



Pledge to Net Zero (PTNZ) Information Webinar

PRESENTER NAMES:

Dr. Sarah Ingle - ACEI Secretary General

Dr. Emma Wilcox – Chief Executive, Society for the Environment (SocEnv)

PJ Ryan - ACEI Sustainability Committee Convenor

Gemma McCarthy - ACEI Sustainability Committee

David McHugh – ACEI President



ACEI's Role

❑ Sustainability Vision

- ❑ A future shaped by socially and environmentally responsible design, where true long-term costs and benefits are considered across entire project lifecycles.

❑ Commitment to Climate Change – Leading:

- ❑ Examining our own firms' structure and operations with a view to address and improve
- ❑ Aspiring to make changes that provide examples of best practice for others to follow
- ❑ Aiming as an association that our member firms achieve carbon neutrality by 2030.

❑ Member Firm Pledge

❑ ACEI Support

ACEI Sustainability Vision

A future shaped by socially and environmentally responsible design, where true long-term costs and benefits are considered across entire project lifecycles.

The Association of Consulting Engineers of Ireland (ACEI) will continue to help shape policy and to influence consulting engineering firms and their clients to pursue well-conceived projects for the benefit of communities and the environment. Such projects will be planned and designed to go beyond the traditional focus on function, cost minimisation and programme, to also address resilience, long-term sustainability, and societal impacts.

ACEI Commitment to Climate Action

The ACEI recognises the: existential crises that humankind faces resulting from climate change; significant influence that consulting engineers have on the built environment of the future; potential for client decisions to contribute positively to future climate outcomes; crucial nature of the sustainability advice that member firms provide to clients.

As an association, and considering consulting engineers to be natural ambassadors for the cause of sustainability, ACEI and its member firms commit to:

Advocating



- Understanding climate change implications and urgency and promoting the required changes
- Designing realistic, practical, and sufficient solutions to deal with the issues
- Persuading and influencing for ambitious levels of commitment to climate action by decision makers at all levels, so that sufficient legislation and allocation of resources are mobilised
- Promoting concerted action within all facets of government and society to deal with the problems.

Innovating



- Investing in learning to understand the underlying sciences, appropriate measures, and the engineering and digital solutions to develop appropriately resilient infrastructure
- Collaborating with others in the built environment sector including contractors and suppliers
- Promoting the sharing of scientifically robust and innovative solutions within the sector through education and training programmes
- Utilising all available resources as efficiently and effectively as possible in the development and introduction of innovative climate solutions.

Implementing



- Encouraging clients to commission and plan well-conceived, resilient projects
- Developing well-designed solutions that take account of true long-term cost and benefit to society and the environment
- Promoting the upgrading of existing developments that fall short of best practice.

Leading



- Examining our own firms' structure and operations with a view to address and improve
- Aspiring to make changes that provide examples of best practice for others to follow
- Aiming as an association that our member firms achieve carbon neutrality by 2030.



ACEI aligned with PTNZ

- ☐ ACEI → Pledge To Net Zero → Race To Zero
- ☐ Pledge to Net Zero is an approved partner of UN's Race to Zero
- ☐ Member firms can use in tenders to demonstrate commitment / action

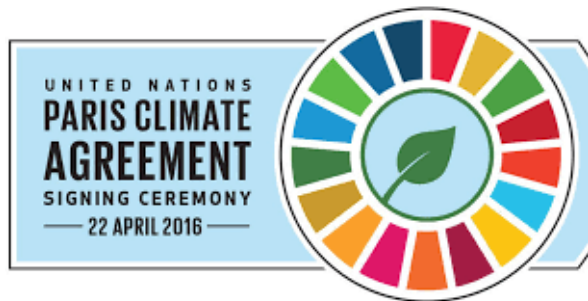
About Pledge to Net Zero

- ❑ Making environmental services sector a leader for action on the transition to a Net Zero carbon economy
- ❑ Working in partnership to ensure maximisation of results
- ❑ Championing environmental professionalism



