



WORLD QUALITY WEEK 2022

Quality conscience:
doing the right thing

7 – 11 NOVEMBER 2022

TELL US HOW YOU WILL
BE CELEBRATING #WQW22.

Creating Positive Social Impact

Peter Anderson

Troup Bywaters + Anders

Peter Anderson

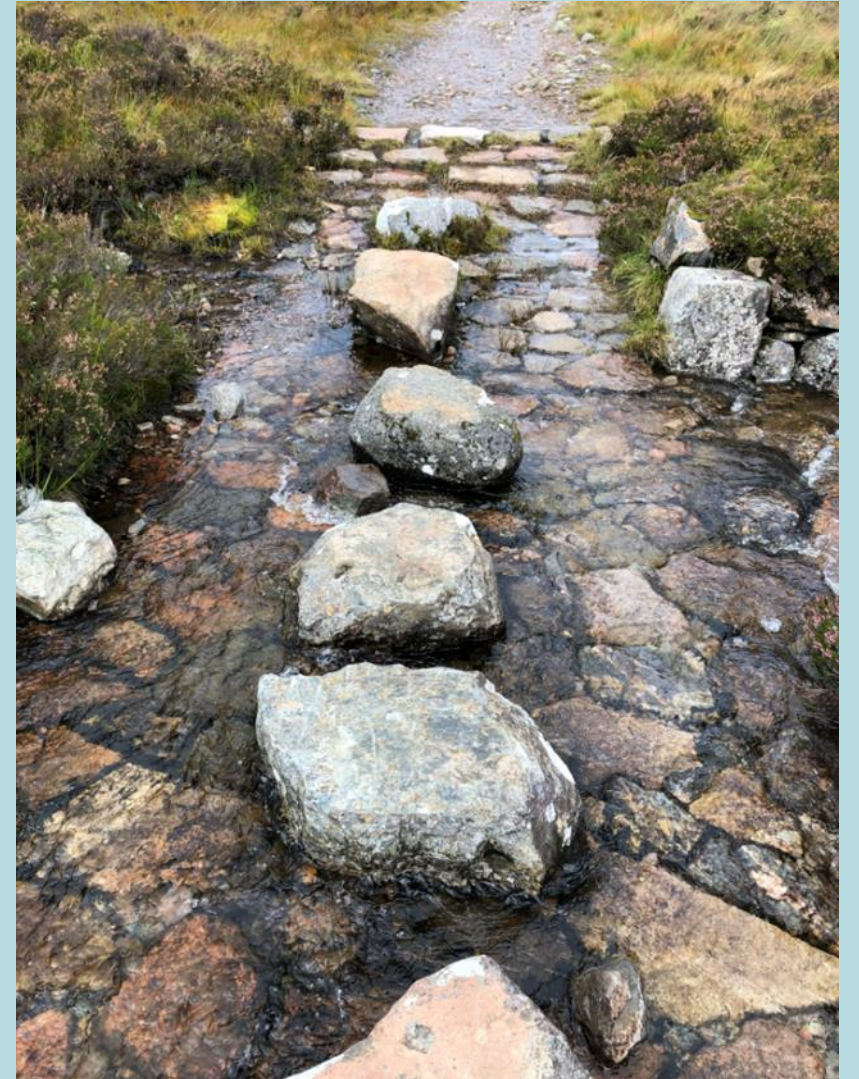
Managing partner

- + UK Green Building Council member
- + Member of UN SDG Advocacy Group
- + UKGBC Task Group-Nature-based solutions
- + Camden Climate Change Alliance Board member
- + Signatory of World Green Building Council Whole-life Advancing net zero pathway



Contents

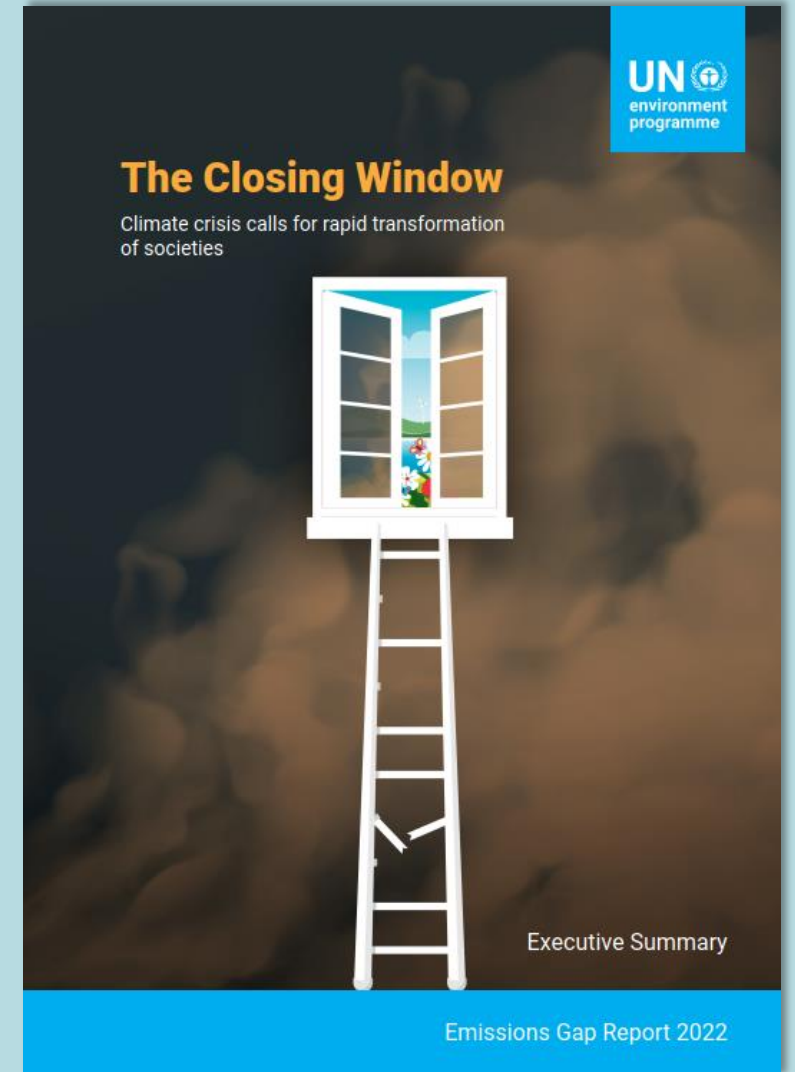
- + The imperative for action
- + The role of business
- + Understanding your industry
- + The quality system
- + Our journey
- + Restorative thinking



The imperative for action

- + The climate crisis is part of the triple planetary crisis of climate change, pollution and biodiversity loss
- + Very limited progress in reducing the immense emissions gap for 2030

United Nations Environment Programme (2022). *Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies — Executive Summary*. Nairobi. [Emissions Gap Report 2022 \(unep.org\)](https://unep.org/emissions-gap-report-2022)



The imperative for action

Global Carbon Budget

- + Global fossil CO₂ emissions in 2021 returned to pre-covid-19 levels according to the Global Carbon Project
- + The remaining carbon budget to limit global warming to 1.5 and 2.0 °C has reduced to 120 GtC (420 GtCO₂), and 350 GtC (1270 GtCO₂) respectively from the beginning of 2022*

*50 % likelihood



The European Space Agency climate office
The Global Carbon Budget <https://youtu.be/z-nnnMWtkls>

The imperative for action

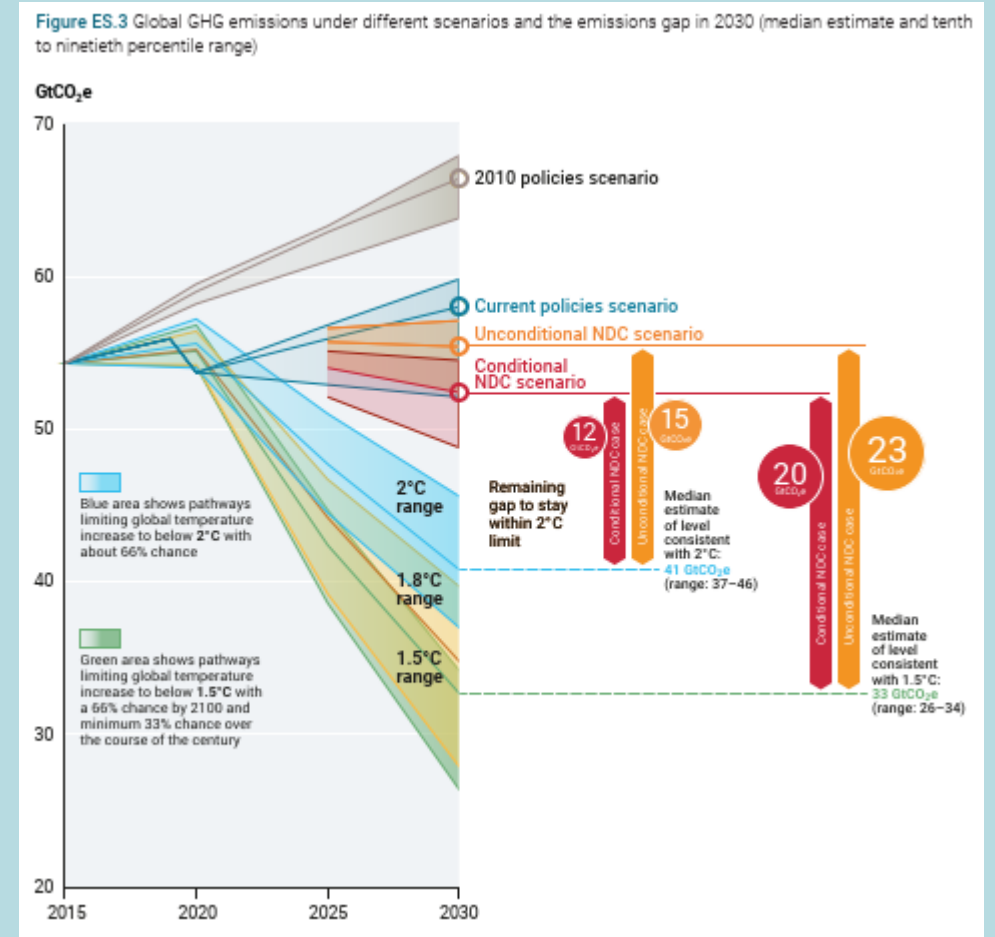
- + One Gigatonne = 1,000,000,000 metric tonnes
- + One Gigatonne = 1,000,000,000,000 kilograms
- + A gigatonne is the mass of all the land mammals in the world other than humans. It's also roughly twice the mass of all of the humans in the world
- + **So we emit 100 times the weight of the human race in greenhouse gases every year**



Source: Energy Education – University of Calgary
<https://energyeducation.ca/wiki/index.php?title=Gigatonne&oldid=7427>

