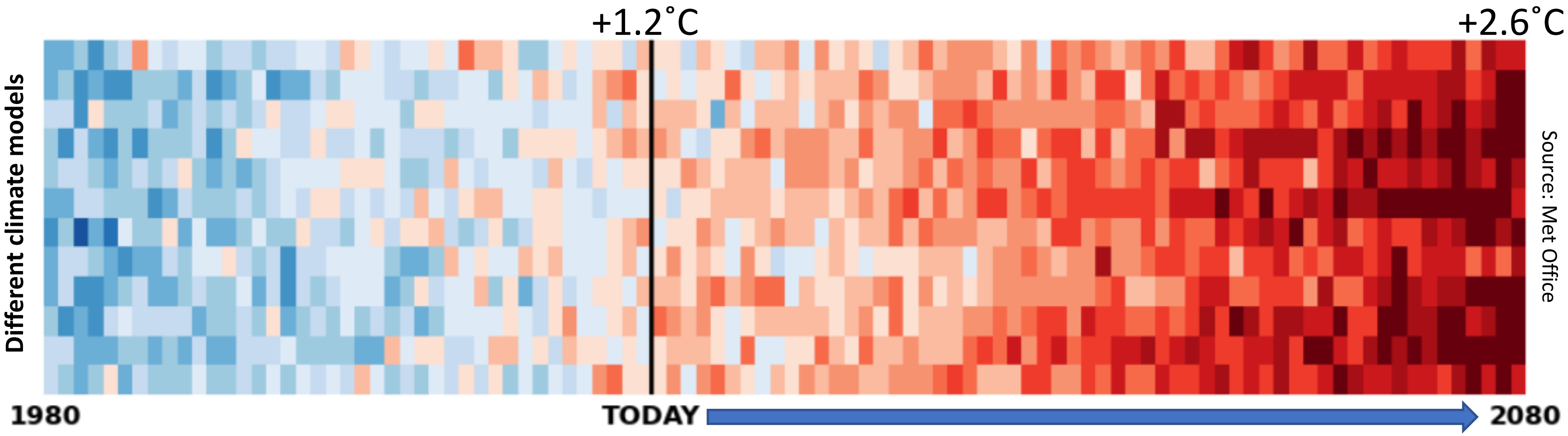
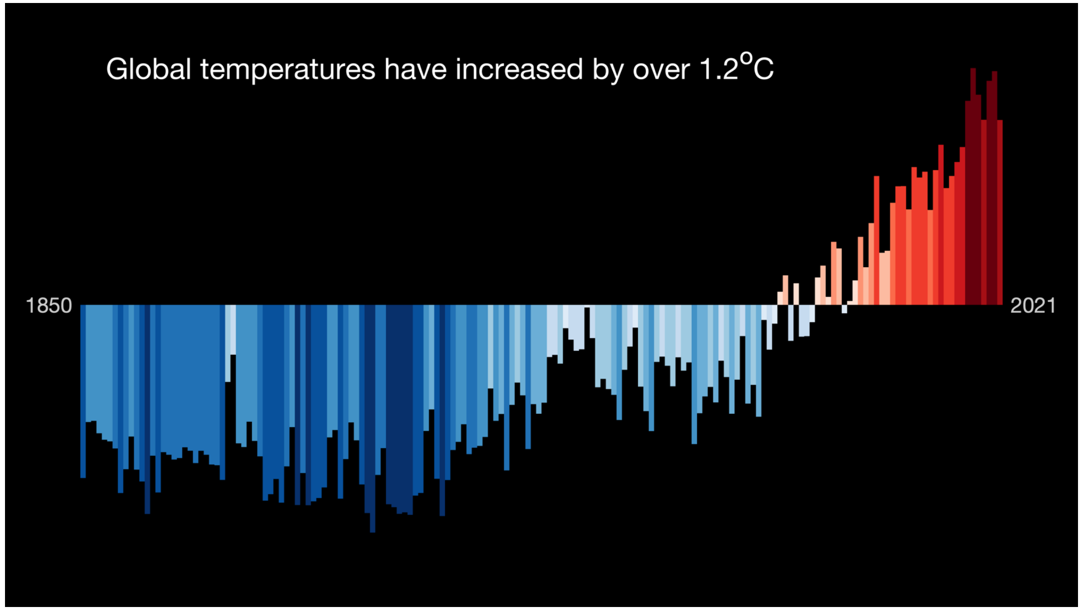
Alasdair Wilcock, owner of Maple Cone Ltd: Renewable Energy and Decarbonisation Consultant working with TBLA on environmental and social impact narratives

Fran Ellington: Business Development and ESG Director at Triple Bottom Line Accounting

Dr Peter Ellington, Associate Professor, Norwich Business School (UEA), founder of Triple Bottom Line Accounting and advocate for changes in accountancy education with environmental and social justice in mind.