Agenda

1. Context
2. Process
3. Case Studies
4. Lessons Learned
5. Q&A



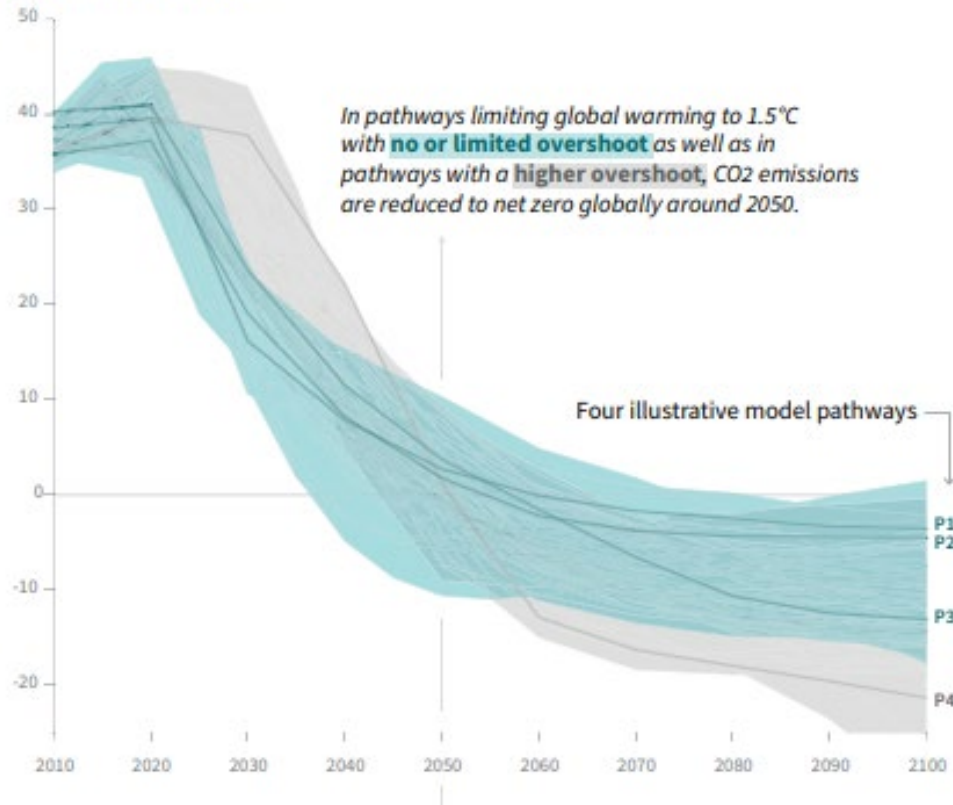
Context

- ☐ Paris Climate Agreement 2016
- ☐ IPCC Special Report on Global Warming of 1.5°C, October 2018
- ☐ EU 'Fit for 55' Package 2021
- ☐ Ireland's Climate Action Bill
- ☐ EU Taxonomy
- ☐ Climate Action Plan 2021

Net Zero

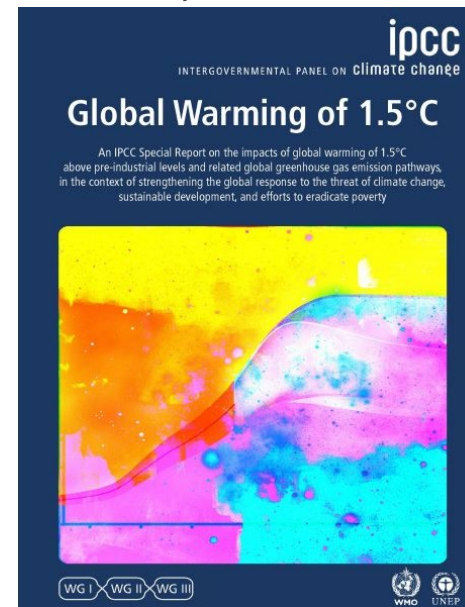
Global total net CO₂ emissions

Billion tonnes of CO₂/yr



□ “In pathways limiting global warming to 1.5°C....CO₂ emissions are reduced to net zero globally around 2050”

□ IPCC Special Report on Global Warming of 1.5°C, October 2018



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Net Zero Definition (Race to Zero)

<https://racetozero.unfccc.int/wp-content/uploads/2021/04/Race-to-Zero-Lexicon.pdf>

Referring to the world as a whole, the IPCC defines net zero as: When anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period.

Race to Zero considers individual actors to have reached a state of net zero when: An actor reduces its emissions following **science-based pathways**, with any remaining GHG emissions attributable to that actor being fully neutralized by **like-for-like removals** (e.g. permanent removals for fossil carbon emissions) **exclusively** claimed by that actor, either within the value chain or through purchase of valid offset credits.

Net Zero Definition (SBTi)