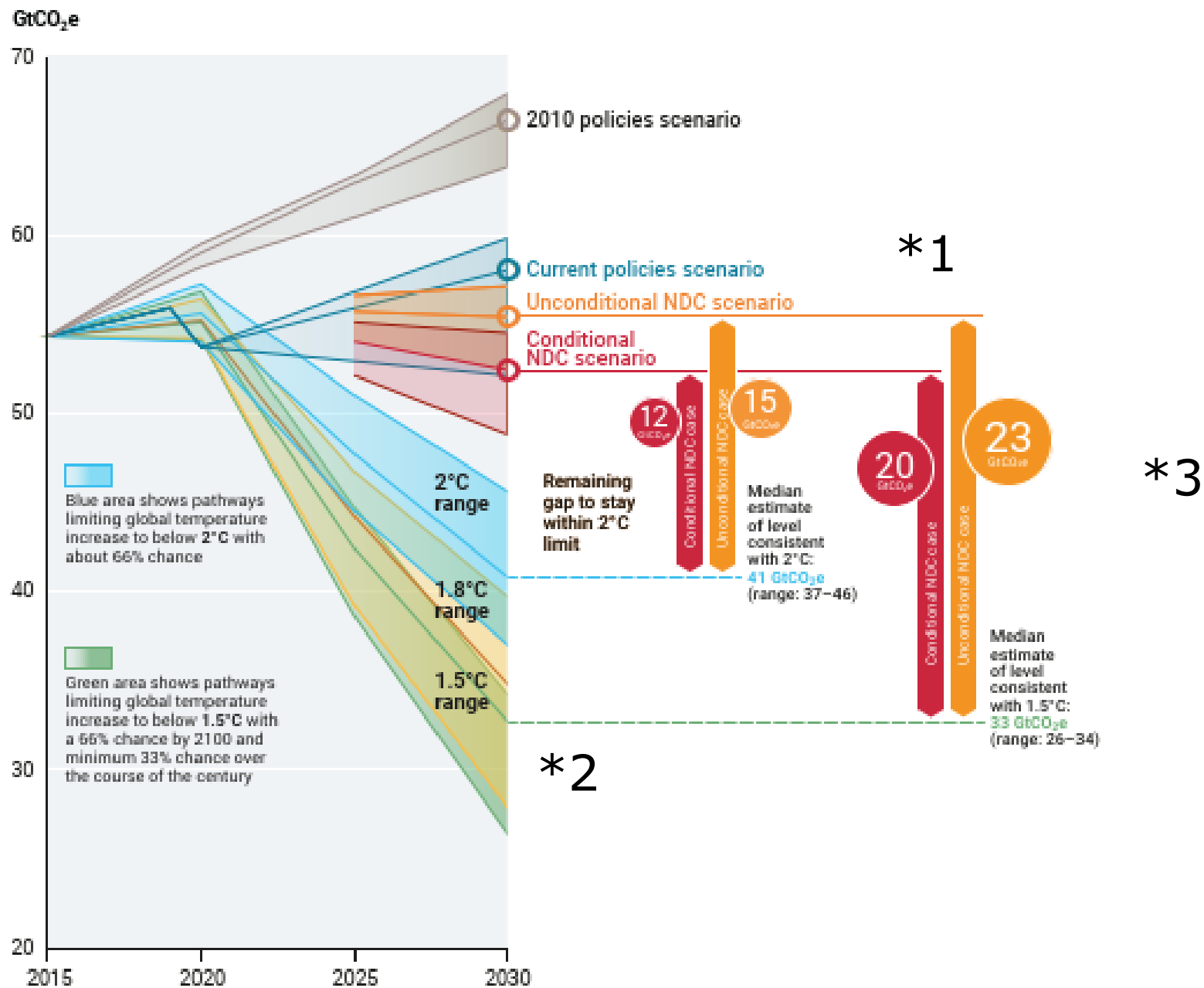
The imperative for action

- + Very limited progress in reducing the immense emissions gap for 2030



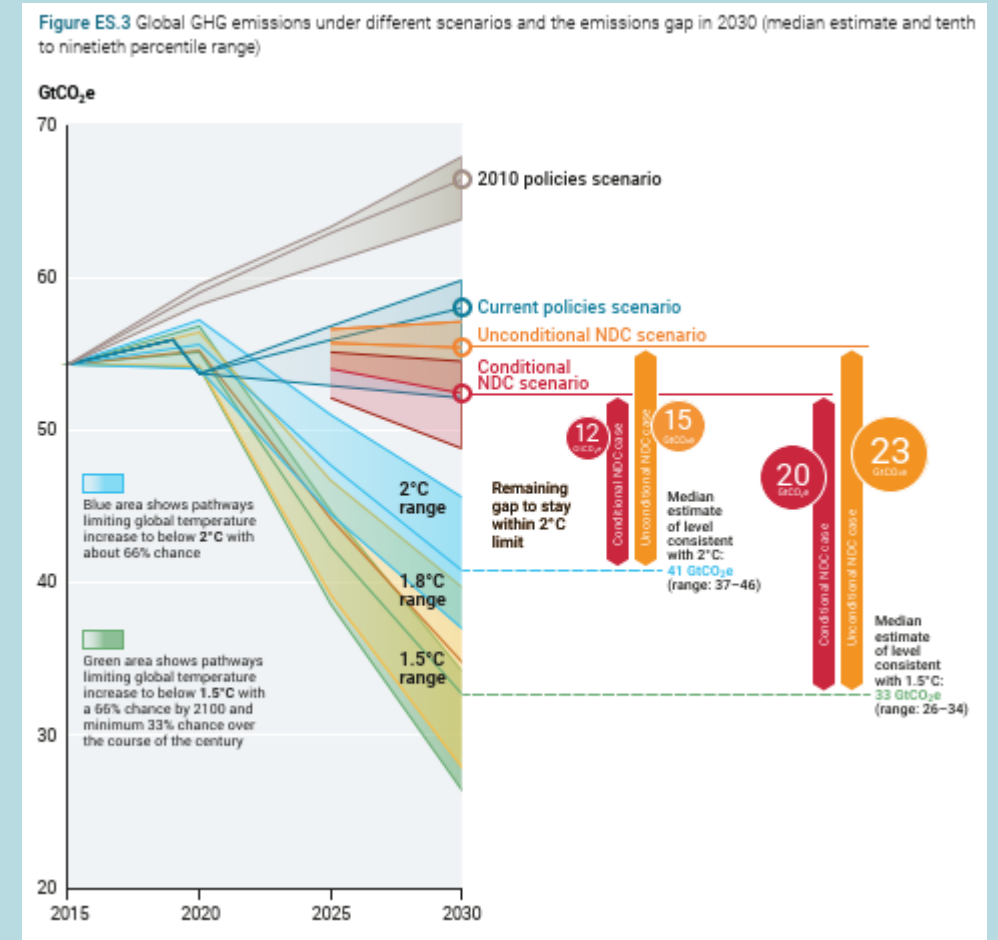
United Nations Environment Programme (2022). *Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies — Executive Summary*. Nairobi. <https://www.unep.org/emissions-gap-report-2022>

Figure ES.3 Global GHG emissions under different scenarios and the emissions gap in 2030 (median estimate and tenth to ninetieth percentile range)



The imperative for action

- + Very limited progress in reducing the immense emissions gap for 2030
- + Policies currently in place with no additional action are projected to result in global warming of 2.8°C over the twenty-first century
- + To get on track for limiting global warming to 1.5°C, global annual GHG emissions must be reduced by 45 per cent compared with emissions projections under policies currently in place in just eight years, and they must continue to decline rapidly after 2030, to avoid exhausting the limited remaining atmospheric carbon budget.

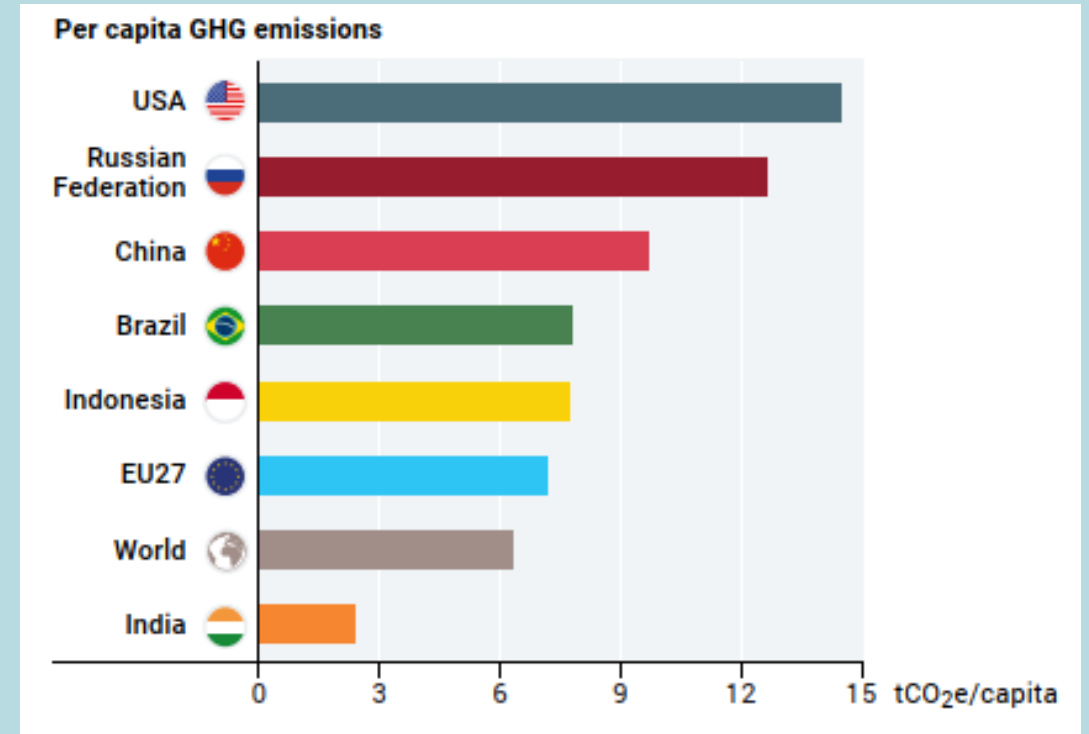


United Nations Environment Programme (2022). *Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies — Executive Summary*. Nairobi. <https://www.unep.org/emissions-gap-report-2022>

The imperative for action

Personal GHG emissions

- + Collectively, G20 members are responsible for 75% of global GHG emissions
- + World average per capita GHG emissions were 6.3 tons of CO₂ equivalent (tCO₂e) in 2020.
- + So, we all have a part to play in bringing our personal and business carbon emissions down.

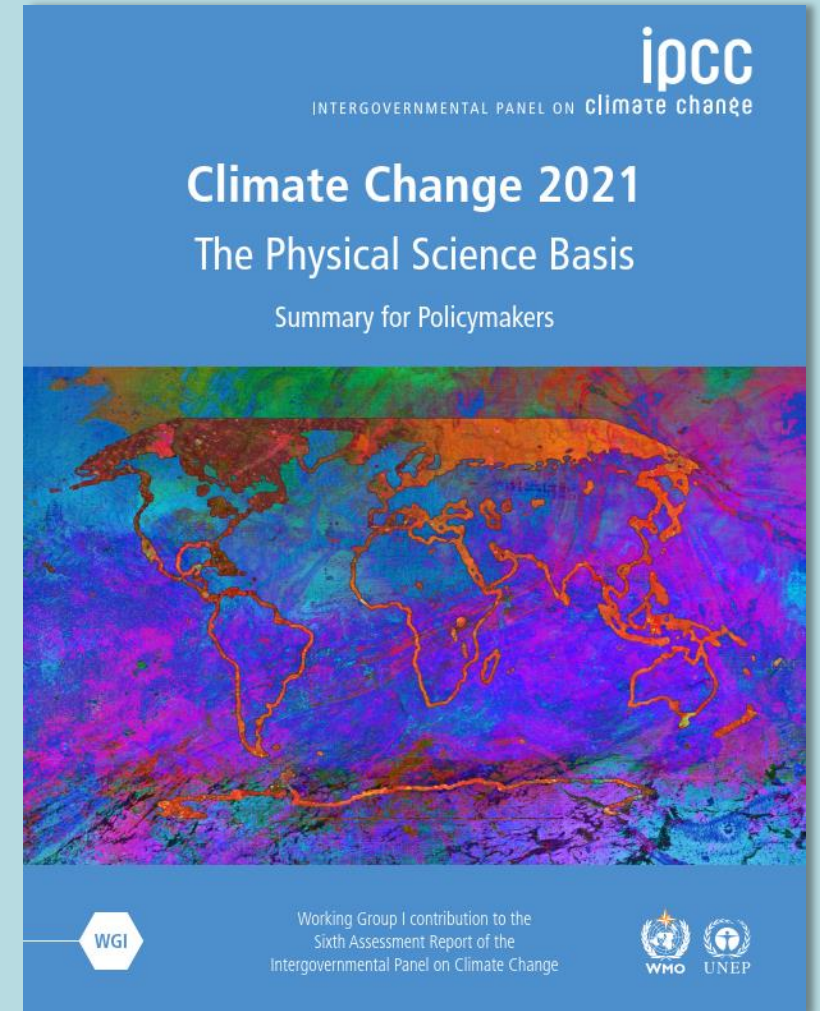


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The imperative for action

IPCC 2021 report

*Intergovernmental Panel on Climate Change
Climate Change 2021 - The Physical Science Basis
Summary for Policymakers 7 August 2021*

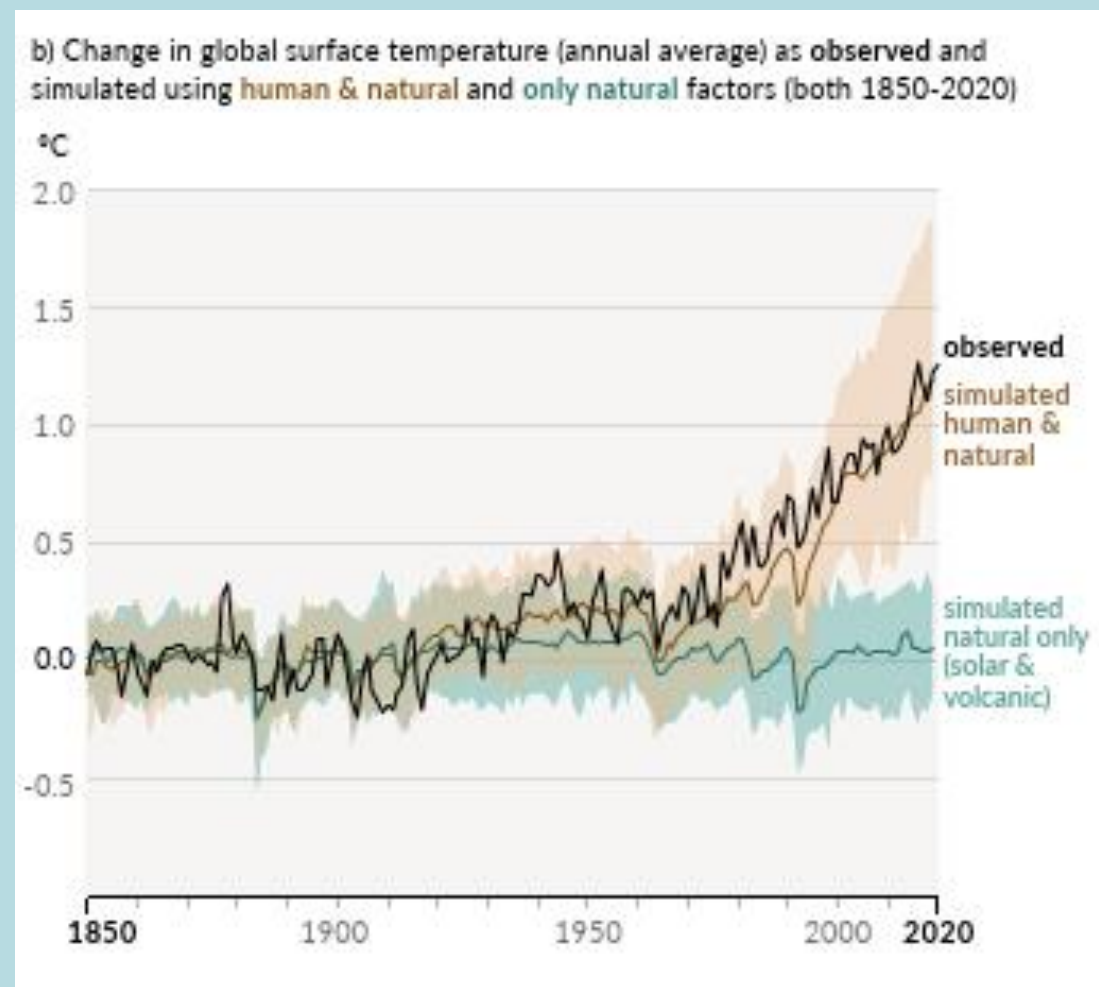


The imperative for action

IPCC 2021 report

- + 'It is unequivocal that human influence has warmed the atmosphere, ocean and land.'
- + CO₂ – higher than anytime in the last 2 million years