Climate change: how bad is it?
What different models say about future warming





Source: University of Reading #showyourstripes

"The world is heading for 2˚C – 3˚C of global warming [by 2100]"

Potsdam Institute for Climate Impact Research, Sep. 2022

"50:50 chance of global temperature temporarily reaching 1.5°C threshold in next five years"

World Meteorological Office, May 2022

Slide courtesy of Nigel Hargreaves CEng MIET: **Solving system complexity for sustainable energy, transport, food and natural resources**
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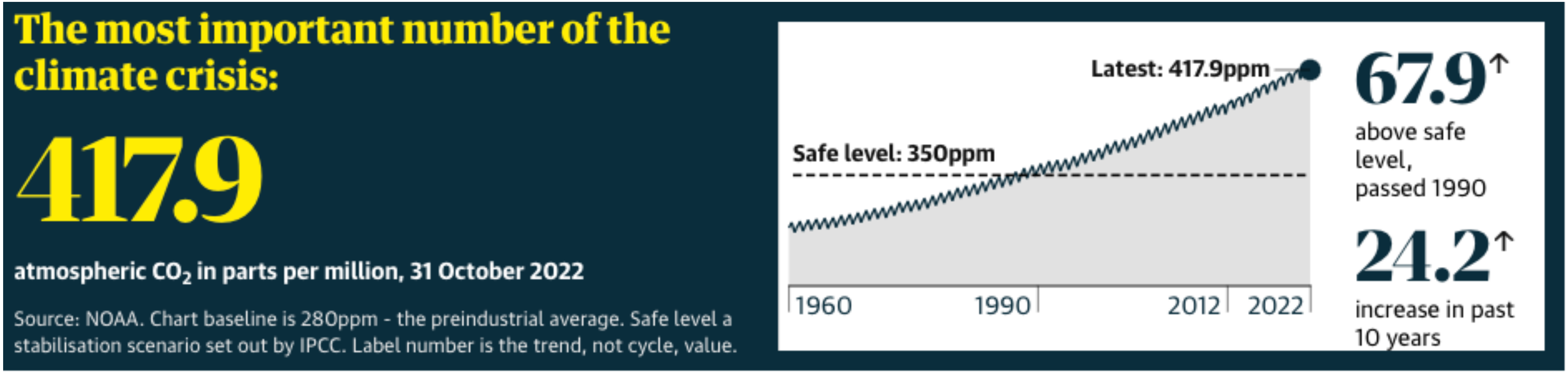
430 ppm of CO_2 =



The Guardian Newspaper daily CO2 tracker – this screenshot from October 31, 2022
https://www.theguardian.com/uk/environment

Photo courtesy of Carbon visuals: https://www.flickr.com/photos/carbonquilt/

Why SMEs?

Business & industry = 25% UK emissions

SMEs:

- **99% of our 5.87 million enterprises**
- **16.6 million employees (60%)**
- **£2.2 trillion of revenue (52%)**
- **Just under half of UK business emissions**