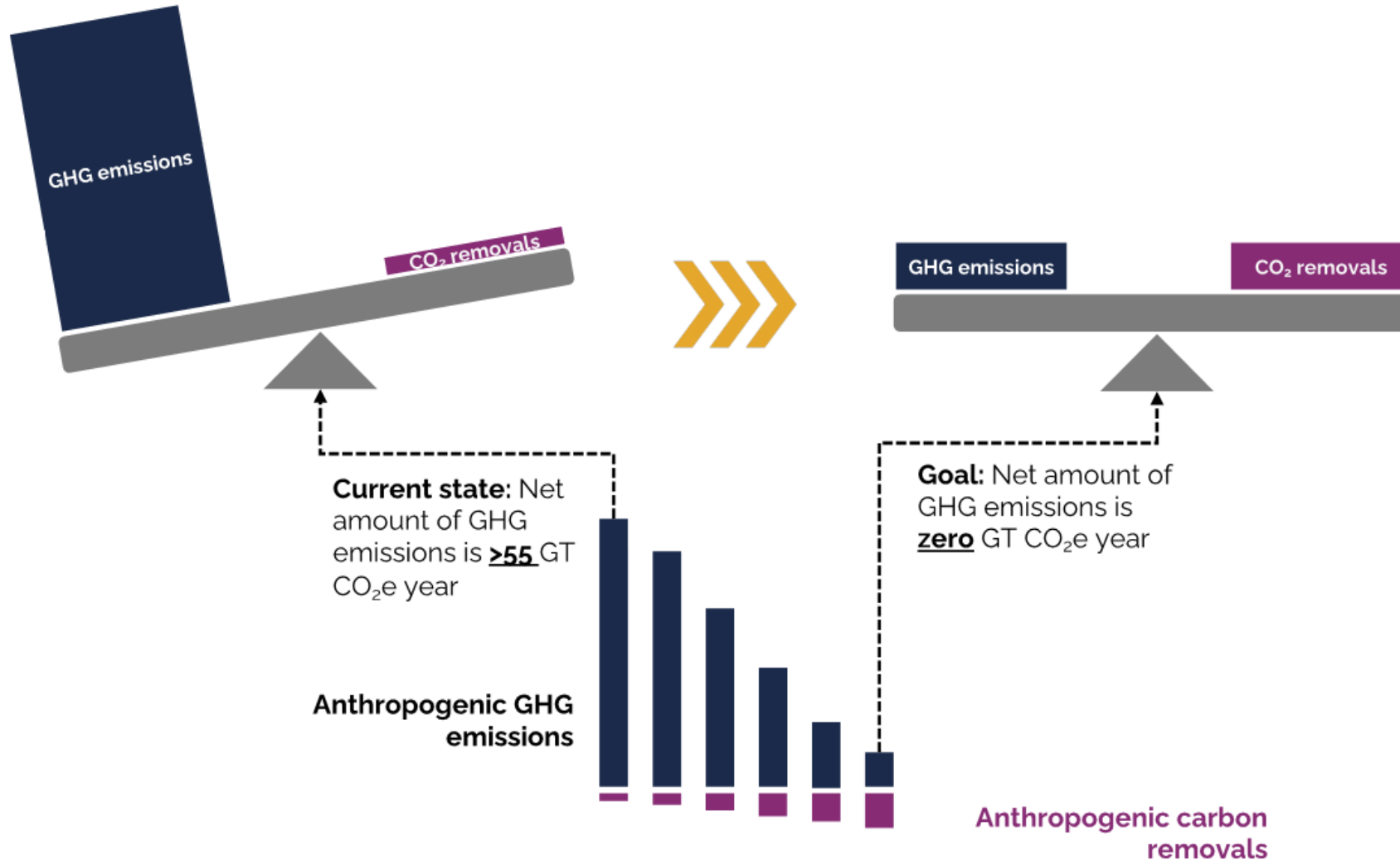
SBTi - Setting corporate net-zero targets aligned with meeting societal climate goals means

(1) achieving a scale of value chain emissions reductions consistent with the depth of abatement at the point of reaching global net-zero in 1.5°C pathways and

(2) neutralizing the impact of any residual emissions by permanently removing an equivalent volume of CO₂.

What does Net Zero mean?

Understanding net zero at a global level



To limit global warming to 1.5°C, we must reach net zero carbon emissions **no later than 2050**

Source: SBTi Net Zero launch presentation

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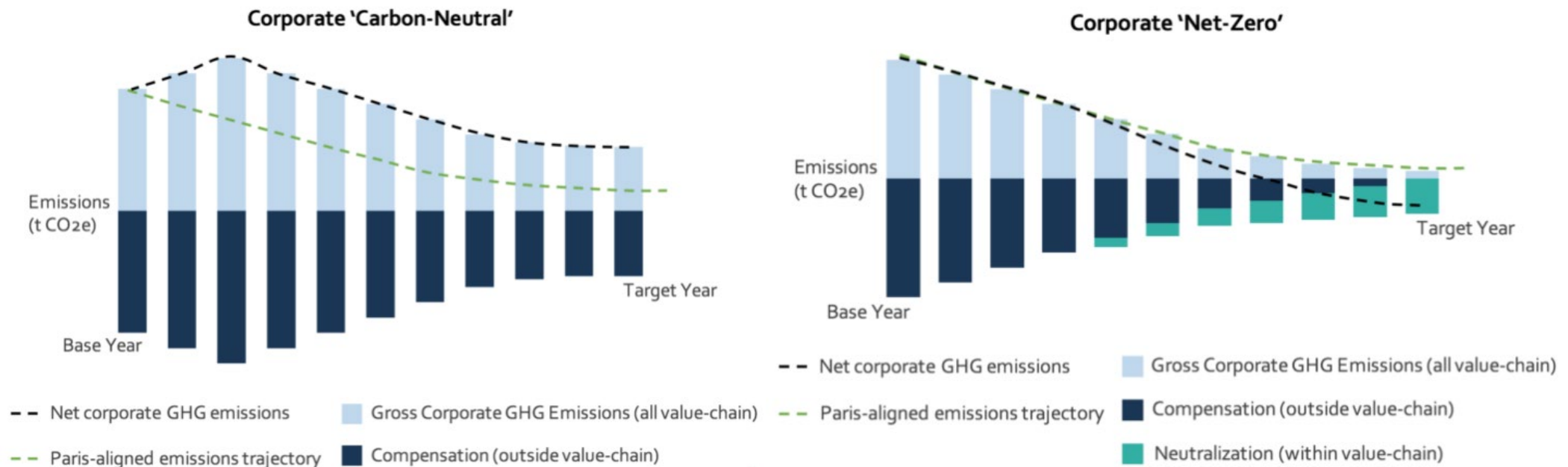
The Science behind aiming for 1.5°C

