How to achieve our Net Zero Goals?

Practical workshop for social enterprises, NGOs and values-led small businesses.

Anne Miller 18 November 2021

https://annemiller.uk/

Agenda

Understanding your carbon emissions

- How to get started?

Setting and communicating your target

- What useful frameworks are there?

Understanding “offsetting”?

- How can we avoid greenwash?

Imagining the Future

- How can we slash our emissions?

How can we help each other?

Why decarbonise?

Cutting costs and increasing profits

Costs can be reduced through measures such as introducing energy management practices, installing smart meters, energy-efficient lighting and heating systems, re-designing products that require fewer inputs without sacrificing utility, reducing volume of packaging and switching to local suppliers to decrease shipping distances, switching to recycled materials, and reusing waste products for other purposes or by selling it onto other companies.

Larger companies expecting their suppliers to take action

SMEs need to engage in this process to avoid missing out on future contracts and growth opportunities, as the wider supply chain increasingly demand low carbon products and services, being able to respond to this demand will give your company a competitive advantage.

Customer expectation

Customers expect companies to make ethical decisions on their behalf, and "going green" can attract new customers, business partners and talent.

Opening new markets

Offering innovative "green" products, services or business models may open low carbon business opportunities.

Enhancing reputation

Cutting carbon emissions and helping to combat climate change demonstrates a degree of corporate social responsibility to stakeholders.

Moral imperative

Business imperative.

Read more at the Carbon Trust's excellent resource for SMEs https://www.carbontrust.com/resources/the-journey-to-net-zero-for-smes

Understanding your Carbon Emissions

How to get started?

1. Measure and declare the emissions from your own operations (scope 1 and 2)
2. Set and commit to a “Science Based Target” to reduce them
3. Start reducing your emissions

To go further

1. Include key emissions from your value chain (Scope 3)
2. Consider paying voluntary “compensation”.

Understanding your scope 1, 2 and 3 emissions

Scope 3 can be 90% of the total

Scope 1

Direct emissions from <u>fuel</u> eg

Gas for heating

Fuel for company vehicles

Process heat for manufacturing

Fugitive emissions (eg methane, refrigerants)

Scope 2

Indirect emissions from purchased energy, eg

Purchased electricity

Purchased heat or steam

Your Organisation: you have control

Scope 3

Indirect emissions in your whole value chain, eg

Purchased goods and services

Transportation and distribution

Business travel

Employee commuting

Use of sold products

Investments

Your Value Chain: You have influence

Green electricity tariffs (Scope 2)

Beware: “Green” doesn’t necessarily mean zero carbon

- **Best:** directly generate, store and use your own renewables, without selling REGOs
- Power Purchase Agreement with generator.
- Green tariff, 100% based on Power Purchase Agreements (eg Good Energy)
- Green tariff based on REGO purchases
- **Worst:** general electricity tariff (especially at peak times)

https://www.ofgem.gov.uk/environmental-and-social-schemes/renewable-energy-guarantees-origin-rego
https://www.uswitch.com/gas-electricity/green-energy/green-accreditation/
https://ghgprotocol.org/scope_2_guidance