Cannot ignore SMEs: whole systems approach

UN CLIMATE CHANGE CONFERENCE UK 2021

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Barriers to Sustainability

SME Climate HUB

SME Climate Hub survey of 194 businesses worldwide

63% **said they don’t have the skills**

48% **said they lacked funds**

42% **stated they had other priorities**

40% **said they lacked time**

35% **said their customers are not asking for it (yet)**

https://businessclimatehub.org/uk/

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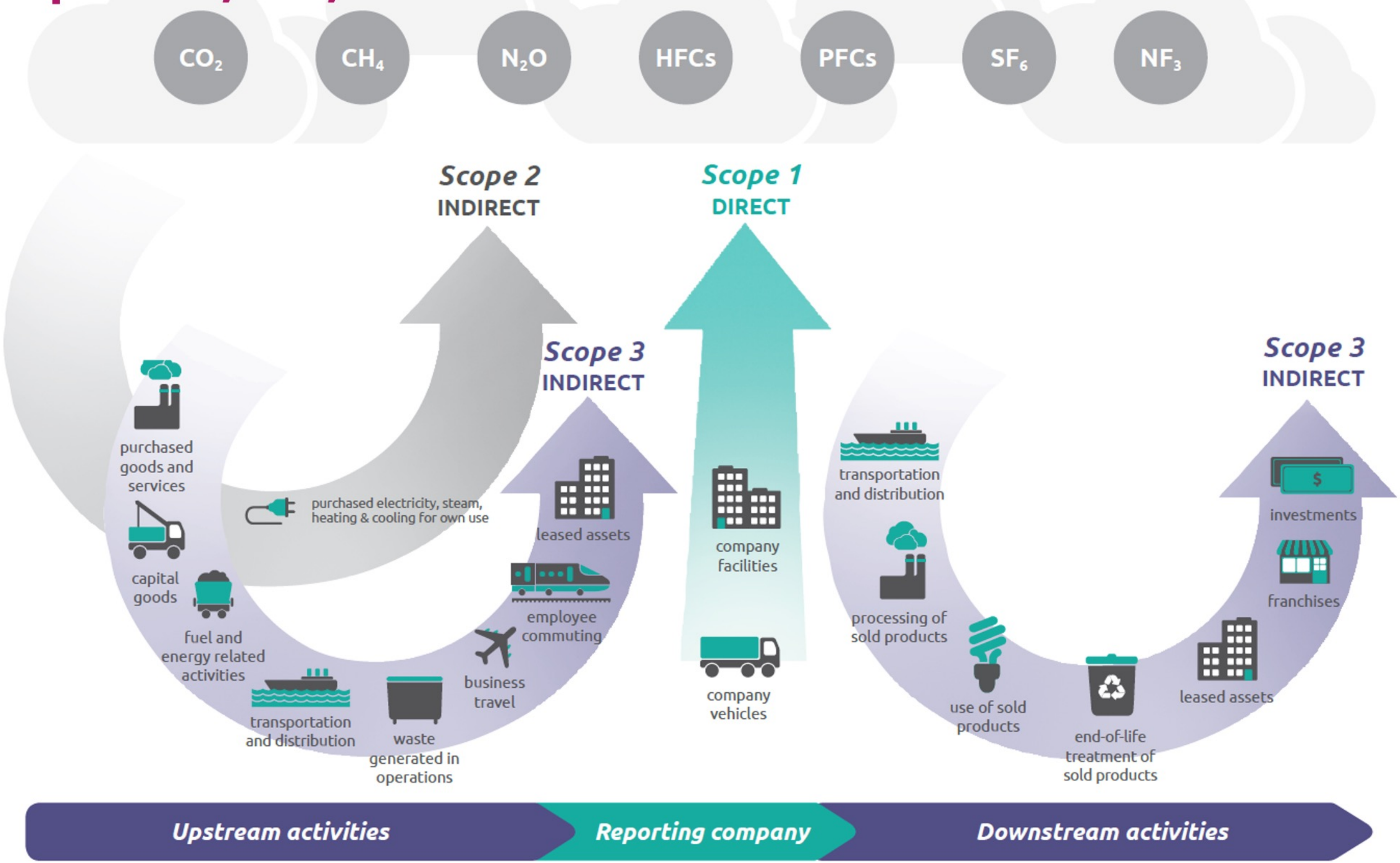
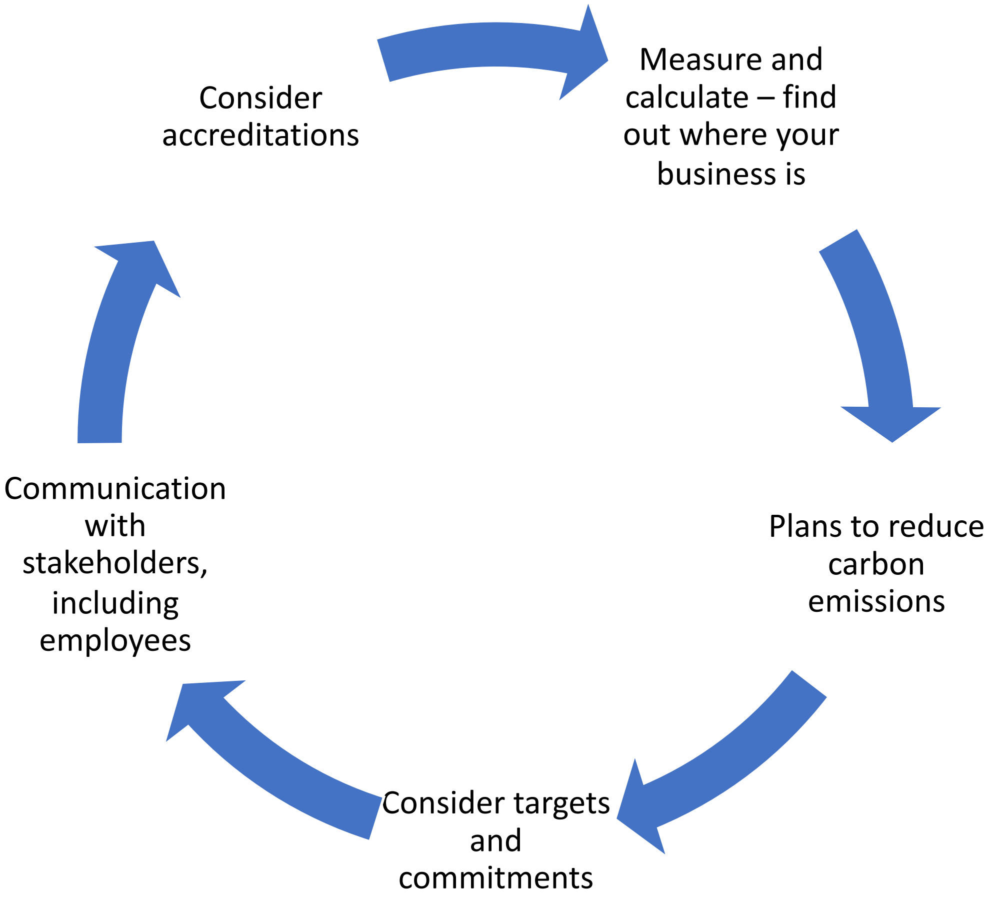
Scope 1, 2, and 3 emissions