	1.5°C	2.0°C	2.0°C impacts
Global population exposed to severe heat at least once every 5 years	14%	37%	2.6x worse
Number of ice-free arctic summers	At least 1 every 100 years	At least 1 every 10 years	10x worse
Further decline in coral reefs	70-90%	99%	Up to 29% worse
Decline in marine fisheries	1.5M tonnes	3M tonnes	2x worse

Despite understanding the severity of climate change, current policies put us on track for between 2.7 – 3.1°C

Source: SBTi Net Zero launch presentation

Carbon Neutral V Net Zero



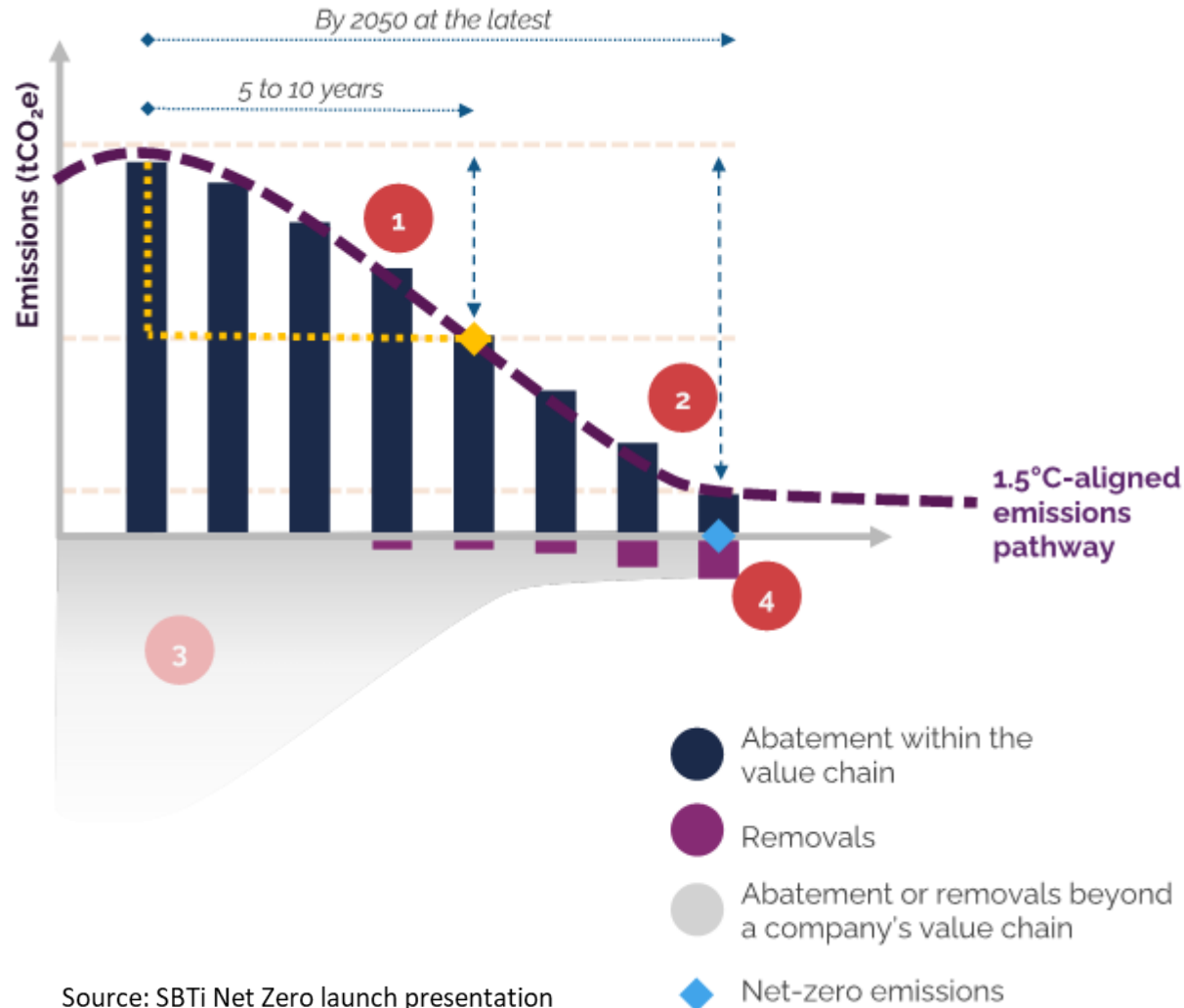
SBTi – Net Zero Standard

- ❑ Launched 28th October 2021
- ❑ More 'Zero' and less 'Net'
- ❑ In summary, science-based corporate net-zero targets will require:
 - ❑ Emissions reductions in line with a global temperature increase of 1.5°C before 2050
 - ❑ Near-term targets and rapid action to reduce emissions over 5-10 years in line with 1.5°C
