

Webinar

Standardizing Carbon Neutrality, a milestone on the way to net zero.

25 November 2021



Your webinar moderator





Els Somers

Project Manager Policy & Partnerships <u>esomers@cencenelec.eu</u> Get the most out of the webinar today



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Your speakers today





Andrea NAM

Project Manager 'Living & Energy'

CEN-CENELEC

anam@cencenelec.eu

Marie GUSTAFSSON

Principal consultant at South Pole <u>m.gustafsson@southpole.com</u>





I an BYRNE

Convenor of ISO TC 207/SC7/WG15 'Carbon Neutrality'

Principal, IBECCS Ltd (Ian Byrne Energy & Carbon Consultancy Services)

ian@ibeccs.co.uk

An introduction to standardization and climate change





Andrea NAM Project Manager 'Living & Energy'

CEN-CENELEC

anam@cencenelec.eu

European Standardization Organizations









CEN - European Committee for Standardization **CENELEC** - European Committee for Electrotechnical Standardization

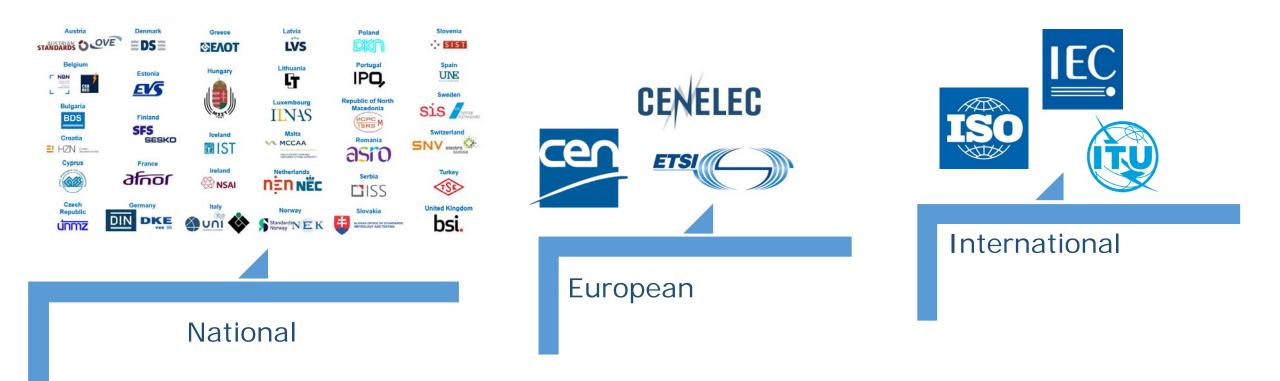
ETSI - European Telecommunications Standards Institute

→ Recognized by European law (EU Regulation 1025/2012)

Standardization happens at different levels



> Aim: identical standards in Europe and worldwide



What is a Standard?

Technical documents designed to be used as a rule, guideline or definition, which are:

- Produced by all interested parties in a transparent, open and consensus based process
- ✓ Intended for a **common and repeated use**
- ✓ Voluntary in use
- ✓ Approved by a recognized body
- ✓ Possible tool to underpin legislation

Recognized businesses and by regulators





European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europhisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Mamix 17, B-1000 Brussels

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The network of CEN and CENELEC

More than 200 000 experts are connected

- ▲ 34 national members
- European organizations associations and federations of businesses, consumers, environmental and societal organizations, etc.
- ▲ Institutions and governmental bodies (including the European Commission (EC) and the European Free Trade Association (EFTA))
- ▲ Affiliates the national standards bodies in countries that are cooperating with the European Union
- ▲ International cooperation with ISO and IEC & regions and countries outside the European Union and EFTA





The changing climate



- Human activities have caused temperature increase (1,1°C above preindustrial levels in 2019) leading to global warming
- Changes in climate have caused impacts on natural and human systems on all continents and across the oceans.
- Existential threat posed by climate change