Some Elements of a Net Zero Strategy



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Ways to Measure your Carbon Footprint

(A) Carbon Charter Footprint Calculator:

(B) Clear Eco Calculator:

(C) Normative Carbon Calculator:

(D) Spherics Carbon Calculator:

Company overview

Triple Bottom Line Accounting Ltd

Country
United Kingdom of Great Britain and Northern Ireland

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Time Period
1 Jan 2020 - 31 Dec 2020

Add time period +

Edit data

Estimated total emissions

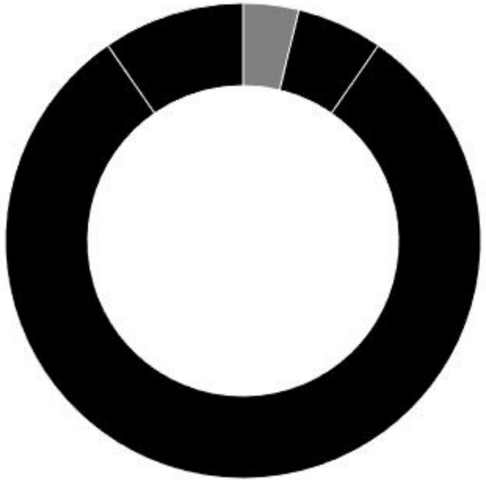
tonnes CO_2e

13.8

Your emissions estimate is only based on the expenses and activities you provide. Missing expenses or activities would mean your full carbon footprint is not covered. Check out the **Business Carbon Calculator methodology** to better understand how we estimate your emissions.

Your scope overview

tonnes CO_2e



Scope 1 - Direct emissions
0

Scope 2 - Indirect emissions
0.52

Scope 3 - Supply chain emissions
13.2

Expense coverage (scope 3)
Okay

What are scopes?