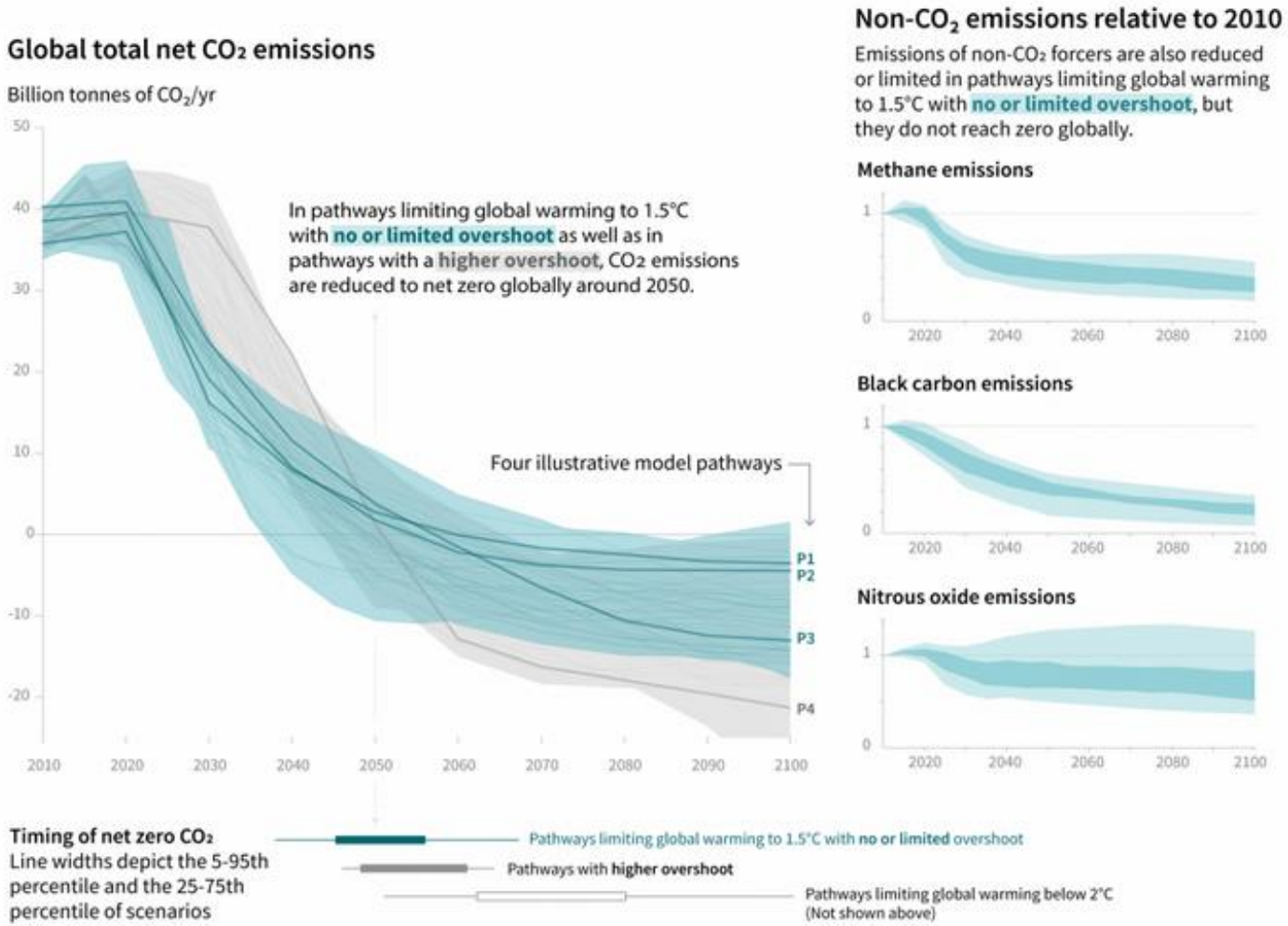
Any questions?

Setting and communicating your target

Science Based Target Initiative (SBTi)

https://sciencebasedtargets.org/

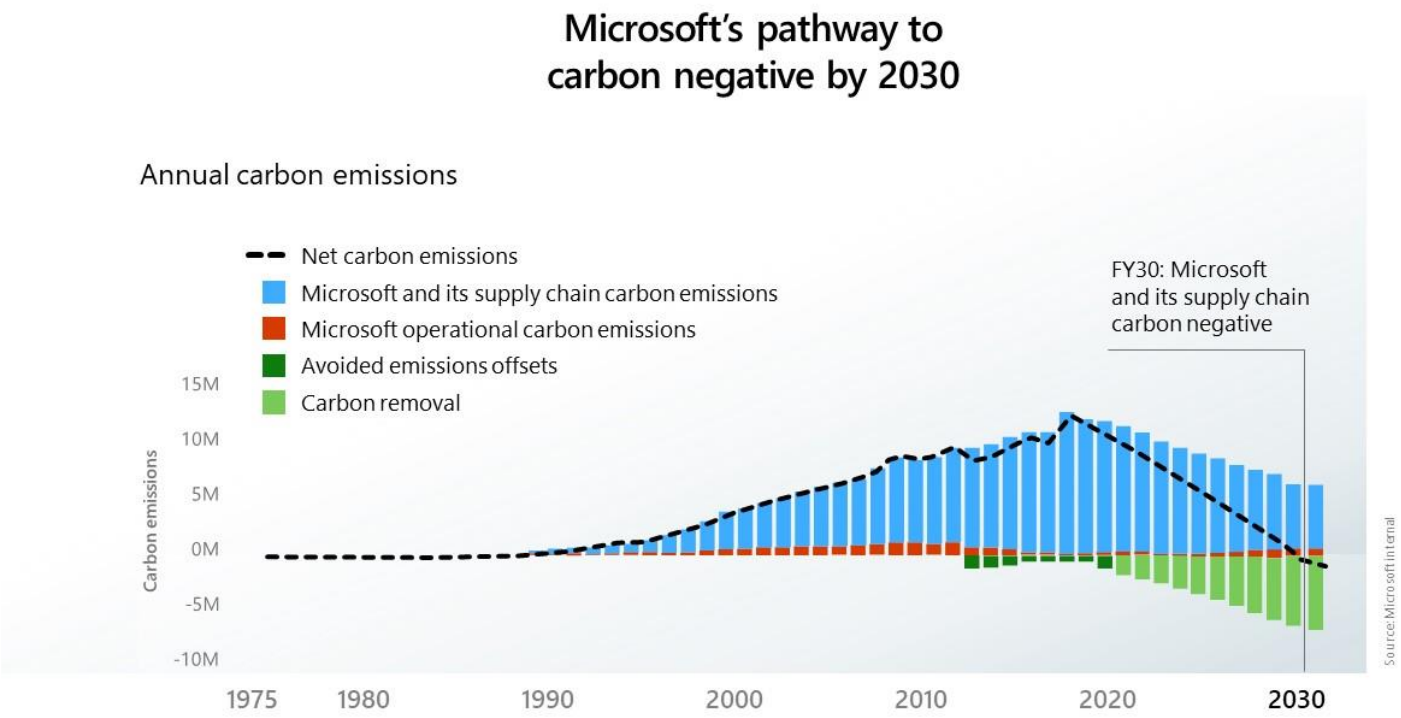
- Corporations are setting Science Based Targets accredited by SBTi.
- Increasingly, these
  - Target 1.5C
  - Include Scope 3