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Increased climate **action** and enhanced **ambition** is required



The view of the EU



- Emissions must be reduced in all sectors, from industry and energy, to transport and farming
- Climate action should be an opportunity for all sectors of the economy in the Union to decouple economic growth from greenhouse gas emissions.
- The EU is a global **leader in the transition** towards climate neutrality: will help raise global ambition and to strengthen the global response to climate change



The Standardization community is committed to support the transition:

- CEN-CENELEC policy paper Uniting the world to tackle climate change: COP26 and the commitments of European Standards
- ISO London declaration Combat climate change through standards

The policy background



European climate policy framework

✓European Green Deal - aims to make the EU climate neutral by 2050

✓Climate Law (Regulation (EU) 2021/1119) - binding greenhouse gas emissions reduction target of at least -55% by 2030

Climate change is a global threat and can only be addressed by a global response

International framework

✓ United Nations 2030 Agenda for sustainable development,

✓ UN Framework Convention of Climate Change (UNFCCC) and its Paris Agreement.

EU actively engages and supports its international partners on climate action

Standards

- contribute to this transition by providing reliable solutions to industry and support to policy implementation,
- ensure comparability, transparency and they are certifiable both at European and at global level.

European coordination through CEN/TC 467 'Climate change'.



Carbon Neutrality - What, how and why?





Marie GUSTAFSSON Principal consultant

South Pole

m.gustafsson@southpole.com

What are claims of carbon neutrality?



our hotel is climate-neutral.

because it is important to us.

In May 2019, our headquarters and manufacturing plants were certified as Carbon Neutral.



Carbon Neutral Buildings

- Creating Value Through



LSE becomes first carbon-neutral university

We are climate-neutral

Working with ClimatePartner, we calculated our carbon footprint for 2019 and offset it

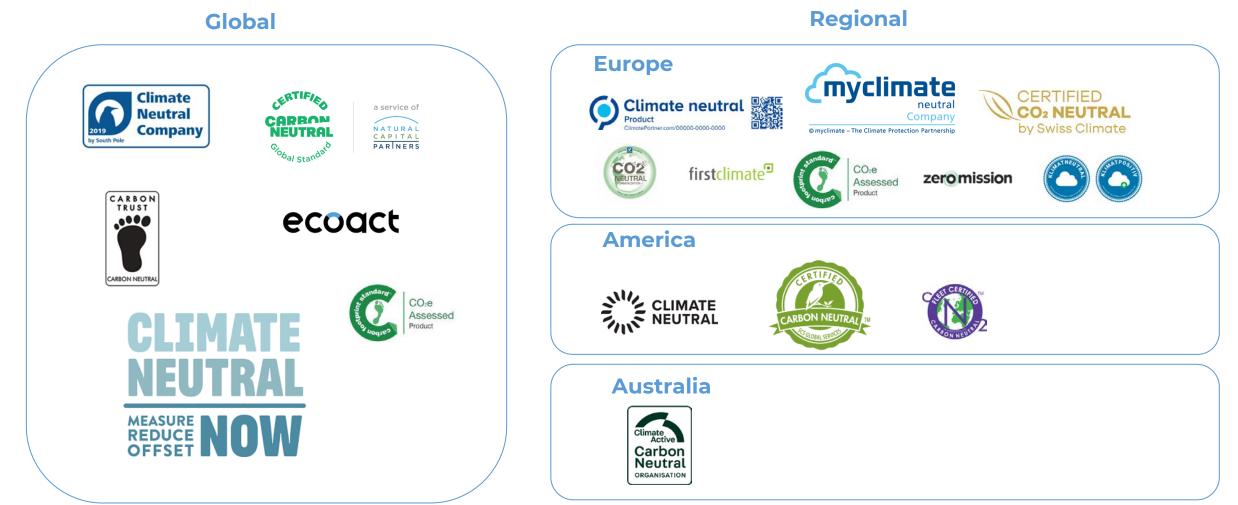


South pole



What are claims of carbon neutrality?