Scope 1

Direct emissions from the combustion of fuel in assets that a company operates, such as fuel emissions from company-owned cars, diesel generators, gas boilers and air-conditioning leaks.

Scope 2

Indirect emissions from the generation of energy purchased from a utility provider, such as heating, cooling, steam, and electricity.

Scope 3

All indirect greenhouse gas emissions that do not fall under scope 2 - upstream and downstream. This calculator includes upstream emissions from purchased goods and services, capital goods, upstream transport and distribution, and business travel, calculated from your expenses.

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Time Period
1 Jan 2021 - 31 Dec 2021

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Estimated total emissions

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25.8

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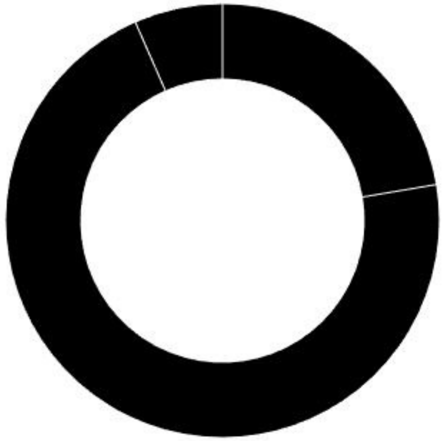
Your scope overview

tonnes CO_2e



Scope 1 - Direct emissions
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Expense coverage (scope 3)
Great

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Integrations with bookkeeping software

- https://www.spherics.io/ - more complex but easy once set up and integrates with Xero, QB and Sage online.
- https://www.cogo.co/ - links to personal bank accounts- but businesses can also sign up to be showcased on the app sustainable B to C providers
- Other start ups – **Ecologi Zero** and **EcoHedge** – currently beta testing or pitching for funding
- Anyone aware of others?

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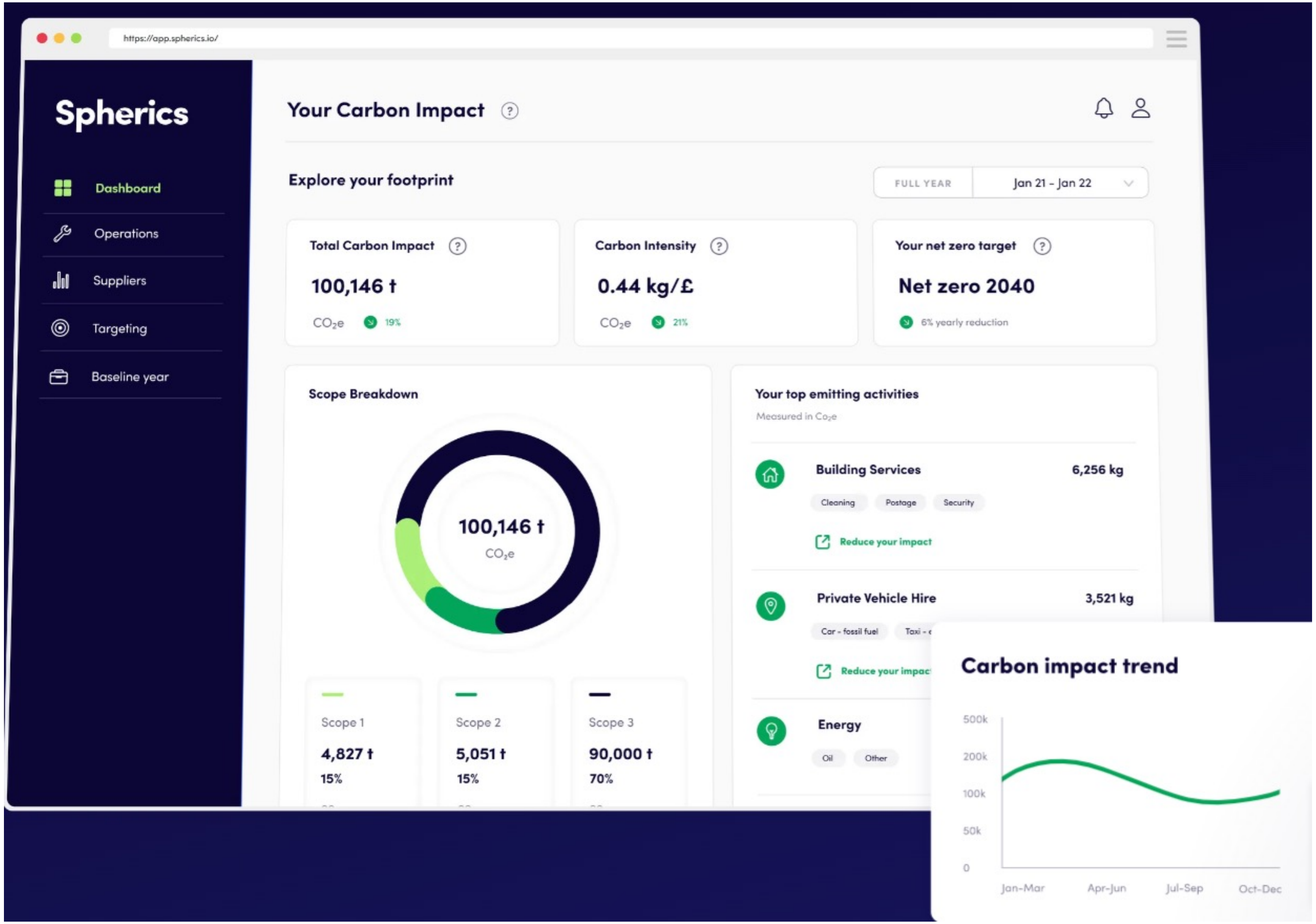
https://app.spherics.io/