Setting and communicating “Science Based Targets”

Company X commits to reduce Scope 1 & 2 GHG emissions in half by 2030 from a 2018 baseline. Company X also commits to measure and reduce Scope 3 GHG emissions and by 2050 Company X will be net zero.

Typical SME Science Based Target



Microsoft’s Science based Target

Useful links for calculating and declaring emissions

- BEIS carbon intensity factors: https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021

Some useful calculators and accredited methods:

- https://smeclimatehub.org/tools/ (free, fairly new)
- https://www.carbontrust.com/resources/sme-carbon-footprint-calculator (free)
- https://ghgprotocol.org/ghg-emissions-calculation-tool (Free)
- https://www.spherics.io (not free, integrates with accounting packages)

Non-accredited (but locally influential)

- https://cambridgecarbonfootprint.org/charter/ (free)

Useful free Scope 3 estimator for SMEs to help decide where to focus

- https://ghgprotocol.org/scope-3-evaluator

Any questions?

What to do about offsetting?

Understanding “Avoided Emissions”, vs “Greenhouse Gas Removals”

“Avoided Emissions”

Paying someone else to promise not to emit carbon emissions that they hypothetically would have done otherwise under “business as usual”

Cheap. Sometimes beneficial, but carbon impact uncertain.

“Greenhouse Gas Removals”

Paying someone else to, in theory, permanently remove your emissions from the atmosphere.

Expensive. Nature based solutions attractive, but durability uncertain. Technical solutions often “*Magic beans and unicorn blood*”

Net Zero or Not Zero. A guide to greenwash
https://carbonneutralcambridge.org/wp-content/uploads/2020/06/19297-net-zero-or-not-zero-.pdf

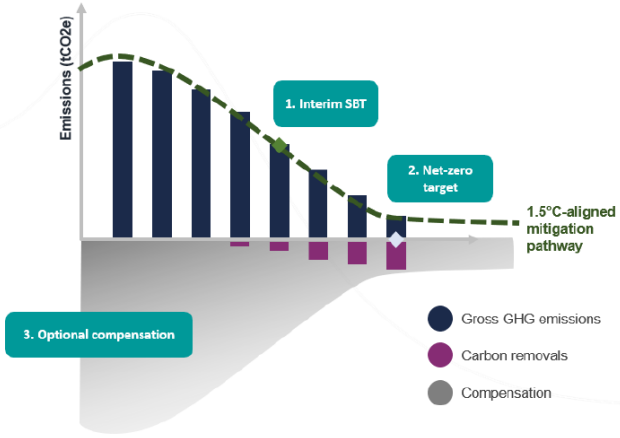
Understanding “Carbon Neutral” vs “Net Zero”