Why are claims made?







Carbon neutrality

IPCC definition

In order to meet the 1.5°C global warming target in the Paris Agreement, global carbon emissions should reach net zero around mid-century.

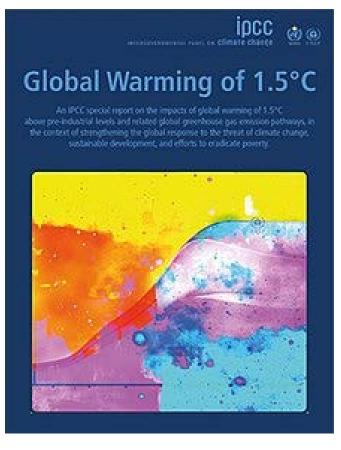
Carbon neutrality

See Net zero CO2 emissions.

Net zero CO2 emissions

Net zero carbon dioxide (CO2) emissions are achieved when anthropogenic CO2 emissions are balanced globally by anthropogenic CO2 removals over a specified period. Net zero CO2 emissions are also referred to as carbon neutrality.







Carbon neutrality



What is it and why is it necessary?



See Net zero CO₂ emissions.

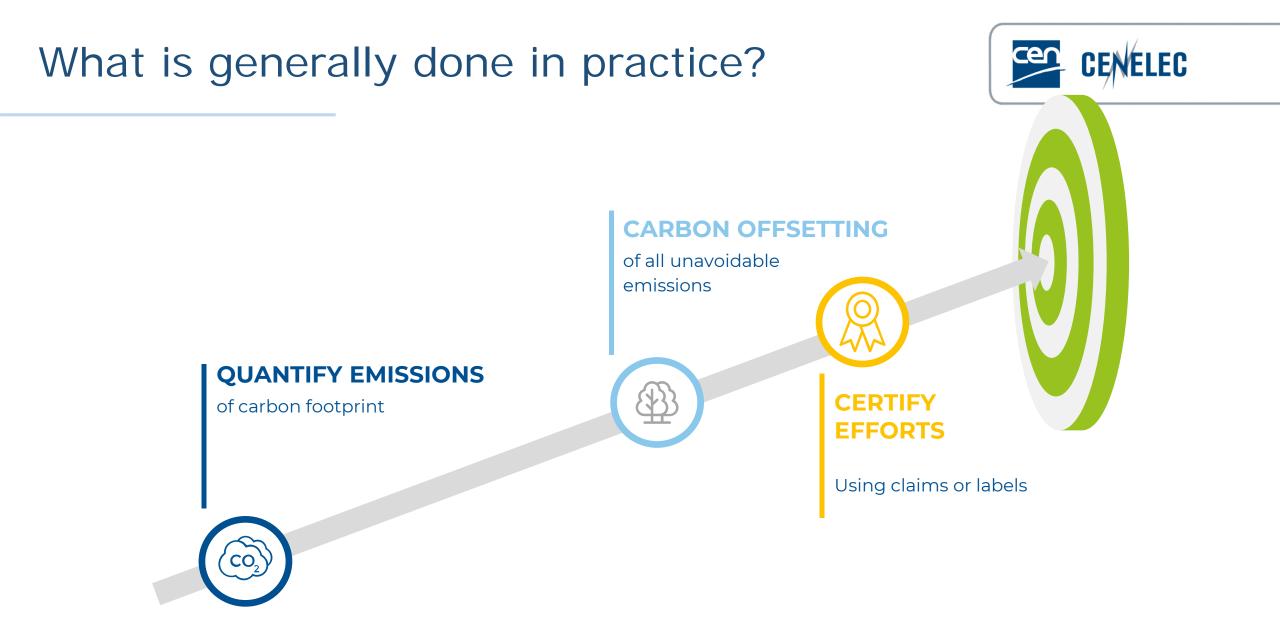
Net zero CO₂ emissions

Net zero *carbon dioxide* (CO_2) emissions are achieved when *anthropogenic* CO_2 emissions are balanced globally by anthropogenic CO_2 removals over a specified period. Net zero CO_2 emissions are also referred to as carbon neutrality. See also *Net zero emissions* and *Net negative emissions*.