*Intergovernmental Panel on Climate Change
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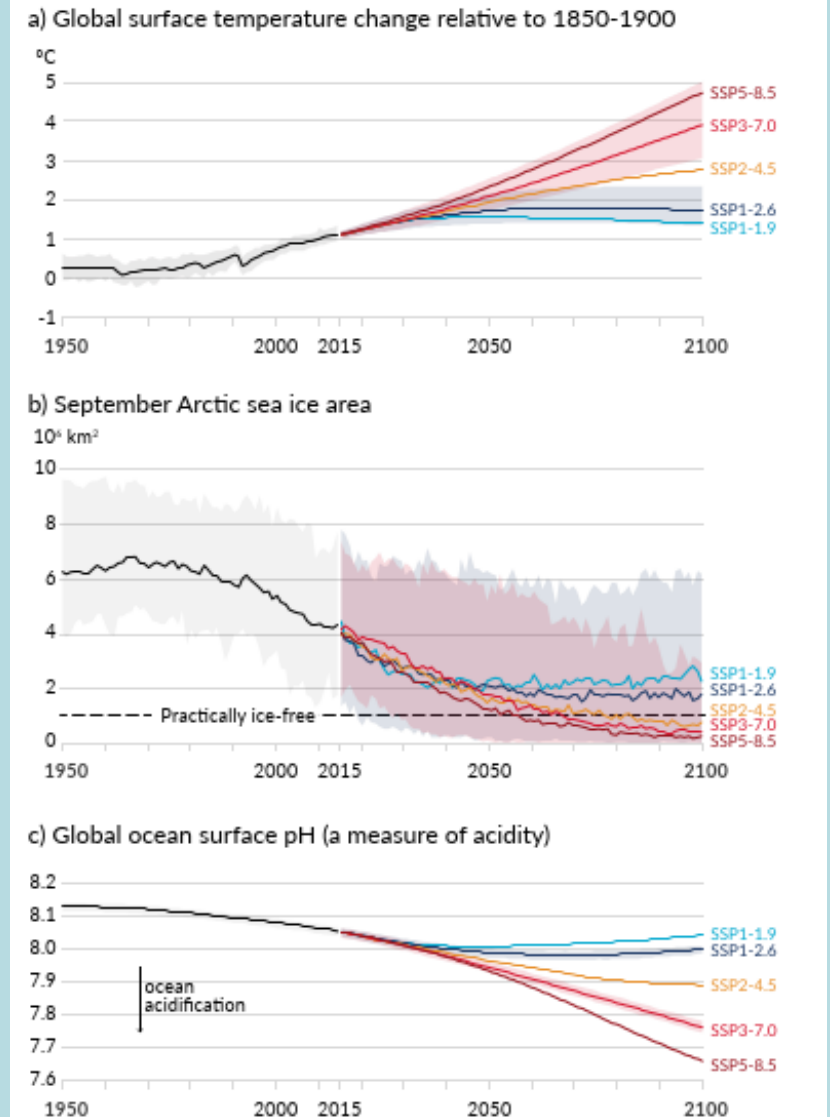


The imperative for action

IPCC 2021 report

- + 'It is unequivocal that human influence has warmed the atmosphere, ocean and land.'
- + CO₂ – higher than anytime in the last 2 million years
- + Global surface temp up by 1.1°C
- + Sea levels have risen by 0.2m
- + All far exceed the natural multi-millennial changes
- + All scenarios predict increases in GST and 1.5°C & 2°C will be exceeded unless there are deep reductions in CO₂ and greenhouse gases
- + As CO₂ increases and sea temps rise the ocean is less effective as a carbon sink

Intergovernmental Panel on Climate Change
 Climate Change 2021 - The Physical Science Basis
 Summary for Policymakers 7 August 2021



The imperative for action

Resources

- + We are consuming far in excess of the world's available natural resources

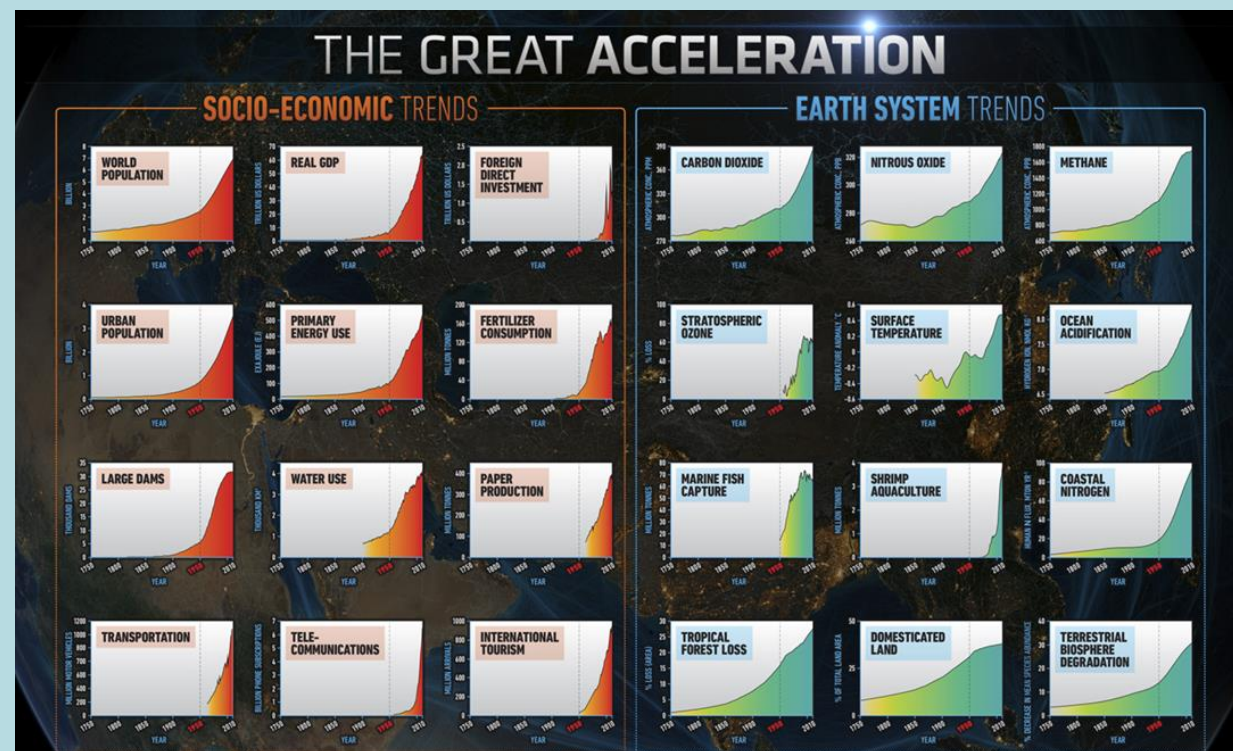


Image over by Johan Rockström, "Bounding the Planetary Future: Why We Need a Great Transition," Great Transition Initiative (April 2015), <https://greattransition.org/publication/bounding-the-planetary-future-why-we-need-a-great-transition>

THE GREAT ACCELERATION

SOCIO-ECONOMIC TRENDS



EARTH SYSTEM TRENDS



The imperative for action

- + We are consuming far in excess of the world's available natural resources
- + The climate system is more extreme as a consequence



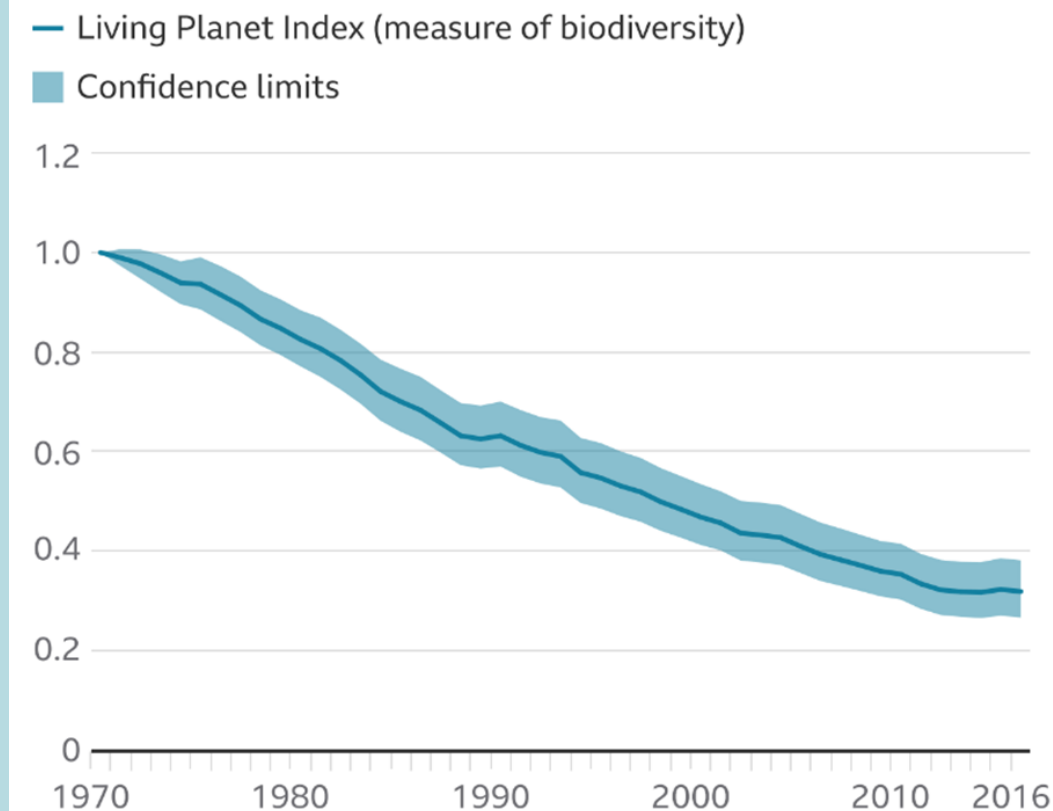
The imperative for action

Humanity has and continues to disrupt natural systems by :-

- + Deforestation
- + Planting mono-cultures
- + Chemical pollution
- + Soil erosion
- + Loss of habitat
- + Bringing species to extinction
- + Creating pathways for pathogens

The Living Planet Index is used by the UN Convention on Biological Diversity to provide a measure of vertebrate species from around the world via population recording, trends etc.

How wildlife has declined, 1970-2016



Source: ZSL

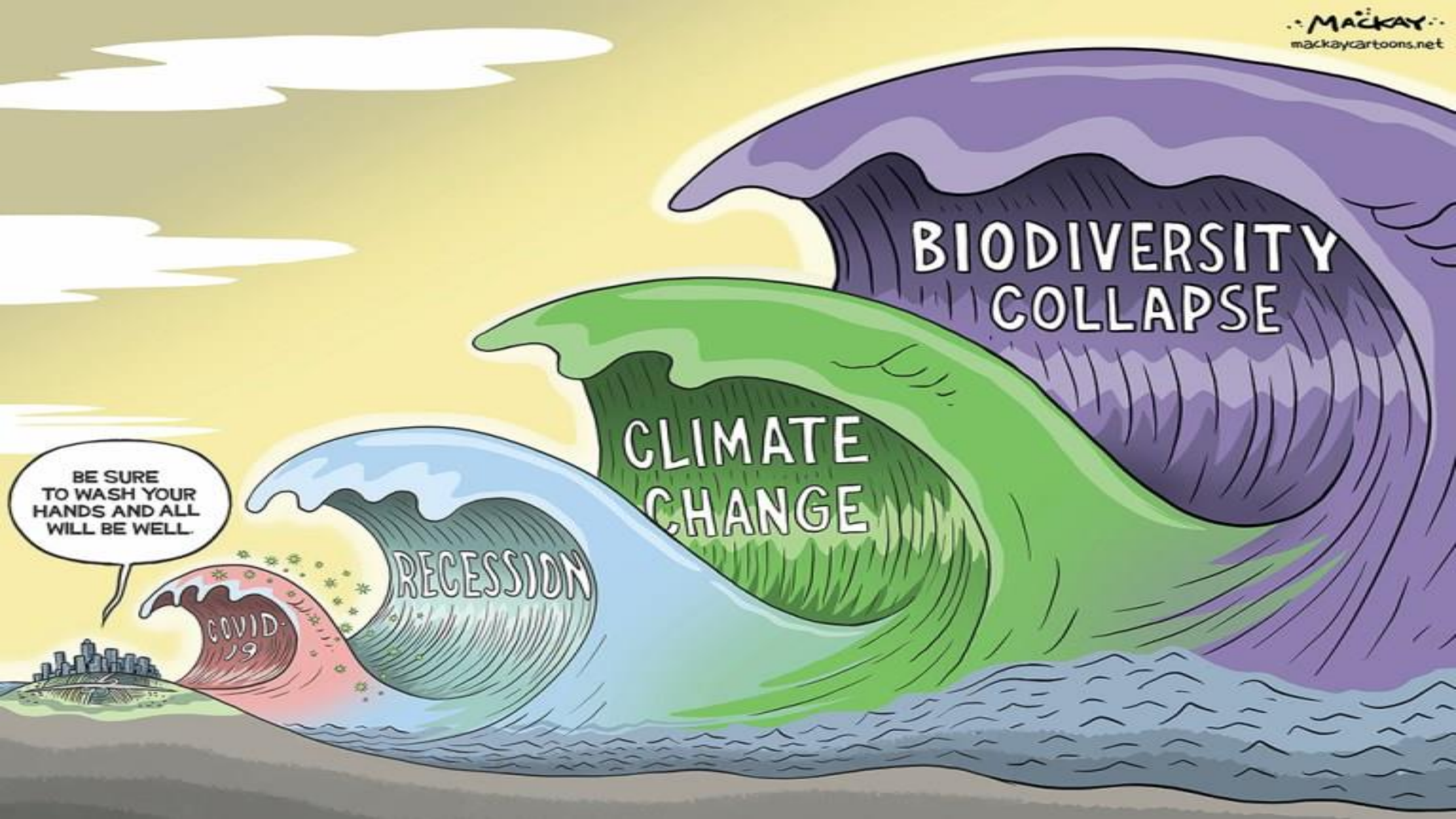
BBC

The imperative for action

The UK has lost almost half of its wildlife and plant species as a result of human and land development since the Industrial Revolution.