 - ❑ Long-term deep decarbonization of 90-95% across all scopes before 2050
 - ❑ A limited dependance on carbon removals to neutralize emissions that cannot yet be eliminated (5-10%)
 - ❑ External verification of corporate net-zero targets and annual progress reporting



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SBTi – Net Zero Standard – 4 key elements



Source: SBTi Net Zero launch presentation

1 To set near-term science-based targets:
5-10 year emission reduction targets in line with 1.5°C pathways

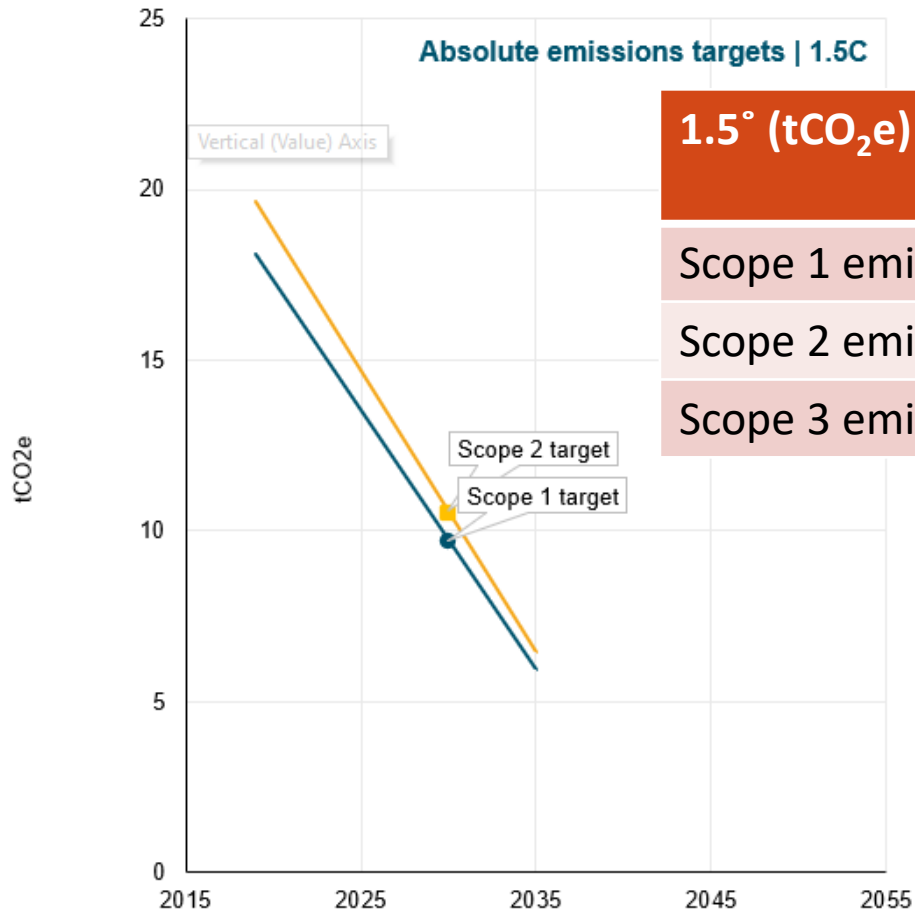
2 To set long-term science-based targets:
Target to reduce emissions to a residual level in line with 1.5°C scenarios by no later than 2050

Beyond value chain mitigation:
In the transition to net-zero, companies should take action to mitigate emissions beyond their value chains. For example, purchasing high-quality, jurisdictional REDD+ credits or investing in direct air capture (DAC) and geologic storage