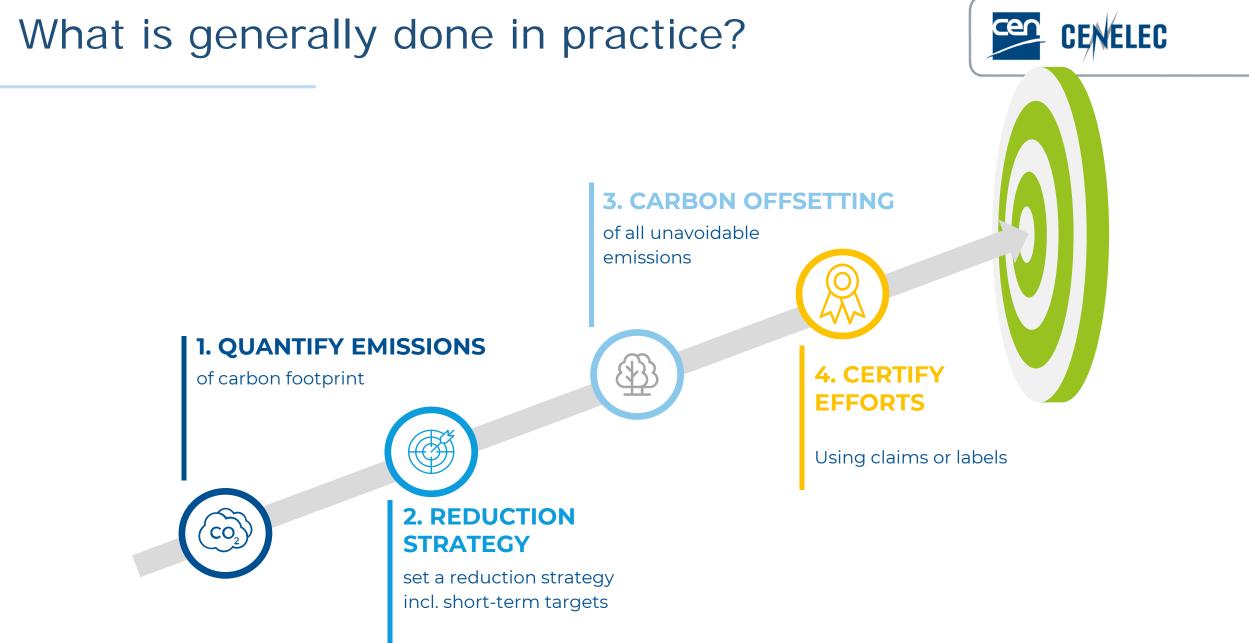
Climate neutrality

Concept of a state in which human activities result in no net effect on the *climate system*. Achieving such a state would require balancing of residual emissions with emission *(carbon dioxide)* removal as well as accounting for regional or local biogeophysical effects of human activities that, for example, affect surface *albedo* or local *climate*. See also *Net zero CO*₂ *emissions*.