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Plans to Reduce Carbon Emissions

Scope	Carbon calculator “A” Tonnes CO_2e	Carbon calculator “B” Tonnes CO_2e
1	9.31	10.70
2	5.77	7.27
3	2.60	3.23
Total	17.68	21.20

Do these differences matter? Yes and No!

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Target setting and a preparing a Net Zero Strategy

Increasing impact of stakeholders on project decisions

Inform	Consult	Collaborate	Consent	Empower
Provide stakeholders with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	Obtain stakeholder feedback on project analysis and design, alternatives and/or decisions and consider stakeholder concerns and aspirations	Partner with stakeholders in reaching all key project decisions and ensure stakeholder input incorporated to maximum extent possible	Respect freely given decisions of rights-holders to proceed or not proceed with project or certain project activities	Transfer control over decision-making, resources and activities to stakeholders

Source: International Association for Public Participation, Public Participation Spectrum; UN-REDD Guidelines on Free, Prior and Informed Consent, Types of Participation (Annex II)

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You tell us what TBLA could do to reduce emissions

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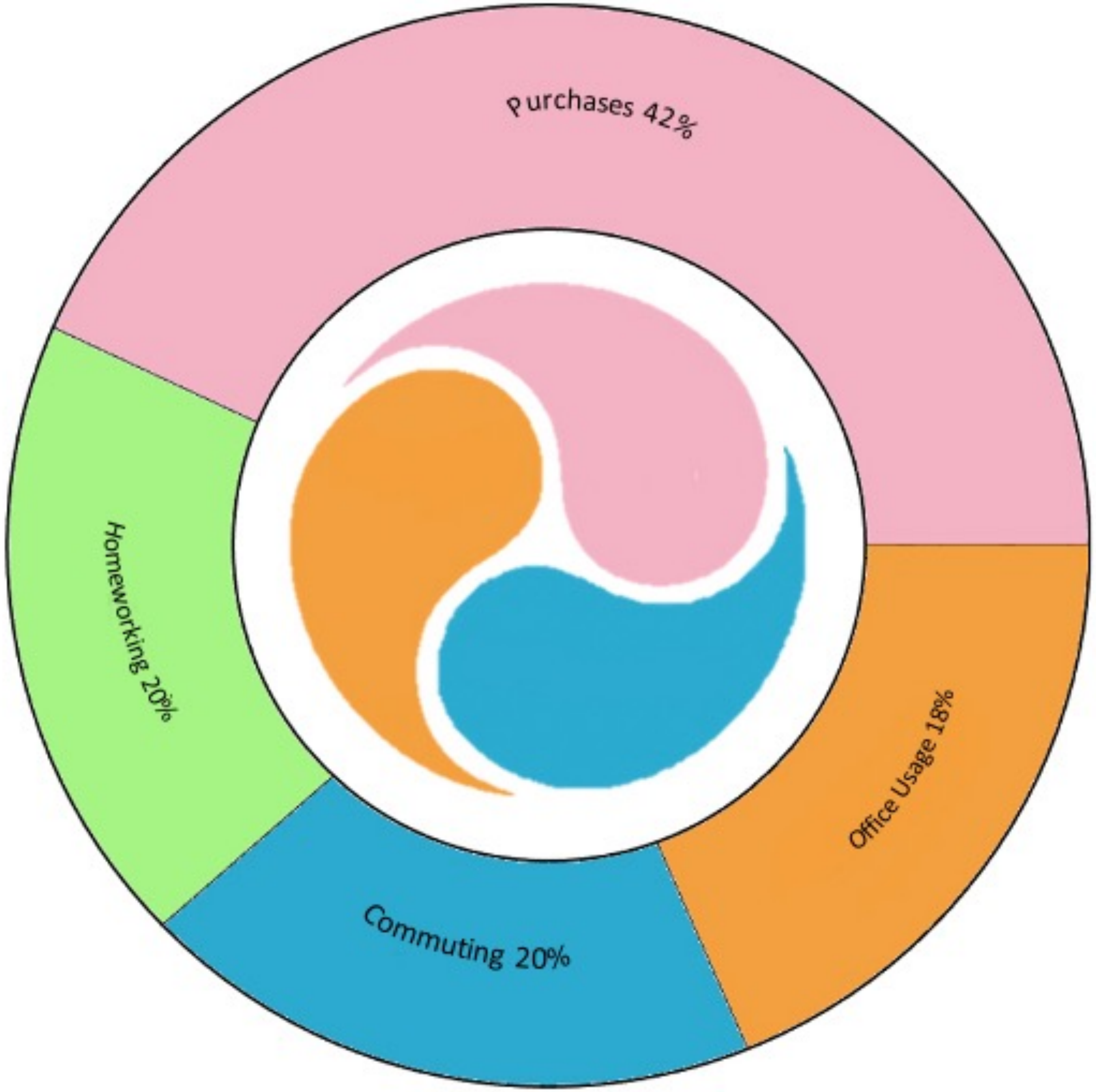
TBLA's Carbon Footprint (CO_2e) in 2020



- **Total Emissions in 2020 were 13,172kg CO_2**

87% of emissions were scope 3

1.8 tonnes CO2e per employee

Target: Net zero by 2050. Within the next 12 months we need to get to 1.6 tonnes of CO2e per employee

The building is virtually zero carbon (the 18% office calculation is scope 2 electricity and from biomass (Drax) which we decided was not as good as renewable see recent article from FT* and Panaroma)

The only employee emissions calculated were:

- WFH (scopes 1 and 2)
- Commuting (scope 3)

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The TBLA team considered:

- Sustainable purchasing policy
- Commuting to the TBLA office
- Rationalizing our software purchasing
- Personal Commitments and Individual Climate Advocacy
- Corporate Climate Advocacy

Read the details here:
https://triplebottomlineaccounting.com/carbon-footprint-report/

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Commuting to the TBLA office

Working from Home in "leaky houses"

v.

Commuting to the energy efficient office.

The team considered individually and as a workforce what is best for the employee in terms of social interactions, getting work done and professional development. This involves ongoing discussions on what works for the company regarding productivity, team meetings, costs, office use etc.

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CONSERVATION

Avoid energy use where possible

- Install more insulation to reduce losses and protect from overheating
- Implement airtight buildings with MVHR systems
- Utilise waste and passive heat and cooling
- Invest in more efficient equipment and lighting
- Make process and product design more resource-lean (within target limits)
- Use lifecycle analysis to target materials and product or process delivery
- Use manual inputs where feasible to reduce reliance on appliances
- Consider market and supply chain localisation

Why?
- Reduces energy bills
- Reduces scope 1 & 2 emissions
- Improves product design
- Increases comfort
- Improves control over supply chain

Slide courtesy of Nigel Hargreaves CEng MIET: **Solving system complexity for sustainable energy, transport, food and natural resources**
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RESPONSIVE SMART CONTROLS