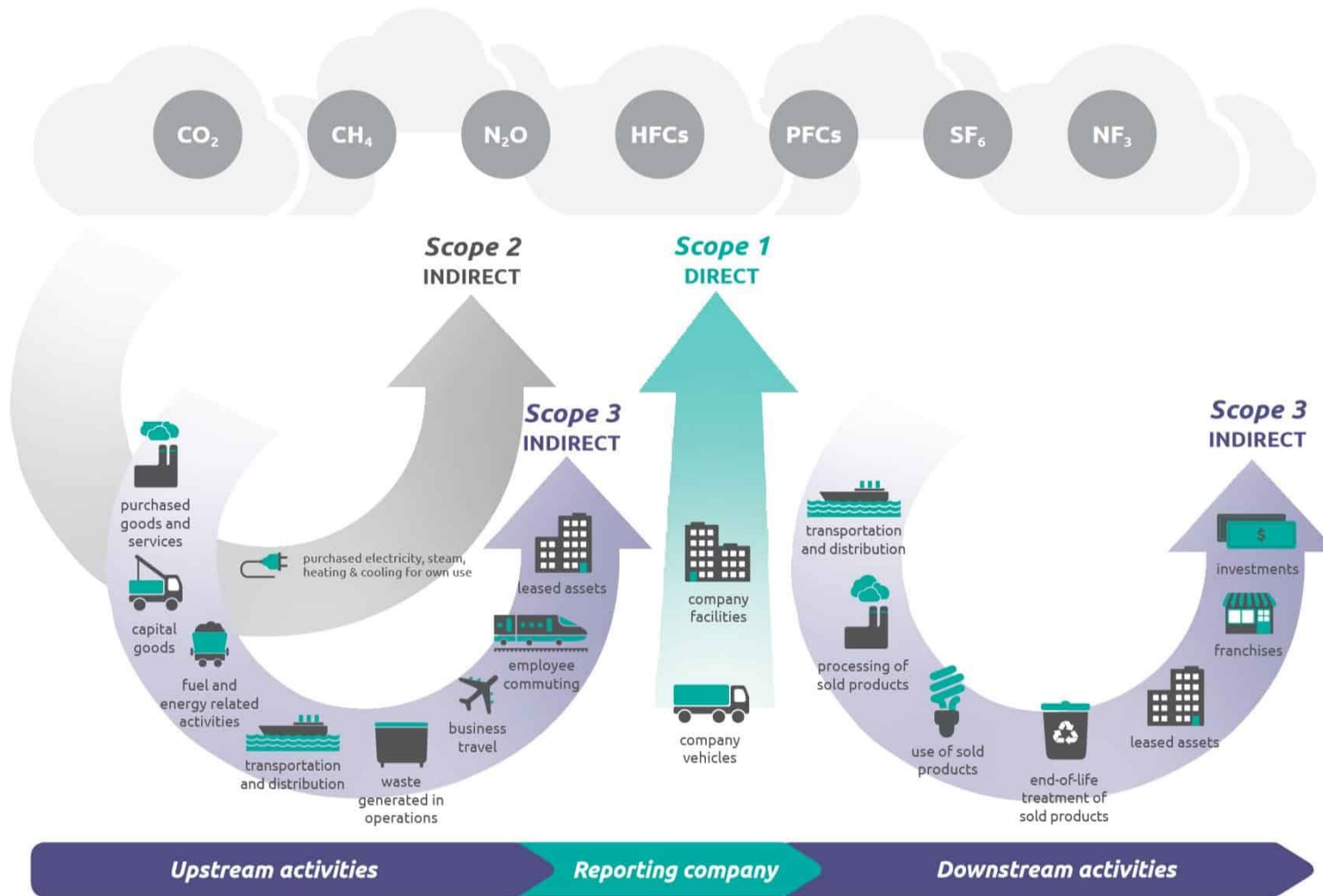
4 Neutralization of residual emissions:
GHGs released into the atmosphere when the company has achieved their long-term SBT must be counterbalanced through the permanent removal and storage of carbon from the atmosphere

Required Recommended

What does it look like?



1.5° (tCO ₂ e)	Base Year (2019)	Target Year (2030)	% Reduction
Scope 1 emissions	18	10	46.2%
Scope 2 emissions	20	11	46.2%
Scope 3 emissions	42.2	19.2	54.6%



Scope 1, 2 & 3 GHG Emissions

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1

2

3

SET A SCIENCE BASED GREENHOUSE GAS TARGET

including 95% of total scope 1 and 2 emissions

Including at least two thirds of total scope 3 emissions

Aiming for a linear 4.2% annual reduction in scope 1 and 2 emissions over the target period.

Aiming for at least a linear 4.2% annual reduction of scope 3 emissions over the target period

PUBLICLY REPORT PROGRESS EACH YEAR

PUBLISH ONE PIECE OF THOUGHT LEADERSHIP EACH YEAR

Pledge to Net Zero: Three Commitments



Register Commitment
– Make the Pledge



Set Inventory
Boundary



Develop a Baseline



Setting a Target



Reporting



Advancing the field



Assurance / Peer
review

Process: Making the Pledge

PLEDGING ORGANISATION

Organisation name



PLEDGE CONTACT

Details of the main point of contact for the organisation relating to *Pledge to Net Zero*.