The country is ranked in the bottom 10% in the world and the worst among G7 nations





BE SURE
TO WASH YOUR
HANDS AND ALL
WILL BE WELL

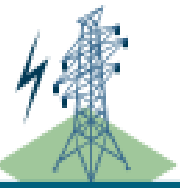



COVID-
19

RECESSION

CLIMATE
CHANGE

BIODIVERSITY
COLLAPSE





The role of business

				
	ELECTRICITY SUPPLY	INDUSTRY	TRANSPORTATION	BUILDINGS
Businesses	<ul style="list-style-type: none"> › Support a 100 per cent renewable electricity future 	<ul style="list-style-type: none"> › Plan and implement zero-emissions transformation › Design long-lived products › Create circular supply chain 	<ul style="list-style-type: none"> › Work towards zero-emissions transportation › Reduce travel in operations 	<ul style="list-style-type: none"> › Construction and building material companies review business models › Achieve zero-carbon owned or rented building stock

United Nations Environment Programme (2022). *Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies — Executive Summary*. Nairobi. <https://www.unep.org/emissions-gap-report-2022>

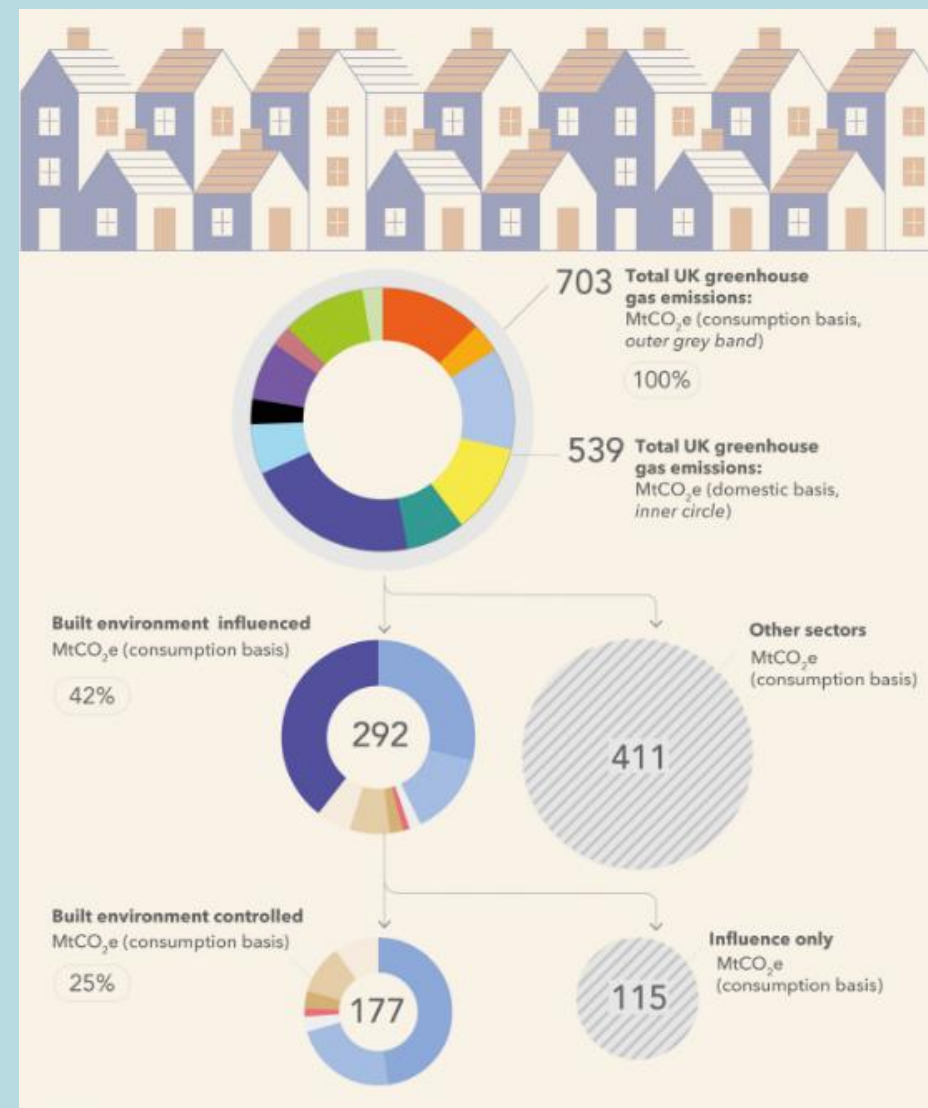
Emissions Gap Report 2022: The Closing Window

Table ES.3 Important actions to accelerate transformations in electricity supply, industry, transportation and buildings by different actors

				
	ELECTRICITY SUPPLY	INDUSTRY	TRANSPORTATION	BUILDINGS
National governments	<ul style="list-style-type: none"> › Remove fossil fuel subsidies in a socially acceptable manner › Remove barriers to expansion of renewables › Stop expansion of fossil fuel infrastructure › Plan for a just fossil fuel phase-out › Adapt market rules of electricity system for high shares of renewables 	<ul style="list-style-type: none"> › Support zero-carbon industrial processes › Promote circular material flow › Promote electrification › Support alternative carbon pricing mechanisms › Support research and innovation › Promote low-carbon products › Plan for a just transformation 	<ul style="list-style-type: none"> › Set mandates to switch to zero-emissions road vehicles by specific dates › Regulate and incentivize zero-carbon fuels for aviation › Adjust taxation/pricing schemes › Invest in zero-emissions transport infrastructure 	<ul style="list-style-type: none"> › Regulate towards zero-carbon building stock › Incentivize zero-carbon building stock › Facilitate zero-carbon building stock
International cooperation	<ul style="list-style-type: none"> › Cooperate on a just coal phase-out › Support initiatives on emissions-free electricity, power system flexibility and interconnection solutions 	<ul style="list-style-type: none"> › Cooperate on zero-carbon basic materials › Cooperate on hydrogen › Share best practice 	<ul style="list-style-type: none"> › Cooperate on financing and policy development › Coordinate on target setting and standards 	<ul style="list-style-type: none"> › Provide access and favourable conditions to finance › Support skills and knowledge growth
Subnational governments	<ul style="list-style-type: none"> › Set 100 per cent renewable targets › Plan for a just fossil fuel phase-out 	<ul style="list-style-type: none"> › Engage in regional planning and regulations › Cooperate with various stakeholders 	<ul style="list-style-type: none"> › Plan infrastructure and supporting policies that reduce travel demand › Adjust taxation/pricing schemes 	<ul style="list-style-type: none"> › Implement zero-emissions building stock plans › Integrate low-emissions requirements in urban planning › Add requirements that go beyond the national level
Businesses	<ul style="list-style-type: none"> › Support a 100 per cent renewable electricity future 	<ul style="list-style-type: none"> › Plan and implement zero-emissions transformation › Design long-lived products › Create circular supply chain 	<ul style="list-style-type: none"> › Work towards zero-emissions transportation › Reduce travel in operations 	<ul style="list-style-type: none"> › Construction and building material companies review business models › Achieve zero-carbon owned or rented building stock
Investors, private and development banks	<ul style="list-style-type: none"> › Engage with or divest from fossil fuel electricity utility companies › Do not invest in or insure new fossil fuel infrastructure 	<ul style="list-style-type: none"> › Engage with or divest from emissions-intensive industry › Invest in low-carbon energy and process technologies › Drive awareness of climate risks 	<ul style="list-style-type: none"> › Invest in zero-emissions transport infrastructure › Support zero-emissions vehicles, vessels and planes 	<ul style="list-style-type: none"> › Adjust strategy and investment criteria for zero-carbon building stock › Support building renovation
Citizens	<ul style="list-style-type: none"> › Purchase 100 per cent renewable electricity 	<ul style="list-style-type: none"> › Consume sustainably › Lobby 	<ul style="list-style-type: none"> › Adopt active mobility practices › Use public transportation › Use zero-emissions vehicles › Avoid long-haul flights 	<ul style="list-style-type: none"> › Retrofit for improved carbon footprint › Tenants challenge landlords › Adopt energy-saving behaviour

Understanding your industry

- + We provide advice in relation to the design, construction, operation and maintenance of buildings
- + The built environment influences and accounts for around 40% of global emissions.
- + Data can be found on the impact of most industries
- + Carbon emissions can be quantified
- + Impact on nature is less well defined
- + Regulation is tightening
- + TCFD and TNFD reporting is coming



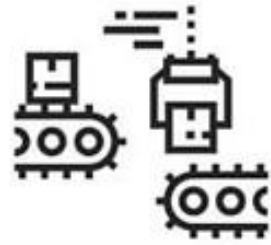


INDUSTRY 1.0

Mechanization,
steam power,
weaving loom



1784



INDUSTRY 2.0

Mass production,
assembly line,
electrical energy



1870

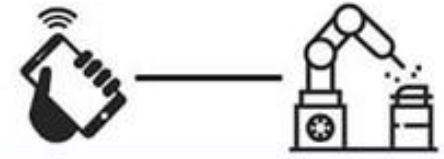


INDUSTRY 3.0

Automation,
computers and
electronics



1969



INDUSTRY 4.0

Cyber physical
systems, internet of
things (IoT),
networks



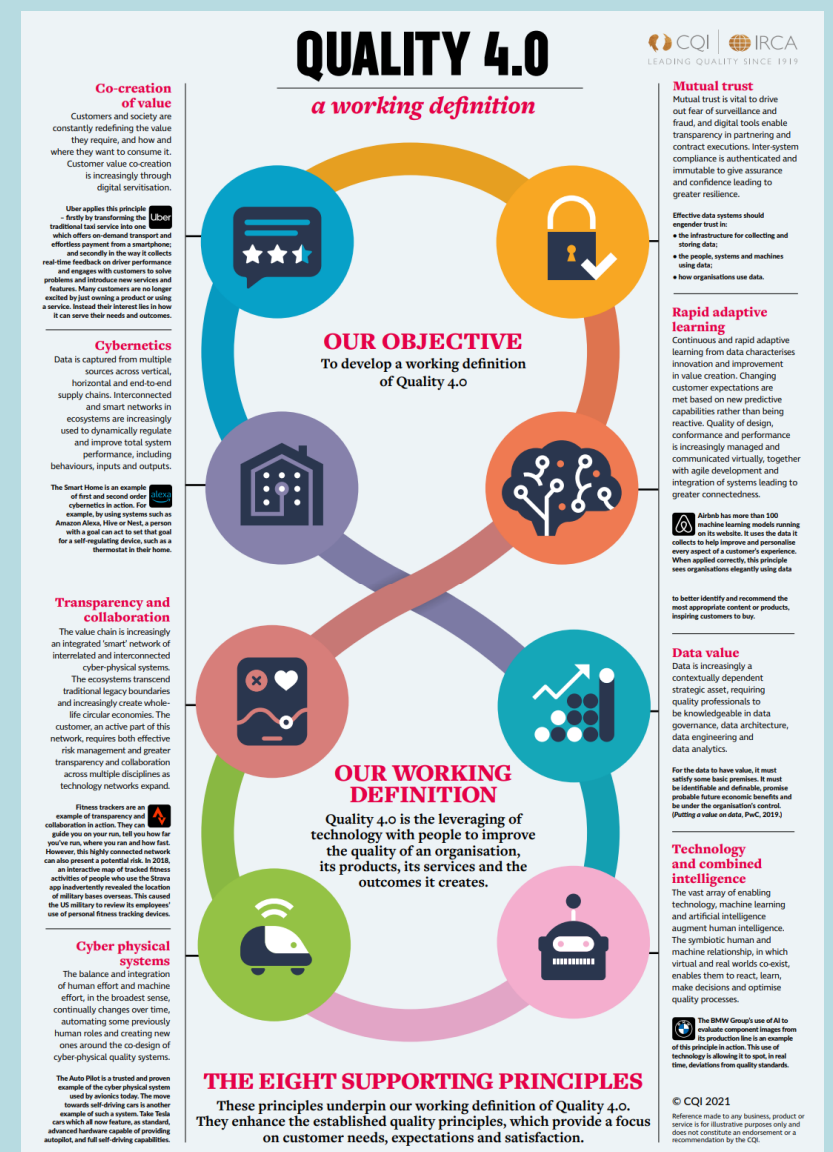
Today

The Quality system

Just as the Quality System thinking has evolved to contemplating 4.0 so has Sustainability thinking:-

- + Sustainability 1.0 – Minimising impact and doing less harm
- + Sustainability 2.0 – Heading to zero and neutrality
- + Sustainability 3.0 – Net positive putting more back into the environment and society than we take out
- + Sustainability 4.0 – Reconfiguring the living system to allow the social and environment aspect to evolve and thrive reaching their greatest potential.

We have a long way to come in a short time as an industry...





About us

Troup Bywaters + Anders, a high-performing building services consultancy, have been bringing buildings to life since 1958.

Over the last 60 years, the partnership has grown to over 240 strong with eight national offices, delivering projects in the UK and Europe across all sectors.