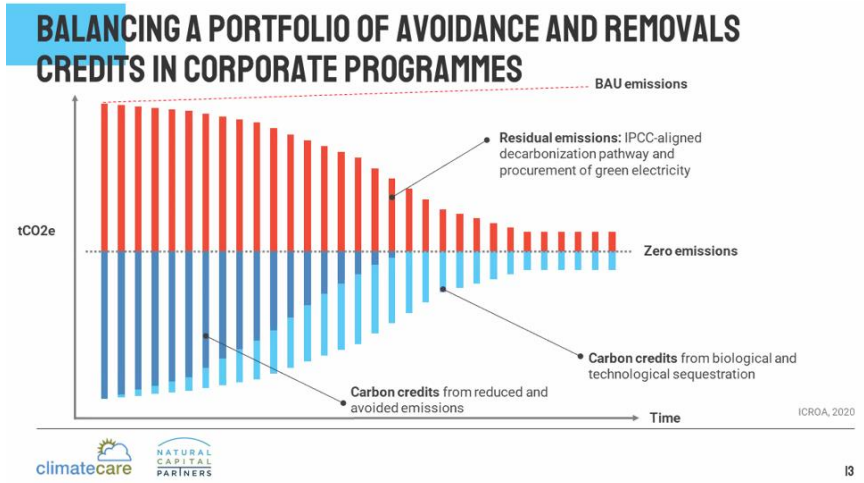
Net Zero (SBTi)

- Reduce emissions in line with 1.5C Science Based Target.
- Optional “compensation” for emissions.
- Only then, neutralise any “hard to decarbonise” emissions with “removals” (GGR) only

Carbon Neutral

- Reduce emissions and each year, pay for accredited offsets.
- Often just Scope 1 and 2
- Offsets usually “avoided emissions, rather than “removals”





https://www.climatecare.org/

Compensating for the “social cost of carbon’

Pay “Compensation” : A voluntary donation eg

- “Carbon gift” of 10-100% of “guilt inducing expenditure”
- Max Fordham donate £100/Tonne for new woodland creation via https://www.forestcarbon.co.uk/

Buy accredited “offsets”

- Eg via https://www.climatecare.org/ or https://marketplace.goldstandard.org/
- Beware ridiculously cheap near-scams (1-£20 /Tonne)
- Risk they would have happened anyway
- Usually for “Avoided” emissions, rather than “Removals”

If holding investments:

- Decarbonise portfolio
- Invest directly in early stage low carbon businesses, Eg via https://energy4all.co.uk/

The “social cost of carbon’ has been estimated at £100-£400/Tonne CO_2. Or 1 year of someone’s life / Tonne CO_2. How can one compensate for that?

Thoughtful blog on the approach of Cambridge Energy Experts Max Fordham https://www.maxfordham.com/mf-net-zero/carbon-offsetting-%E2%80%93-friend-or-foe

Any questions?

Do you think Offsetting is morally right?

To watch later: “Cheat Neutral” https://www.youtube.com/watch?v=I6zpnVW134k

Imagining the future:

So what might my organisation look like, when we're on the path to Net Zero?

Some examples…

Reducing Scope 1 and 2 emissions…

Switch to a good quality Green Electricity Tariff

Hitcham village shop slashed emissions and reduced overheating by upgrading old freezers

Newnham Sports and Social Club slashed emissions by insulating snooker room ceiling

Reducing Scope 3…

Zoom and ‘Teams’ are reducing the need to travel

Cambridge University Catering Service reduced catering emissions by 33% by changing menus.

Delta-T slashed emissions by changing default shipping method from “air” to “surface”

Exercise:

What would our organisation look like if we:

- Reduced our Scope 1 and Scope 2 carbon emissions by at least 50% by 2030?
- Slashed the carbon emissions from at least one of our Scope 3 emissions?

Discuss together then share key ideas

Note down any interesting ideas for your organisation, so you can explore them later.

Fuel and purchased electricity

Purchased goods and services; transportation and distribution; business travel; employee commuting, use of sold products; investments..

Discussion

How can other organisations help you on your journey to Net Zero? How can you help others?

Concluding recommendations

- Start by measuring, declaring and reducing your Scope 1 and 2 emissions
- Set your 2030 Scope 1 and 2 target

- Identify and reduce your key Scope 3 emissions, where you can.
- If possible, pay “compensation” for your unabated emissions.

- Be transparent about your approach and assumptions.
- Share what you’re doing and help others
- Help your own supply chain decarbonise.

Thank you

Do download the presentation

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