Become a smarter business

- Install smart meters and ‘Consumer Access Devices’ to use the data
- Use smart controls over secure networks
- Integrate data into control systems
- Operate two-way battery systems – V2G, B2G (VPPs), intelligent charging
- Consider variable electricity tariffs and demand side response

Slide courtesy of Nigel Hargreaves CEng MIET: **Solving system complexity for sustainable energy, transport, food and natural resources**
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Why?
- Improves accuracy of energy accounting
- Reduces energy bills
- Reduces energy waste
- Increases energy efficiency

Commitments

This will depend on what is possible for your business

- **Halve your greenhouse gas emissions before 2030 (ideally 2025)**
- **Achieve net zero emissions before 2050 (ideally 2030-40)**
- **Disclose your progress on a yearly basis**

  - SME Climate Hub - make the climate commitment and get some free advertising

  https://businessclimatehub.org/smes/

Offsetting: Example 18 tonnes of CO2e

- Global Portfolio are verified to the Verified Carbon Standard (VCS). Projects are selected predominantly within developing countries, where they assist carbon emission reduction as well as bringing local community benefits. **£161.62 (£9 per tonne)**
- UK tree planting with VCS. Your funding supports the planting of trees in the UK region of your choice. The project mainly plants in school locations, helping to educate children and support wildlife habitats whilst sequestering carbon emissions. **£350.40 incl. VAT (£19.80 per tonne)**
- Select a Gold Standard VER (Verified Emission Reduction) project to provide additional social and community benefits in addition to high quality carbon offsetting. Great for businesses with ambitious CSR targets. **£188.56 to offset 17.958 tonnes (£10.50 per tonne)**

Ask yourself:

Why offsetting?

How long for?

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Communicating- who needs to know?

- "Most stakeholders – from shareholders, to employees, to customers, to communities, and regulators – now expect companies to play a role in decarbonizing the global economy. Few things will impact capital allocation decisions – and thereby the long-term value of your company – more than how effectively you navigate the global energy transition in the years ahead."
- Larry Fink: CEO of Black Rock 2022 letter to CEOs.

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How to Communicate

- Carbon Footprint Report
- Sustainability policy
- Environmental Impact narratives
- Press releases
- Websites
- Socials
- Packaging
- Third party verified accreditations
  - https://triplebottomlineaccounting.com/esg-impact-measurement-narrative/

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Accreditations

Questions and discussion

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Suffolk Green Business Consultancy

carboncharter.org/suffolk-business-consultancy/

Our team of expert and impartial advisors are here to assist. Having supported over 1000 businesses across the region, it's quite likely that they've already found an answer to the issue you're facing.

- Energy audits
- Carbon footprints
- Funding searches
- Sustainability plans

Email: suffolkbusinessadvisor@groundwork.org.uk

Tel: 01473 350 370


COP27 in Suffolk
Climate Change and Nature
Online Talk and Q&A
Free webinar, Thursday 17 November, 7pm to 8pm
www.greensuffolk.org/events
Coast & Heaths
Area of Outstanding Natural Beauty
DEDHAM VALE
AREA OF OUTSTANDING NATURAL BEAUTY
& STOUR VALLEY
Suffolk
Creating the Greenest County

Carbon Charter

The Net Zero Hub for all things green in the business world. Our freely available resources will equip you to decarbonise with confidence – cutting costs & building your brand

15th November – Carbon Literacy Training
24th November – CoffeeLink Tour & Tasting
8th December – Groundwork meetup

New Anglia LEP Events
14th Nov 12pm – Green Financing
15th Nov 8.30am Norwich – Clean Growth for Business
16th Nov 12pm – Carbon Footprinting
18th Nov 12pm – Supply Chain Emissions
www.eventbrite.co.uk/o/new-anglia-local-enterprise-partnership-14377496878

www.carboncharter.org

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Contact details and useful information

- **Triple Bottom Line and Maple Cone Environmental and Social Impact Measurement and Narrative Service:**

  www.triplebottomlineaccounting.com - **ESG**

- Alasdair Wilcock, Maple Cone: aw@maplecone.co.uk
- Fran and Peter: hello@triplebottomtlineaccounting.com
- You can read the TBLA 2020 and 2021 carbon footprint reports here:
- https://triplebottomlineaccounting.com/carbon-footprint-report-and-procedures-statement/

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