GROWING PEOPLE

INVESTORS IN PEOPLE
We invest in apprentices Platinum

Investors in People | Health & Wellbeing Award
Good Practice

INVESTORS IN PEOPLE
We invest in people Platinum

THE INVESTORS IN PEOPLE
AWARDS 2019 Winner

YOUNG ENGINEERS AWARDS 2019
Employer of the Year
WINNER Medium company

INVESTORS IN PEOPLE | Champion

PRINCESS ROYAL TRAINING AWARD 2017

Women Living Wage
Employer

Consultancy & Engineering AWARDS 2017

2018 TALENT CN AWARDS
EXCELLENCE IN LEARNING & DEVELOPMENT

Apprenticeships
National Awards 2020 Winner

HEALTHY WORKPLACE
CERTIFICATION 2019
MAYOR OF LONDON

ACHIEVING QUALITY AND CONSISTENCY

Constructionline
Part of Capita plc

LUX AWARDS 2017
WINNER

iwfm
CORPORATE MEMBER

Q
CDI • RICA
INTERNATIONAL QUALITY AWARDS 2018

CIBSE
High Performance Building

BCO REGIONAL WINNER 2019
Awards

SUSTAINABILITY AT HEART

UK GBC
Member

TERRA CARTA
For Nature, People & Planet

ADVANCING NET ZERO

A CLIMATE NEUTRAL COMPANY
ClimatePartner

UKAS
1183
Low Carbon Energy Assessor

BREEAM
VIBRANT

Camden Climate Change Alliance
TEAM GREEN

WELL AP

Camden Climate Change Alliance
CARBON CHAMPION

BREEAM
ADVANCED

UKAS
1183
Low Carbon Consultant

Our journey

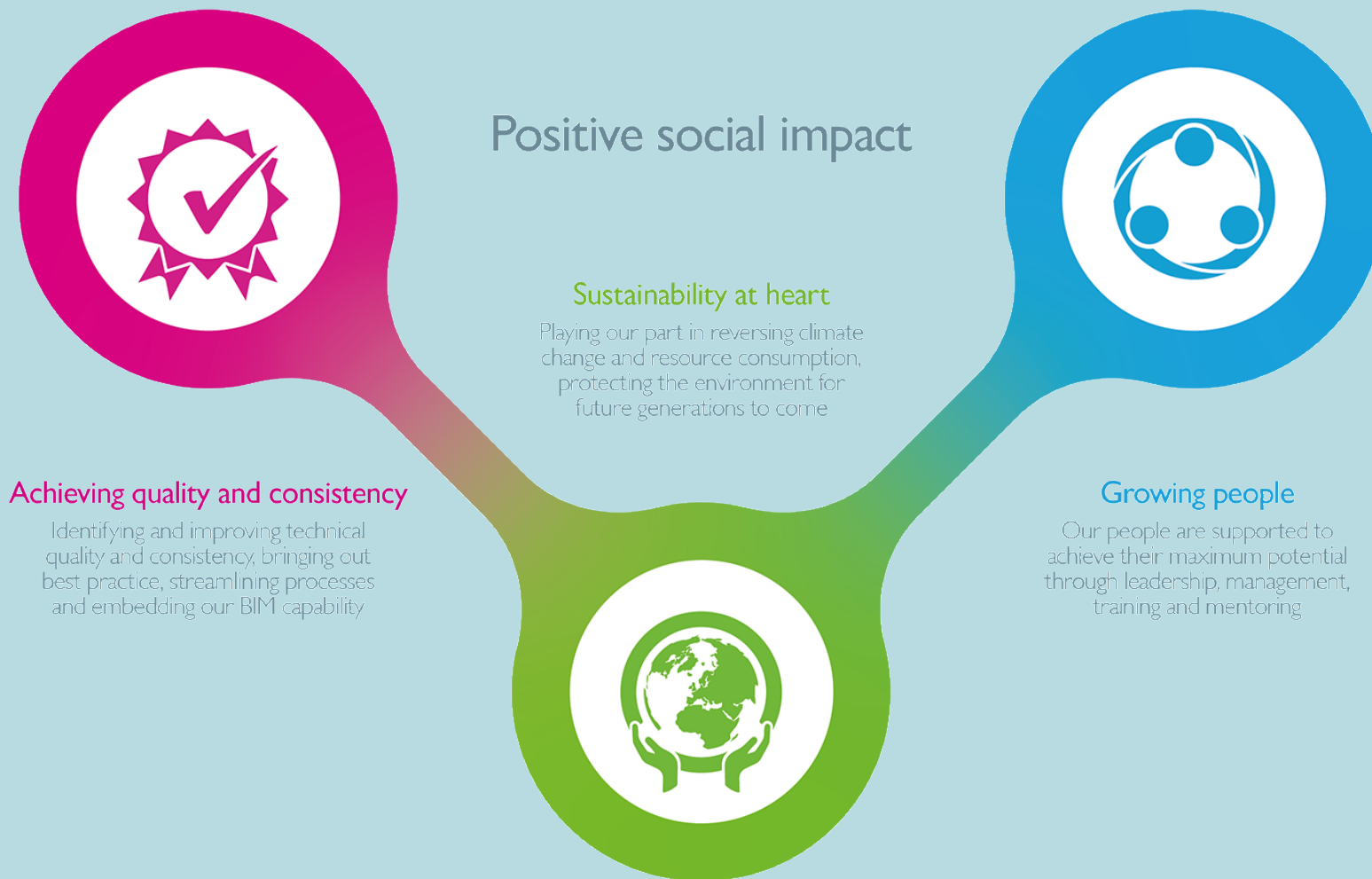
Our purpose

+ to be a socially responsible and ethical partnership



Our journey

+ Place sustainability centrally



Our journey

- + Place sustainability centrally
- + Growing people
 - + Award winning apprenticeship programme
 - + Learning & Development
 - + Mentoring scheme
 - + Members of TAC and chair of LAAN
 - + Majority of senior team joined as trainees or apprentices
 - + Working with Dept of Education in a 'Greening the UK Apprenticeships' programme

Growing people
They make the difference

Our exemplar apprenticeship programme

TROUP BY WATERS + ANDERS

INVESTORS IN PEOPLE
We invest in people

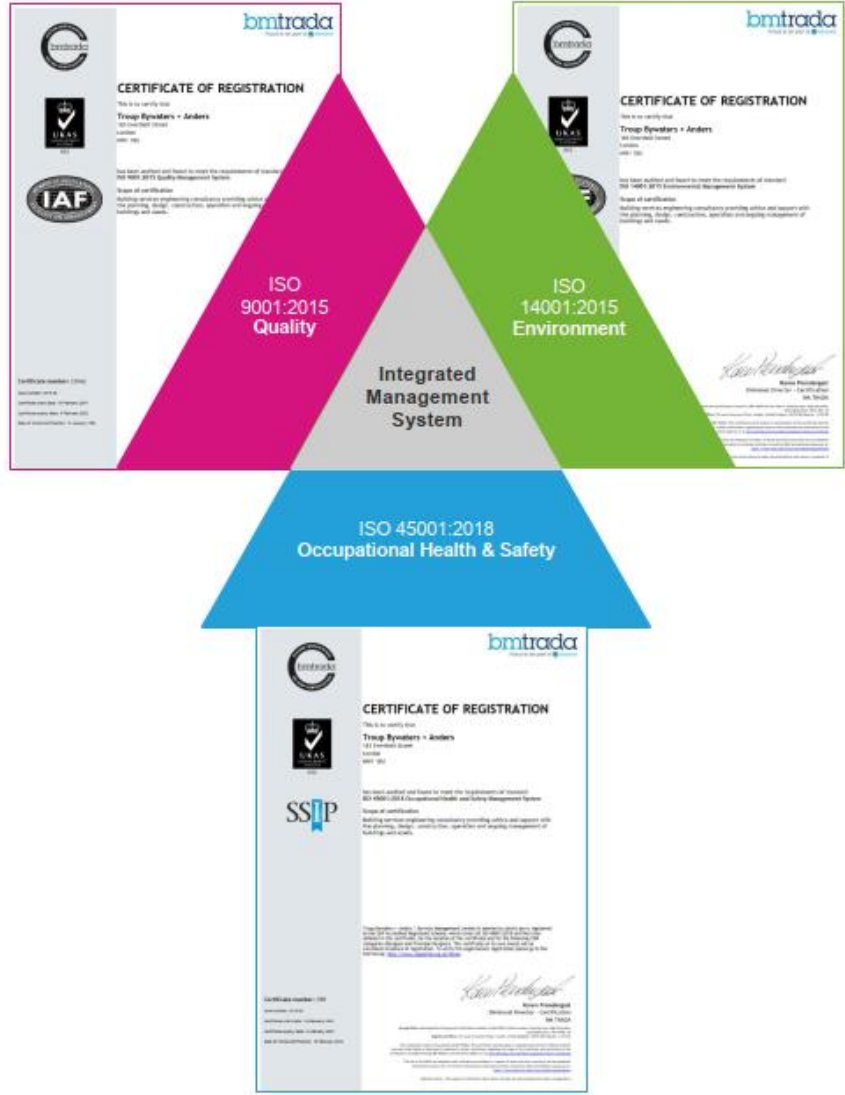
Oliver Newman

They make the difference

Growing people

Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system



Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system
- + Context of the Organisation

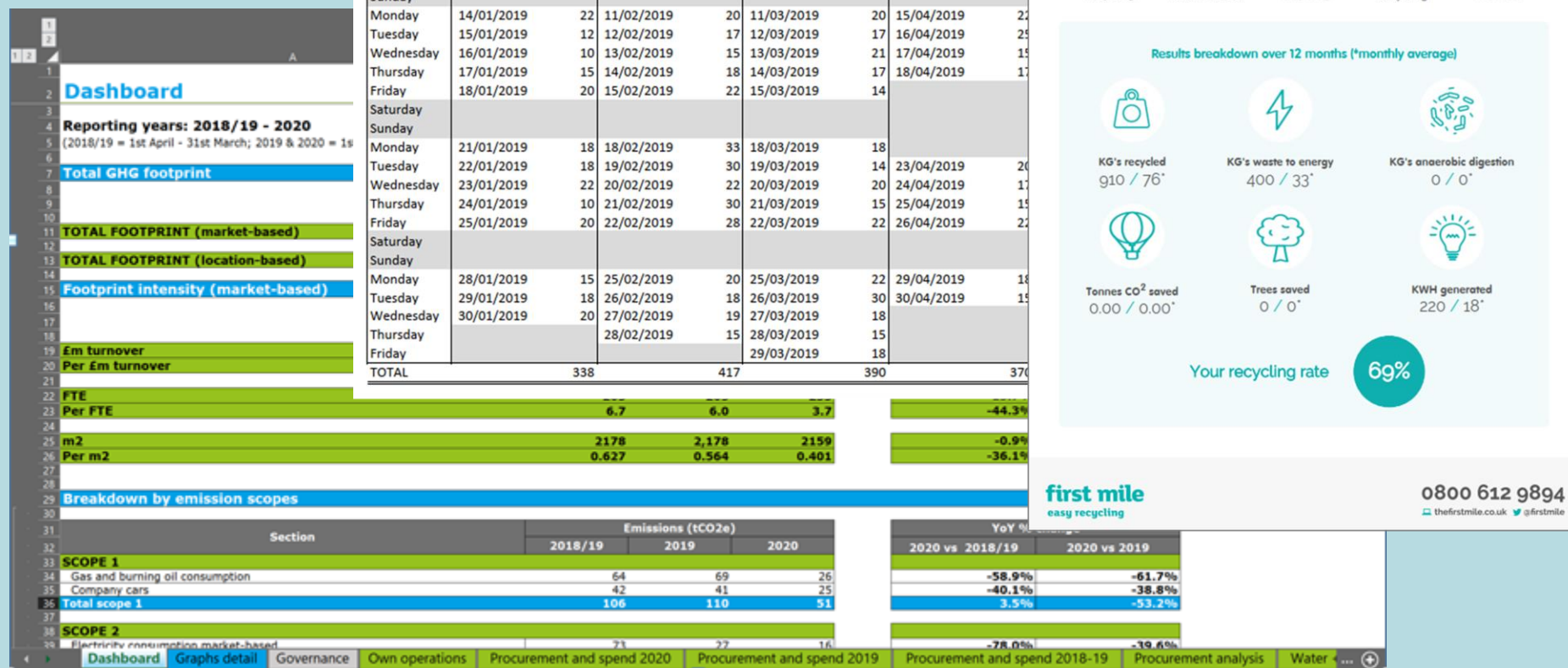
SWOT analysis
July 2021

Strengths	Weaknesses
<ul style="list-style-type: none"> • Our people, profile & standing against competitors • Profitable and stable • Partnership model • Diverse client base • UK wide reach • Development opportunities for our people • Sustainability at heart – carbon neutral and commitment to net zero • National consistency on training and process • Work and resource sharing across offices • Our whole life offering and National task team intelligence • Response to pandemic retaining staff, delivery & award winning 	<ul style="list-style-type: none"> • Potential sectors National this • Not all • Knowledge and be – we ne these? • Depth
Opportunities	Threats
<ul style="list-style-type: none"> • Maximising direct award frameworks • Smart grids and IoT • Climate change emergency awareness – reinforce pro-activeness • Decarbonisation agenda • Increased BIM usage – ensure standards are consistent across the business • Rebalancing of the UK economy towards our major regional cities • Response to pandemic as our clients' businesses' reshape across public & private sectors – new workstreams, changes in HVAC, potential focus on refurb/repurpose/efficiency • Improving /expanding whole life to take account of change in working practices 	<ul style="list-style-type: none"> • Uncertain confidence • Pace of us and v • Government • Coronavirus all 4 UK • Competition presence the indu • COVID (particular Efficient lower gr • Impact of the pandemic on education and quality of future apprentices – also extends to all staff but in particular current graduates & apprentices


Bringing buildings to life
Integrated Management System
Context of the Organisation
(addressing the requirements of
 ISO 9001:2015
 ISO 14001:2015
 ISO 45001:2018)
 January 2022

Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system
- + Context of the Organisation
- + Measure everything!



Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system
- + Context of the Organisation
- + Measure everything!
- + Use UNSDG's – maximum impact



Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system
- + Context of the Organisation
- + Measure everything!
- + Use UNSDG's – maximum impact
- + Engage with people, community, industry



Commercial Partner for Build Better Now

BUILD BETTER NOW



Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system
- + Context of the Organisation
- + Measure everything!
- + Use UNSDG's – maximum impact
- + Engage with people, community, industry





Our journey

- + Place sustainability centrally
- + Growing people
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- + Measure everything!
- + Use UNSDG's – maximum impact
- + Engage with people, community, industry



Our journey

TROUP
BYWATERS
+ ANDERS

Sustainability Week 2022
12th – 16th September

**BUILDING FOR
EVERYONE**



#BuildingforEveryone

Monday 12th September Theme: The planet	Tuesday 13th September Theme: Communities	Wednesday 14th September Theme: People	Thursday 15th September Theme: Economics	Friday 16th September Theme: Communities
Pen - Links Sustainability Week	Pen - Links Sustainability Week	Pen - Links Sustainability Week	Pen - Links Sustainability Week	Pen - Links Sustainability Week
Pen - Challenge Get involved in at least 4 activities or presentations to be in with a chance to win a prize. Submit your Connect4 card which can be found on the Sustainability Week page to sustainability@trouw.co.uk at the end of the week.	Pen - Challenge Meet-free Tuesday - why not try to reduce your meat intake and try a vegetarian or vegan recipe today.	Pen - Challenge Meet-free Tuesday - why not try to reduce your meat intake and try a vegetarian or vegan recipe today.	Pen - Challenge Meet-free Tuesday - why not try to reduce your meat intake and try a vegetarian or vegan recipe today.	Pen - Challenge Meet-free Tuesday - why not try to reduce your meat intake and try a vegetarian or vegan recipe today.
9.30am - Activity (online - All offices) We are partnered with the Durrell Wildlife Conservation Trust, an international charity headquartered at Jersey Zoo, working to save species from extinction. A small group of people will have the chance to go out to Jersey Zoo for either a volunteering day or tour towards the end of 2022/beginning of 2023, just for by TB&A. If you are interested in signing up to this, please send your name through to sustainability@trouw.co.uk and names will be pulled out of a hat.	9.30am - Activity (online - All offices) Topic: "Start your day right with a green breakfast practice guided by Mandy, designed to wake up the body and mind for the day ahead!" London - Huxley (please bring your own mat)	9.30am - Activity (online - All offices) Topic: "Start your day right with a green breakfast practice guided by Mandy, designed to wake up the body and mind for the day ahead!" London - Huxley (please bring your own mat)	9.30am - Activity (online - All offices) Topic: "Start your day right with a green breakfast practice guided by Mandy, designed to wake up the body and mind for the day ahead!" London - Huxley (please bring your own mat)	9.30am - Activity (online - All offices) Topic: "Start your day right with a green breakfast practice guided by Mandy, designed to wake up the body and mind for the day ahead!" London - Huxley (please bring your own mat)
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11.30am - Presentation (online - All offices) Presenter: Peter Anderson, Managing Partner, TB&A Topic: Introduction and Future based solutions	11.30am - Presentation (online - All offices) Presenter: Peter Anderson, Managing Partner, TB&A Topic: Introduction and Future based solutions	11.30am - Presentation (online - All offices) Presenter: Peter Anderson, Managing Partner, TB&A Topic: Introduction and Future based solutions	11.30am - Presentation (online - All offices) Presenter: Peter Anderson, Managing Partner, TB&A Topic: Introduction and Future based solutions	11.30am - Presentation (online - All offices) Presenter: Peter Anderson, Managing Partner, TB&A Topic: Introduction and Future based solutions
12pm - SDG Votes (Send through to sustainability@trouw.co.uk) Please choose the UN SDG of your choice or one you feel most passionate about (just the number) from the icons below to determine the top 3 choices across the business. From these we will choose our offering portfolio to align with the top 3 SDG votes!	12pm - SDG Votes (Send through to sustainability@trouw.co.uk) Please choose the UN SDG of your choice or one you feel most passionate about (just the number) from the icons below to determine the top 3 choices across the business. From these we will choose our offering portfolio to align with the top 3 SDG votes!	12pm - SDG Votes (Send through to sustainability@trouw.co.uk) Please choose the UN SDG of your choice or one you feel most passionate about (just the number) from the icons below to determine the top 3 choices across the business. From these we will choose our offering portfolio to align with the top 3 SDG votes!	12pm - SDG Votes (Send through to sustainability@trouw.co.uk) Please choose the UN SDG of your choice or one you feel most passionate about (just the number) from the icons below to determine the top 3 choices across the business. From these we will choose our offering portfolio to align with the top 3 SDG votes!	12pm - SDG Votes (Send through to sustainability@trouw.co.uk) Please choose the UN SDG of your choice or one you feel most passionate about (just the number) from the icons below to determine the top 3 choices across the business. From these we will choose our offering portfolio to align with the top 3 SDG votes!

Sustainability Week 2022
1 – 16th September

**BUILDING FOR
EVERYONE**



#BuildingforEveryone

Tuesday 13th September Theme: Communities	Wednesday 14th September Theme: People	Thursday 15th September Theme: Economics	Friday 16th September Theme: Communities
2pm - Pledges Daily Pledge - Pick a pledge (examples found here via The Edge) and promote this through LinkedIn or Twitter using #BuildingforEveryone or #TBASustainabilityWeek	2pm - Pledges Daily Pledge - Pick a pledge (examples found here via The Edge) and promote this through LinkedIn or Twitter using #BuildingforEveryone or #TBASustainabilityWeek	2pm - Pledges Daily Pledge - Pick a pledge (examples found here via The Edge) and promote this through LinkedIn or Twitter using #BuildingforEveryone or #TBASustainabilityWeek	2pm - Pledges Daily Pledge - Pick a pledge (examples found here via The Edge) and promote this through LinkedIn or Twitter using #BuildingforEveryone or #TBASustainabilityWeek
2.30pm - Presentation (online - All offices) Presenter: Debbie Bourne, Think & Do (Light Fantastic) Topic: Light Fantastic Scheme Condo	2.30pm - Presentation (online - All offices) Presenter: James Campbell, Partner, UK Topic: TB&A Whole Life	2.30pm - Presentation (online - All offices) Presenter: Derek Hutchings, Partner, Glasgow Topic: Euxine Golder	2.30pm - Activity (online - All offices) Raffle, Surfer, winners. Ask the kids poster competition winners, Connect 4 winner, Carbon Calculator winner
4pm - Quotes Via The Edge	4pm - Quotes Via The Edge	4pm - Quotes Via The Edge	4pm - Quotes Via The Edge
4pm - Food bank donations It's a challenging time for everyone as the we recover from the pandemic and the cost of living continues to soar. If you can, we will be setting up collection points in each office for supplies to donate to local food banks close to each office.	4.30pm - Activity Volunteer with the Sustainable Week	4pm - Challenge (online - All offices) Ask the kids poster competition ends today - submit your entries to sustainability@trouw.co.uk . Winners will be announced tomorrow!	4pm - Activity (in person - Belfast) Local food/drink tastings
4pm - Activity (in person - London) Fatty's Organic Gin / Dulwich Spirits Drinks & Food tasting	5pm - Activity (online - All offices) Fragrant Cooking Class - Sri Lankan cuisine	4.30pm - Activity (online - All offices) Sustainability Quiz	5pm - Activity (online - All offices) Disconnect & switch-off your work and home items
4pm - Activity (online - All offices) Global Generation is focused on youth education and nature engagement, with several community gardens across the Capital. If you are interested in volunteering at one of these towards the end of 2022, or the beginning of 2023, please send your name through to sustainability@trouw.co.uk	All day - Awareness - Future Leaders meeting Topic: Sustainability	5.30pm - Activity (in person - Manchester) House night with locally sourced food from a sustainably forward restaurant. Bookings	

[sustainability@trouw.co.uk](#)

All day - Seedbombs
Throw and Grow your own wildflower meadow

All week - Raffle

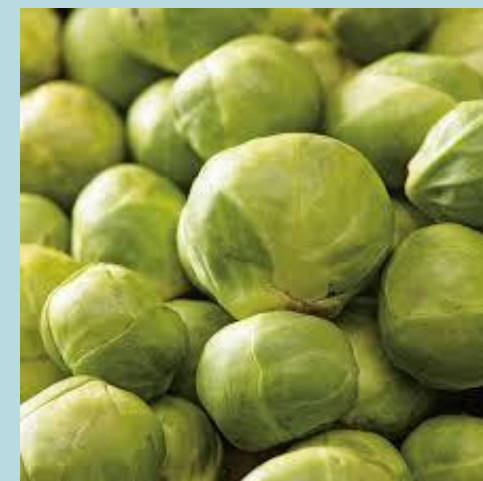
This year our chosen charity is National Energy Action (NEA), the national fuel poverty charity campaigning to ensure that everyone can afford to live in a warm and safe home. This is something shared to millions because of poor housing, low incomes, and high fuel bills. Help us to support the amazing charity by taking part in our Sustainability Week Raffle and be in with a chance of winning some great prizes! Visit [NationalEnergyAction.org.uk](#) for more information and donate via our [Sustainability Week](#) page.

#TBASustainabilityWeek
#WGBW22
#SustainabilityatHeart



Our journey

- + Place sustainability centrally
- + Growing people
- + Integrated management system
- + Context of the Organisation
- + Measure everything!
- + Use UNSDG's – maximum impact
- + Engage with people, community, industry
- + Influence behaviour



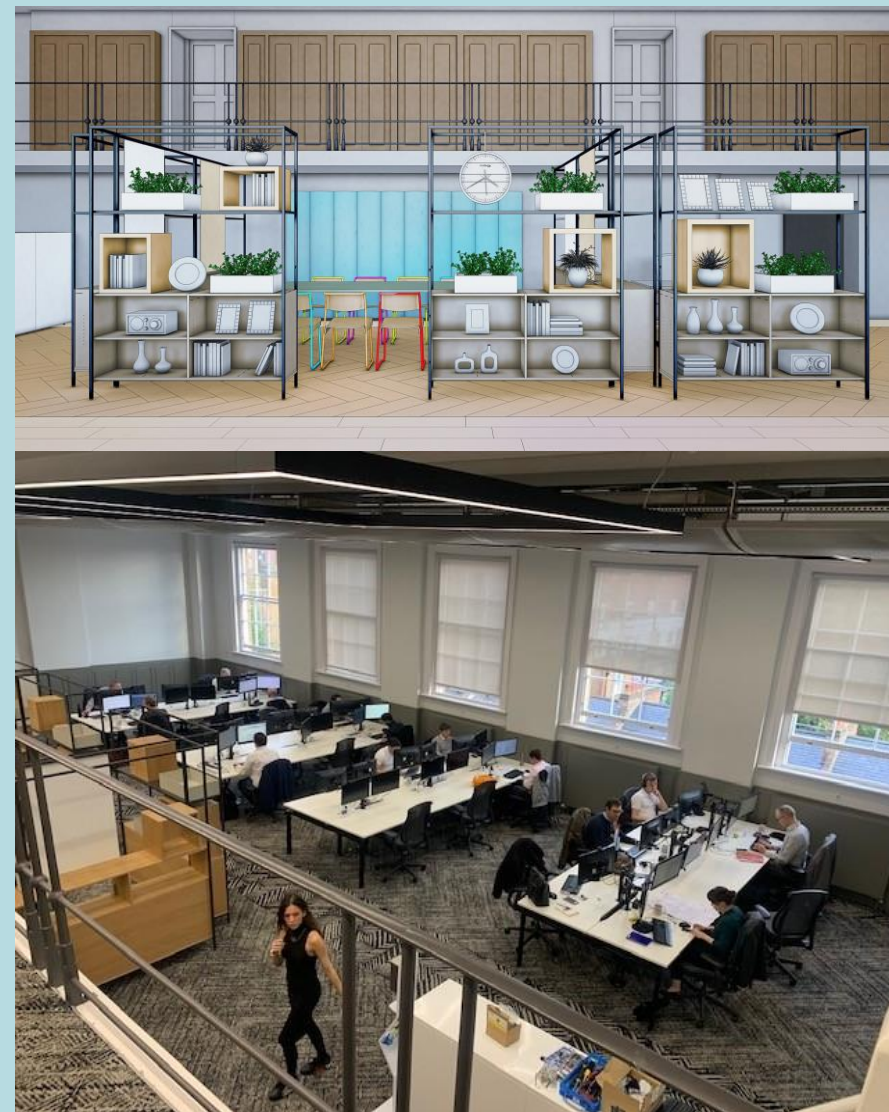
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- + Engage with people, community, industry
- + Influence behaviour
- + Drive efficiency, set policies



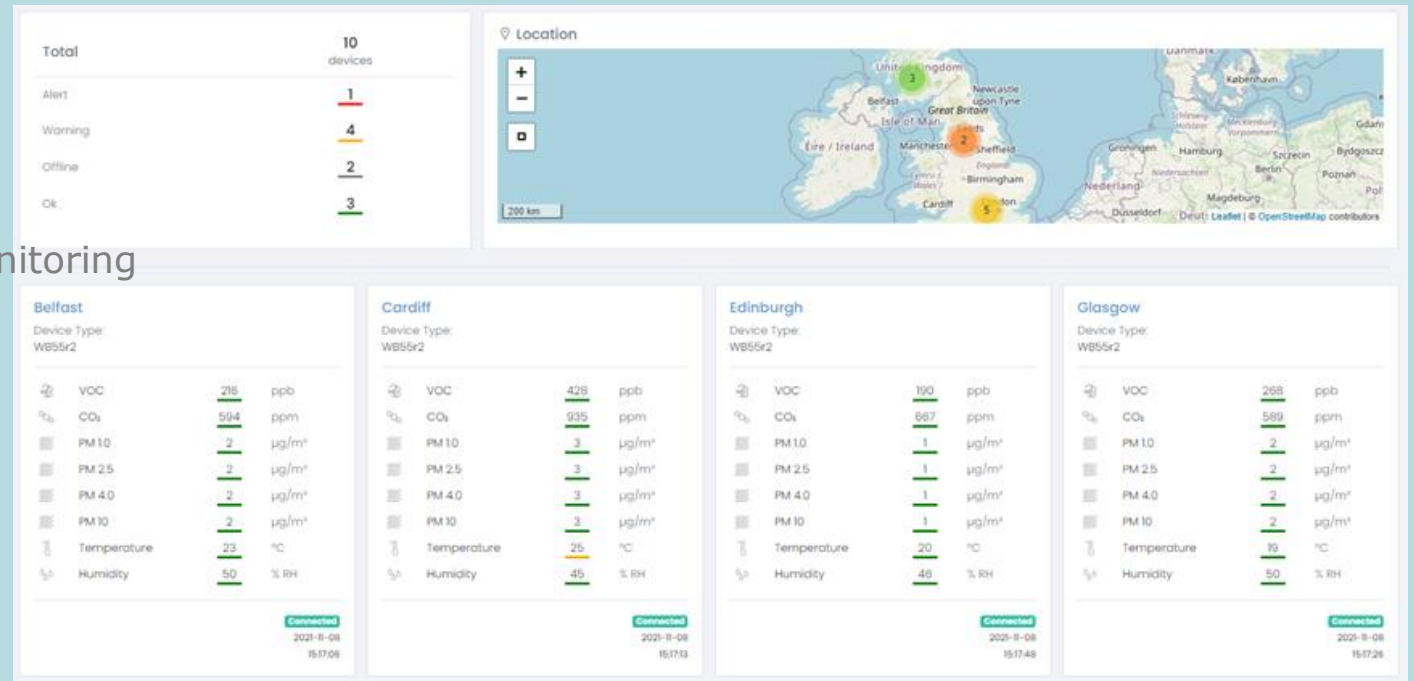
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- + Engage with people, community, industry
- + Influence behaviour
- + Drive efficiency, set policies
- + Refresh offices and source renewable energy