Full name

Job title

Email address

Contact number

ENDORSEMENT

Details of a member of your organisation who will be endorsing the *Pledge to Net Zero* commitment. This person should hold either an executive team or board member level position

Full name

Job title

PLEDGE

☐

I confirm that the above stated organisation would like to Pledge to Net Zero

Submit pledge >

Step 1: Register Commitment

- ☐ Register your commitment via the website
 - ☐ <https://acei.ie/pledge-to-net-zero/acei-member-net-zero-commitment>
 - ☐ www.pledgetonetzero.org
- ☐ This includes identifying a member of your organisation who will be endorsing the commitment.
 - ☐ This person should hold either an executive team or board member level position.

Step 2: Set Inventory Boundary

Organisational Boundaries

- Define all operations that constitute the 'company'
 - For organisations who own 100% of their operations, boundaries will be clear and this step will therefore not be necessary.
 - If operations are not 100% owned, it is recommended that signatories take an operational control approach. This means any operations that the company has authority to implement policies for, are considered to constitute part of the company. For example, leased buildings and vehicles.



Step 2: Set Inventory Boundary

Operational Boundaries

- ❑ Identify the direct and indirect emissions which will be included within accounting and reporting
 - ❑ Activities which account for 95% of combined total scope 1 and 2 emissions must be included within the target.
 - ❑ Scope 3 activities must be chosen so that over 2/3 of total scope 3 emissions are accounted for within the target. A high scope 3 screening inventory should therefore be carried out in order to decide which categories to include.
 - ❑ For more information on scope 3 accounting (including screening) please refer to guidance for accounting and setting a target.

Step 3: Develop a Baseline

Choose a base year – for which the emissions baseline is developed

- ☐ This should be the most recent year for which a full set of data is available and consistent across all targets set by the company (e.g. calendar or financial year).
- ☐ If a single recent representative year is not available, then average emissions data over consecutive years can be used (e.g. 2018-2020)
- ☐ The base year should promote action that hasn't already been accomplished to promote forward looking ambition

Step 3: Develop a Baseline

Account for Emissions

- ❑ Calculate emissions for the chosen base year within the inventory boundaries
- ❑ A separate guide outlining how to calculate a carbon footprint for a typical consultancy, including worked examples, is provided as 'Guidance for Accounting and Reporting'

Step 4: Set a Target

Choose a Target Year

A long-term 2050 target– encourages planning to manage long term risks and opportunities from a 2017-2020 base year.

A mid-term target (optional) which covers a minimum of 5 and a maximum of 15 years – increases ability to identify immediate inefficiencies and opportunities

Scope 1 & 2 Targets

- All new signatories from October 2021 must aim for a 1.5°C trajectory - implies a linear 4.2% annual linear reduction in scope 1 and 2 emissions over the target period

Scope 3

- Must aim for at least a 2°C trajectory - implies a minimum 1.23% annual linear reduction.
- It is encouraged for signatories to pursue greater scope 3 ambition with targets which are consistent with a well below 2°C (2.5% linear reduction) or a 1.5°C trajectory (4.2% linear reduction).

Step 5: Reporting

All signatories will need to publicly report greenhouse gas emissions and progress against their interim and long term targets each year

Publicly report GHG emissions

- ☐ This can be done through any public channel, including the reporting organisations website or annual report
- ☐ Reporting through a trusted platform which feeds into the UNFCCC's Global Climate Action Portal is recommended. These include ICLEI, CDP and others

Step 6: Advancing the field

In order to support the transition to a net zero carbon economy signatories are required to carry out one of the following

Publish research around thought-leadership

- ☐ publish one piece per year
- ☐ related to the practical steps necessary for delivering science-based targets
- ☐ intended to support the organisations own thinking in this area and be an opportunity for active engagement with stakeholders to encourage a broader uptake of science-based targets

Support smaller consultancies

- ☐ this assistance can be related to target setting, carbon reporting and research development

Step 7: Assurance

In order to ensure commitments are credible and the pledge remains robust, all targets, GHG reports and research/thought leadership pieces shall be submitted to the administrator within the timelines specified below. In addition, signatories will need to include a statement of assurance, provided here below, to be signed by the endorser identified in Step 1.

I, endorser name, confirm that the data contained in this report for company name, is to the best of my knowledge an accurate representation of our performance as of date. The data in this report covers the period from starting date to end date inclusive, and has been produced in accordance with the guidance issued by the Pledge to Net Zero.

Signatories may additionally choose to have targets and reports externally verified by a third party but this is not a requirement of this commitment.