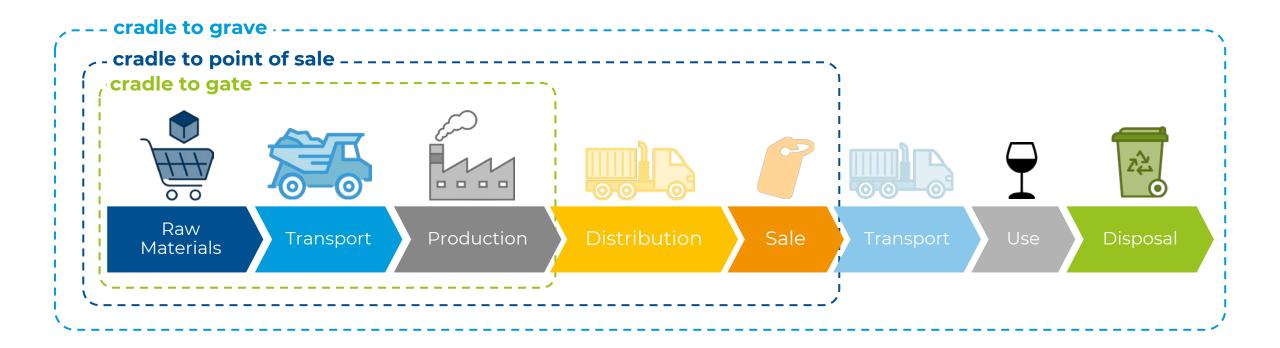


• Scope of the calculated and offset footprint

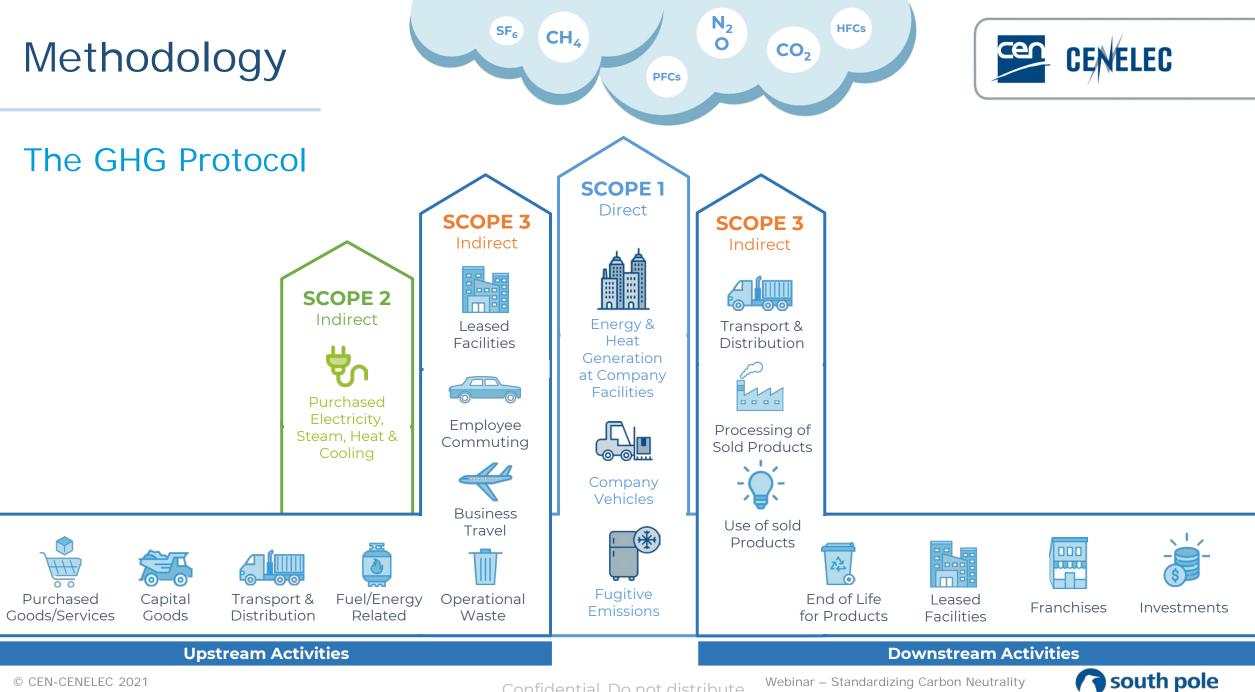




• Scope of the calculated and offset footprint







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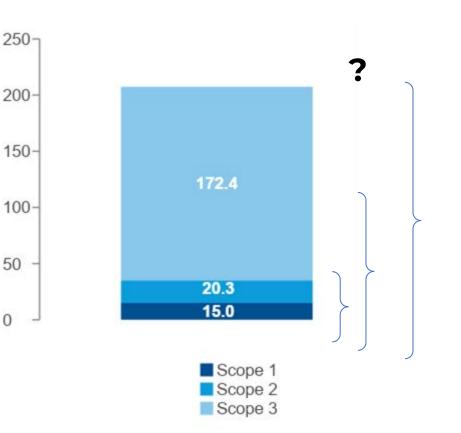
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tCO2e



- Scope of the calculated and offset footprint
- Verification of calculations
- Required/ambition of reduction plans and targets required
- Type of compensation credits used
- Requirements for transparency







Corporate climate claims: a dynamic landscape



GovernmentsCivil societyCorporate
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carbon neutrality

claims; they want

to see the full

scope of activities

around voluntary corporate climate claims, including 'carbon neutrality' Science-based Targets Initiative (SBTi) and ISO Carbon Neutrality Protocol are developing guidance on how companies can set targets, action roadmaps, and use carbon credits towards (public) claims notably carbon neutrality and net zero.

Consumers & investor



Clients and investors want more clarity around the environmental impacts, but also the climate credentials of a company's products and services



Regulating voluntary corporate claims on climate



At least 6 countries in the past 2 years are regulating environmental claims.

Consumer & Market Authorities are regulating the environmental claims companies are making about products and services, with France setting legislative requirements on carbon neutral claims. Regulations require companies to be clear on:

- 1. Clear definitions on components of environmental claims
- 2. Transparency, accuracy and up-to-date data on how claims are achieved in balance between reduction efforts and financial mechanisms (carbon credits, or financial contributions)