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- + Drive efficiency, set policies
- + Refresh offices and source renewable energy
- + Meters, electronic controls and air quality monitoring



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- + Refresh offices and source renewable energy
- + Meters, electronic controls and air quality monitoring
- + Embed offering and products



Our journey

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- + Influence behaviour
- + Drive efficiency, set policies
- + Refresh offices and source renewable energy
- + Meters, electronic controls and air quality monitoring
- + Embed offering and products
- + Establish working teams

Our journey

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- + Growing people
- + Integrated management system
- + Context of the Organisation
- + Measure everything!
- + Use UNSDG's – maximum impact
- + Engage with people, community, industry
- + Influence behaviour
- + Drive efficiency, set policies
- + Refresh offices and source renewable energy
- + Meters, electronic controls and air quality monitoring
- + Embed offering and products
- + Establish working teams
- + Develop 5 year sustainability strategy & action plan



Our journey



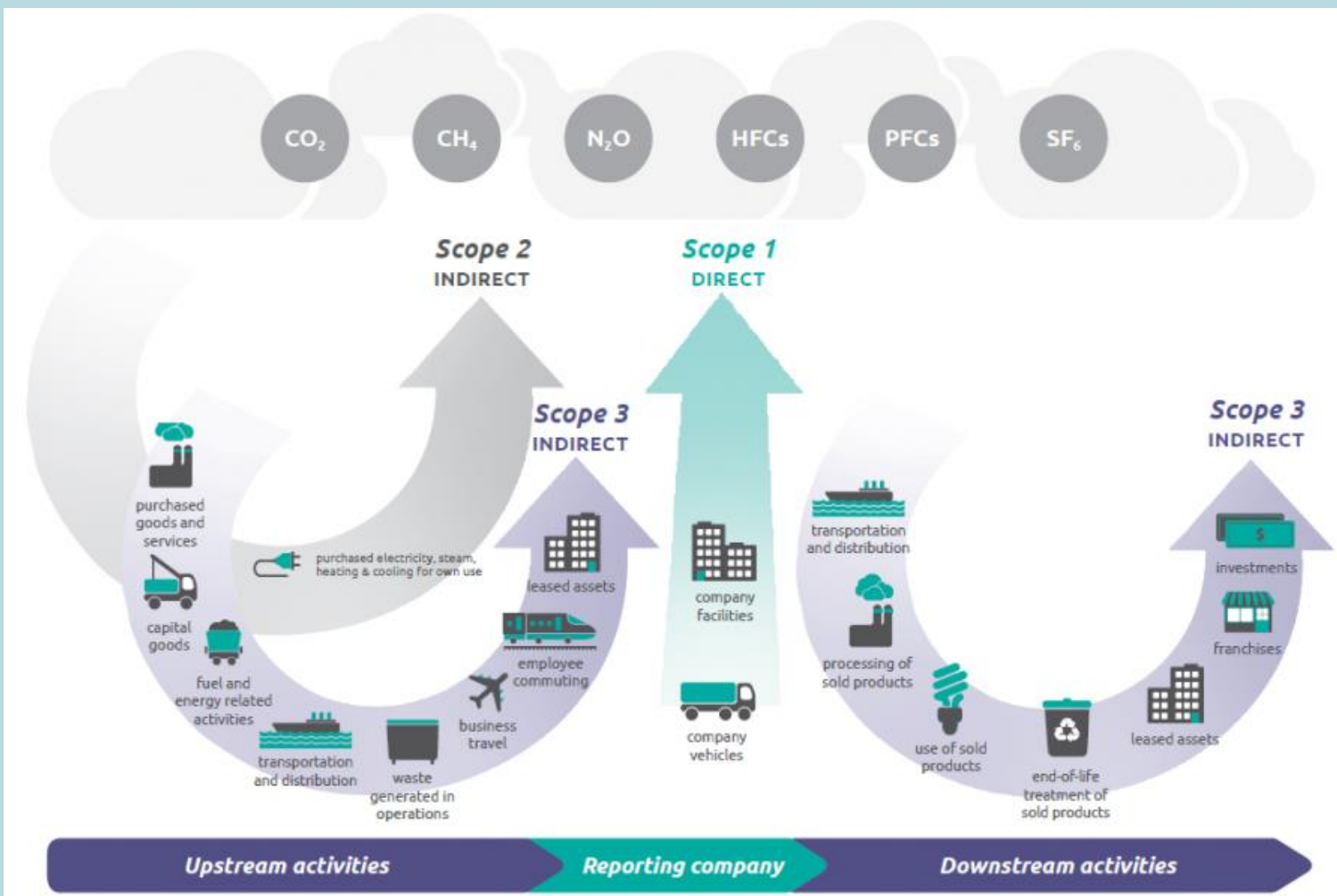
Our journey

+ Independent audit

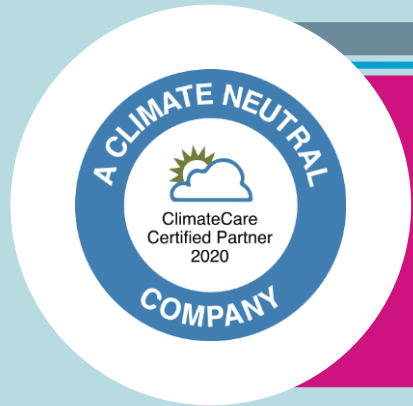


Our journey

- + Independent audit
- + Establish carbon reduction trajectory



Our journey



WORLD
GREEN
BUILDING
COUNCIL



SCIENCE
BASED
TARGETS

Scope 1
Burning fossil fuels

Scope 2
Electricity consumption

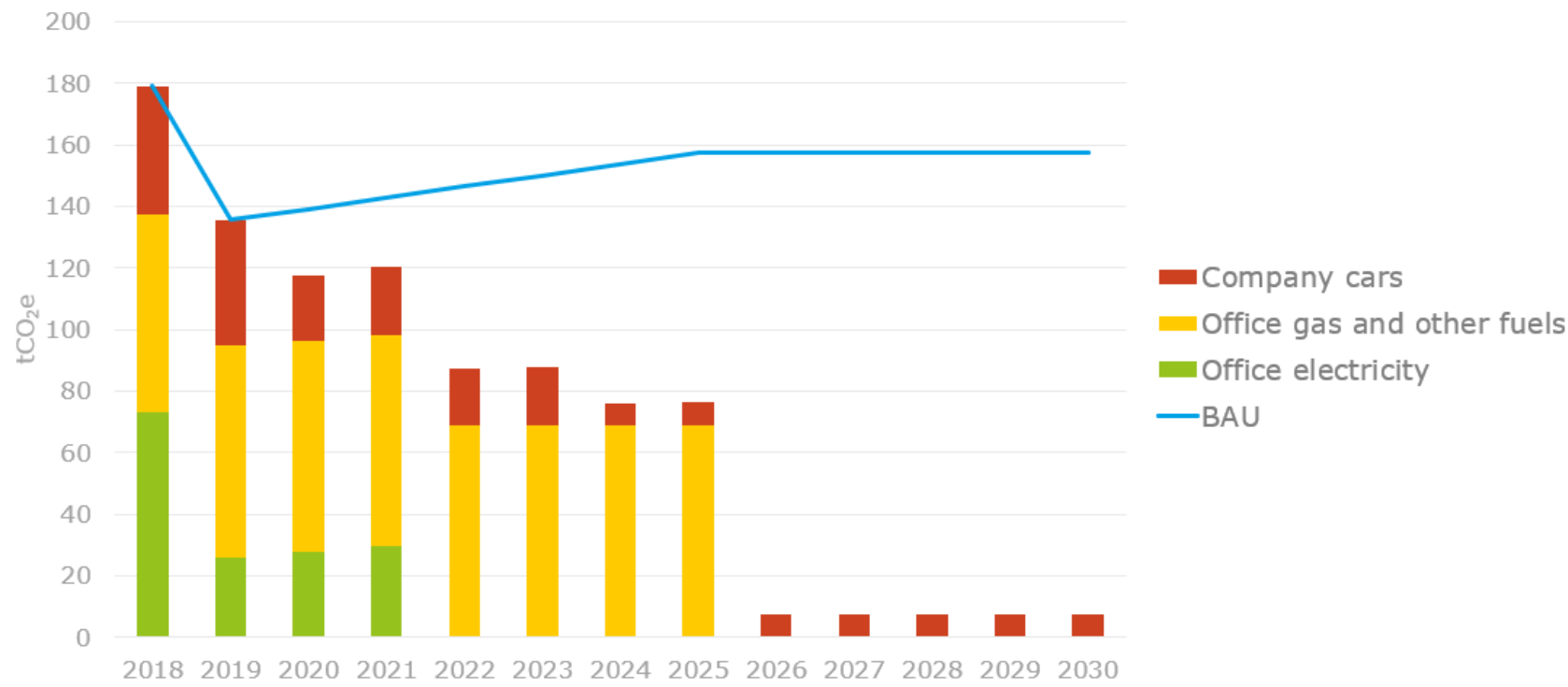
Scope 3
Emissions from up and
downstream operations

Our journey



Carbon reduction trajectory (draft)

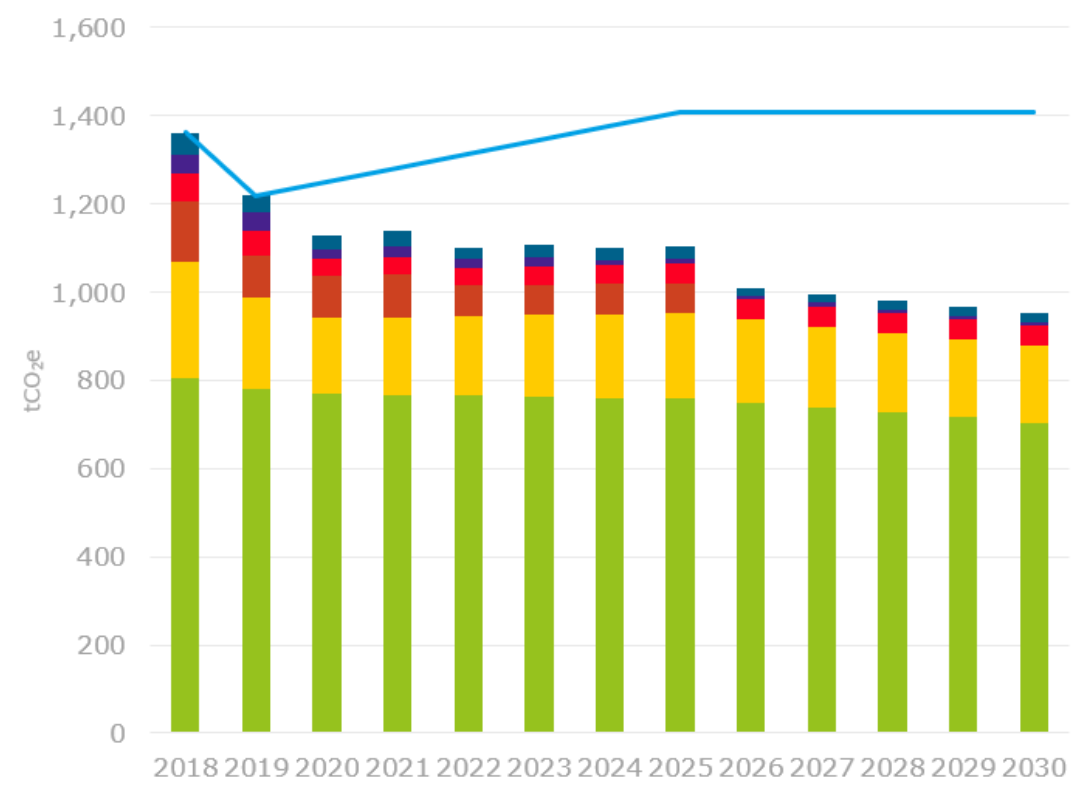
	2025	2030
Scope 1 & 2 reduction	-57%	-96%



Our journey



Carbon reduction trajectory (draft)