Timelines

Make Pledge by 31st December 2021

Submit first science-based target 15th May 2022

Submit between 6th November 2022 and 31st January 2023:

- carbon footprint
- progress against target
- first publish article/ evidence of mentoring and support

Pledging Windows

- 31st December 2021
- June 2022
- December 2022

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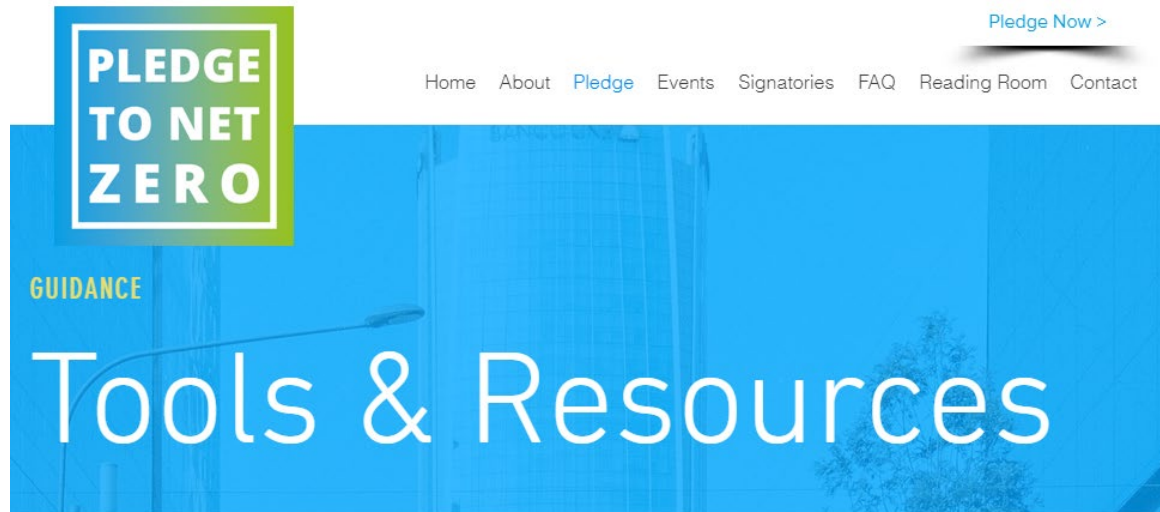
Lessons Learned from UK

- ❑ Get Senior Management buy-in / sign-off
- ❑ Reductions are 'absolute'
- ❑ Screen your Scope 3 emissions early
- ❑ Don't let perfect get in the way of good

Lessons Learned from UK

- ☐ Energy Audits
- ☐ Green memoranda with landlords / Green Leases
- ☐ Certified renewable electricity / Green Gas / Biofuel
- ☐ New office selection
- ☐ Cutting down air travel
- ☐ Addressing car miles & move to e-mobility
- ☐ Working from Home Guide / allowance for renovation
- ☐ Assess use of fossil fuels / favor heat pumps
- ☐ Travel Planning Tool
- ☐ Virtual Consultation Space

PTNZ Website



To support your organisation in pledging to become Net Zero, a list of some **free** tools and resources to help guide you are included below.

If you require any further guidance, please feel free to get in contact with our team at pledgetonetzero@wsp.com.

Pledge to Net Zero Detailed Guidance:

- [General Guidance for Signatories](#)
- [Guidance for Accounting and Reporting](#)
- [Best Practice for Microbusinesses](#)
- [Race to Zero Guidance](#)

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Mott MacDonald

10 steps to becoming carbon neutral

1

Lead from the top and communicate your plan

2

Invest in staff engagement

3

Establish your carbon baseline

4

Seek accreditation

5

Drive down emissions and empower employees

6

Collaborate

7

Use digital technology

8

Offset

9

Keep cutting

10

Set science-based targets

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Next Steps

Pledge to Net Zero

Welcome to ACEI's *Pledge to Net Zero* Commitment



The latest IPCC report clearly demonstrates that urgent action is required in order to keep global warming due to greenhouse gas (GHG) emissions to less than 1.5°C. As a sector, one of Consulting Engineering's core roles is to advise clients to manage and deliver on environmental challenges and signing up to Pledge to Net Zero is a clear way for our member firms to show leadership in this area.

By registering for this commitment, ACEI consulting engineering practices will demonstrate their actions as leaders in the field, making a real difference within their own operations, as well as continuing to provide world class advice on sustainability and environmental concerns to clients.

To help firms on the pathway to net zero to understand the benefits of involvement in this pledge, a webinar is being arranged. Please join us at 2pm on 9 November to start your journey to Net Zero, by registering for the webinar [HERE](#).

During the webinar ACEI's commitment to the pledge will be launched by members of the ACEI Sustainability Committee and others.

For any comments or questions about the pledge or the webinar you can email:
netzero@acei.ie

Click [HERE](#) to sign up to the pledge and start your journey to Net Zero.

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