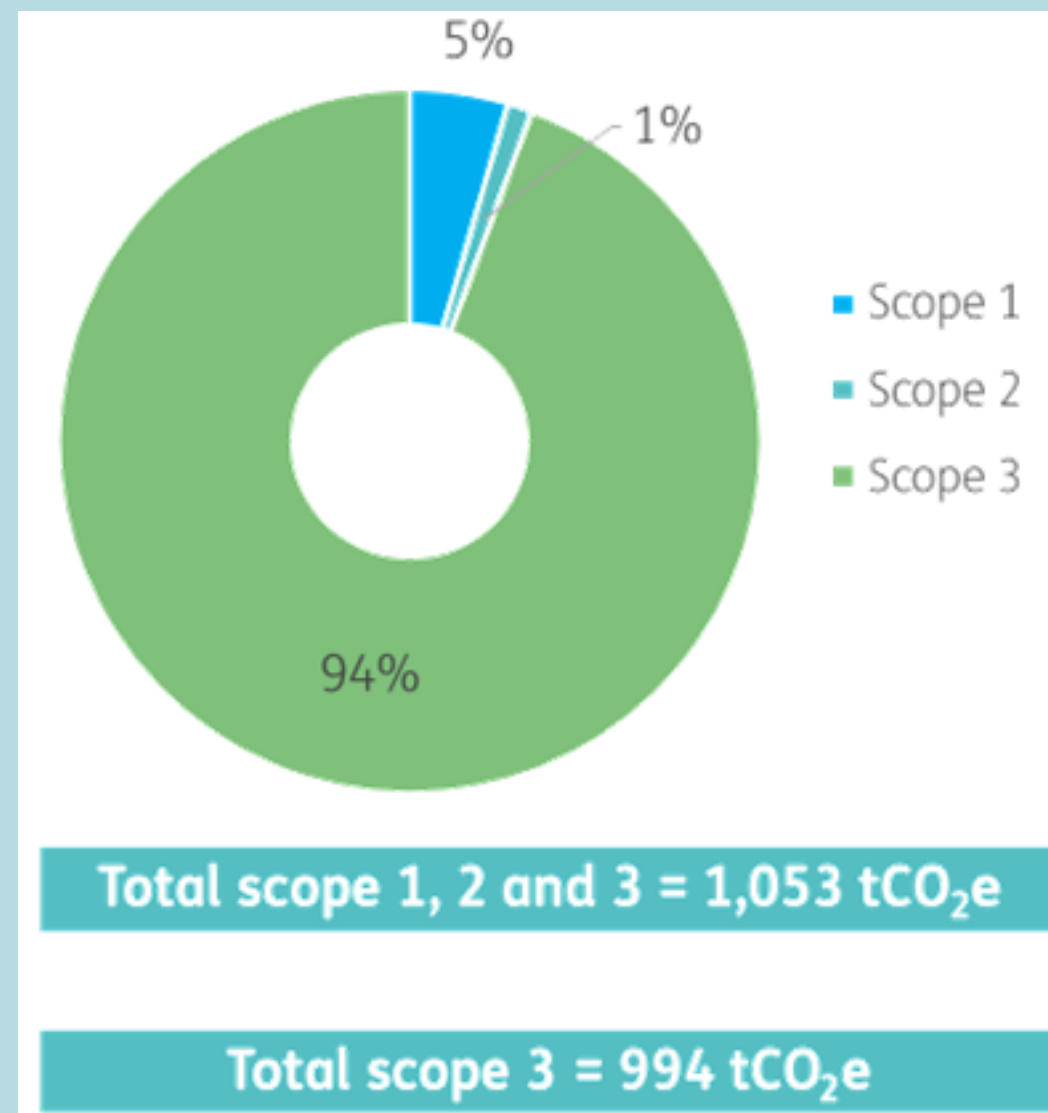
	2025	2030
Total footprint reduction	-27%	-38%

- Other
- Company cars
- Employee commuting
- Office energy
- Business travel
- Procurement and capex
- BAU

Scope 3

Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain



Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain
- + Commit





[Business](#) | [City](#) | [States & Regions](#)
TROUP BYWATERS + ANDERS
 Engineering Consultancy
 Tenant

TB+A is a socially responsible and ethical partnership providing whole-life advice for design, construction, operation and management services and roadmaps for clients to decarbonise the built environment. 'Sustainability at Heart', one of their core strategy pillars, is dedicated to reversing climate change and resource consumption, thereby protecting the environment.



WORLD GREEN BUILDING COUNCIL



- Commit**
Achieve carbon neutrality by 2020 and commit to only occupying net zero carbon operational assets by 2025.
- Disclose**
Measure and disclose energy consumption and carbon emissions (Scope 1, 2 and 3) via publicly available annual reporting.
- Act**
Engage with landlords, tenants and supply chain to incorporate energy efficiency measures, and 100% renewable energy solutions where possible. Continue to implement a carbon-reduction strategy aligned with the Commitment and SBTs.
- Verify**
Verify annual energy consumption and carbon emissions data via independent third party verification.
- Advocate**
Continue to advocate for the construction industry to transform by creating new pathways for low to zero carbon technologies and approach that present a new level for the property industry to achieve net zero emissions. Engage with suppliers to reduce upstream carbon intensity and collaborate with customers as part of a whole building approach to design, operation and management.

7 assets
 1,821 m² total floor area
 158 tCO₂e portfolio carbon emissions
 237 employees

TROUP BYWATERS + ANDERS
 a member of UK Green Building Council

CLIMATE GROUP EP100

Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain
- + Commit

Sponsorship & Volunteering

Sponsorship

- + Sponsored Uni College School – Plant hedgerow
- + Light Fantastic – energy saving measures/lightbulbs

Volunteering

- + Global Generation: Paper Gardens, Canada Water
- + Calthorpe community garden project, Kings Cross
- + Jersey Zoo
- + Pro-bono work

THINK&DO
COMMUNITY SPACE FOR CLIMATE & SOCIAL ACTION



Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain
- + Commit
- + External measurement



Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain
- + Commit
- + External measurement
- + Launch ESG Report



Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain
- + Commit
- + External measurement
- + Launch ESG Report
- + Share knowledge

TROUP
 BYWATERS
 + ANDERS

A carbon neutral Partnership

We are a carbon neutral partnership and our operations are aligned with the UN SDGs. Sustainability is at the heart of our business as we make stronger commitments and take action to be at the forefront of climate leadership. Our leaders, consultants and engineers are all experienced in delivering tailored socially and environmentally beneficial possibilities drawing on sector specific technical knowledge. We are leaders in sustainability and with our whole-life approach are ideally placed to support you on your journey to becoming a Net Zero Carbon organisation.

Leadership in responding to the climate crisis

We are committed to making a positive social impact as part of the UN Global Compact UK-SDG Advocacy Working Group, members of the UK Green Building Council and board members of the Camden Climate Change Alliance accredited with 'Team Green' and 'Carbon Champion'. By signing up to both the UK BSE Declare Climate & Biodiversity Emergency and RetroFirst, we are setting new priorities and developing better ways of working, improving the sharing of information and best practice. All with the aim of moving towards zero carbon construction in support of the government's 2050 net zero target.

LETI collaboration route to net zero

As co-authors of the Climate Emergency Design Guide produced by the London Energy Transformation Initiative (LETI), we contributed to setting guidelines for the industry on whole-life net zero carbon, and bringing this knowledge, experience and thinking to our clients' journey to net zero.

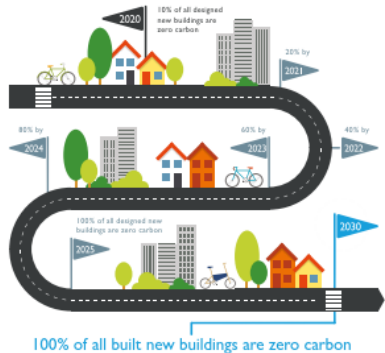


Achieving net zero

Our approach to helping you achieve net zero carbon is about understanding where you are now and establishing a roadmap that responds to all facets of your business. We will allocate a sustainability champion who will be our lead in engaging with you and be committed to delivering your journey.

Our consultation process will cover the following key areas:

- + Benchmarking
- + Behaviours
- + Efficiencies
- + Renewal plans
- + Innovation exploration



100% of all built new buildings are zero carbon

TROUP
 BYWATERS
 + ANDERS

Developing your roadmap

Whether you are only just thinking of designing your new property or whether it is an existing building, of any age, we can assist you in defining the pathway towards net zero and beyond to a regenerative positive contribution. The steps to zero carbon will be aligned with the UKGBC Net Zero Carbon Buildings Framework as illustrated below, to define your unique roadmap.



Our journey

- + Independent audit
- + Establish carbon reduction trajectory
- + Work with supply chain
- + Commit
- + External measurement
- + Launch ESG Report
- + Share knowledge
- + Positive impact investment
 - + Scope 1,2 and 3
 - + At 2018 levels
 - + Thereby investing 20x more than commitments



Rachel Hughes – Partnership Officer at Durrell Wildlife Conservation Trust

THE INVESTMENT OF £367,969 IN REWILD CARBON TO DATE WILL...

RESTORE 40 HECTARES
OF NEW ATLANTIC
FOREST, EQUIVALENT
TO 109,281 TREES

WILL SEQUESTER
14,970 TONNES CO₂e
OVER THE LIFETIME
OF THE TREES



OUR SUSTAINABILITY JOURNEY

Our purpose is to be a socially responsible and ethical Partnership that is the best at everything we do.

Over the past decade, we have continued to make stronger commitments and take action to be at the forefront of climate leadership through our work with the UK-GBC, CCCA and World Green Building Council.

In 2009, TB+A achieved ISO 14001, and with the aid of sustainability partners Bioregional, has since gone on to attain further accreditations, sign pledges and win awards for commitments to sustainability.

2016

Winner: Investors in People Excellence in CSR

3 pillars introduced:
+ Growing people
+ Sustainability at heart
+ Achieving quality and consistency

2017

Awarded CCCA Going Green and Team Green Marks of Achievement

Camden Business Sustainability Awards – Winner Best Employee Engagement Initiative

Princess Royal Training Award

2012

Creating an energy policy and monitoring

Invested and introduced a formal apprenticeship scheme, 3 apprentices joined in London. TB+A acted as lead employer

2009

Achieving ISO 14001

2010

Set up the Eco-committee to become the Sustainability Working Team in 2019

2011

Joined CCCA (Camden Climate Change Alliance) by signing Climate Commitment

2013

Joined UK Green Building Council

2015

Highly commended for 'Excellence in Sustainability' at the Camden Business Awards



Camden Climate Change Alliance



ecommittee

2021

Carbon reduction targets approved by SBTi.

Supporters of HRH The Prince of Wales's Sustainable Markets Initiative, the 'Terra Carta'

Founding signatory of the WGBC Whole Life Carbon pathway

We Invest in Apprentices – IIP Platinum

Celebrating TB+A's 5 year living wage anniversary

Achieved EcoVadis Gold status

Commercial Partner to UKGBC Build Better Now COP26 campaign and virtual pavilion

Invested in Rewilding Carbon with the Durrell Wildlife Conservation Trust to achieve Carbon Positive actions

Winners of IIP Best Pivot Scheme during the pandemic



2020

'SME Employer of the Year' at the National Apprenticeship Awards

TB+A becomes a Carbon Neutral Partnership

Joined the WGBC Net Zero Carbon Buildings Commitment

CCCA Carbon Champion 2020 and 2021

National Apprenticeship Awards winner

INVESTORS IN PEOPLE®
We invest in apprentices Platinum



THE INVESTORS IN PEOPLE®
AWARDS 2021
Winner



2018

Development of TB+A's Sustainability Strategy & Action Plan

Finalists in the 'Quality Organisation of the Year' category at the CQI International Quality Awards

Healthy Workplace Charter

2019

Transitioned from OHSAS 18001 to ISO 45001:2018

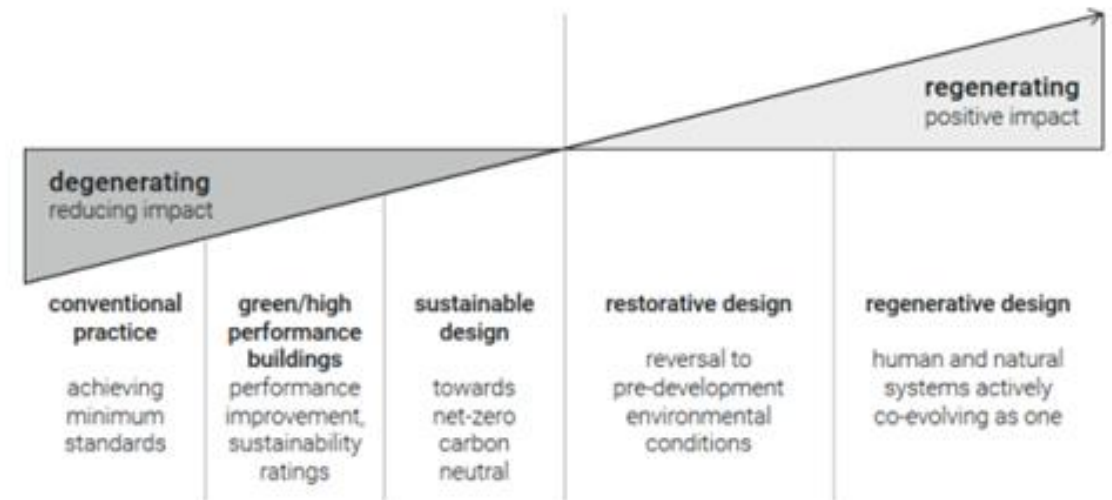
Achieved Investors in People Platinum



Restorative thinking

Nature based solutions

- + We need to learn to live within boundaries and natural ecosystems
- + We are part of nature and all of our actions are interlinked with our destiny
- + TB+A recognise our impact on the world and the need to drive towards a regenerative position



Paradigms from degenerating to regenerating impact. Source: Naboni and Havinga, 2019.

Restorative thinking

Nature based solutions

- + UK Green Building Council | Climate resilience and embracing nature: An ambition for the built environment

"Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human wellbeing and biodiversity benefits." – IUCN, 2019

Plan to restore biodiversity



Land
Protect
wild areas



Farming
Make better
for nature



Cities
Make space
for nature



Oceans
Protect marine
habitats



Water
Safeguard
lakes and rivers
for wildlife



Climate
Reduce impacts
of climate
change



Food
Plant based
diet, reduce
waste



One health
Manage whole
environments
to aid health

Restorative thinking

Nature-based solutions

- + UK Green Building Council | Climate resilience and embracing nature: An ambition for the built environment

'By 2030, all buildings and infrastructure will, throughout their lifetime, be climate resilient and maximise environmental net gains, through the prioritisation of nature-based solutions.'

A DIFFERENT FUTURE

Imagine a world where...

- Urban environments are cooled through networks of tree canopies, rather than air conditioning units
- Rainwater is managed, stored and filtered through green roofs, vegetated ditches, ponds and wetlands
- Flood defences are built using trees and wetlands rather than engineered structures

Such nature-based solutions can provide benefits to ecosystems whilst improving health and wellbeing, sequestering carbon and providing social value. They can be designed in ways which address the need for our built environments to both adapt to climate change and enhance nature for the benefit of people, planet and business.

Restorative thinking

Nature-based solutions

- + Consider the Oak tree...
- + Resilient, strong, durable....
- + Sequesters carbon...



Restorative thinking

Nature-based solutions

A mature Oak provides a habitat and food to 2300 species including:-

- + 31 mammals
- + 38 birds
- + 284 insects
- + 108 fungi
- + 716 lichens and mosses

It sustains, recycles, regenerates and lives within it's means as part of the ecosystem.



TROUP
BYWATERS
+ ANDERS

High-performing partnership
Higher performing buildings

Thank you for your time