Country passed legislation on claims

Consumer & Market Authority guidance on claims

Court case on company claiming carbon neutrality



South Pole's requirements for climate neutrality

- 1. Calculate footprint across Scopes 1, 2 & 3 and all main GHGs
- 2. Use established footprint standards
- 3. Set reduction targets in line with the Science Based Target approach
- 4. Offset emissions with **high-quality offset projects**
- 5. Disclose your footprint and efforts
- 6. Follow through on reduction commitments & assess your performance periodically



relevant tools & platforms













Standard on carbon neutrality





Ian BYRNE

Convenor of ISO TC 207/SC7/WG15 'Carbon Neutrality' Principal, IBECCS Ltd (Ian Byrne Energy & Carbon Consultancy Services) ian@ibeccs.co.uk



In response to the issues that Marie has raised, ISO have established a working group to write a new standard on carbon neutrality.

But why do we need an international standard on carbon neutrality?

- Neutrality is out there widely used
- No control over claims
- Lack of understanding by public ... and the claimants themselves?
- Strong risk of greenwash
- Confusion with net zero

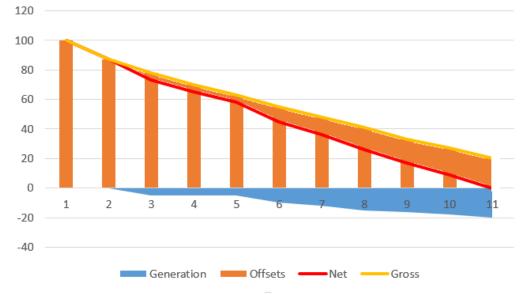


Confusion with net zero?

But aren't net zero and carbon neutrality the same?

- Some people see them as synonyms
- Many definitions overlap
- But there are differences
- Most net zero claims are about targets 2025, 2030, 2040, 2050, 2060
- Most carbon neutral claims are about now: "we are carbon neutral!"
- Also use of terms like climate neutral, carbon negative





Neutrality & Net Zero

Current Carbon Neutrality Claims



- Typically carbon neutral is claimed by those selling or using offsets
- Balance total emissions associated with a company or product
- But rarely justify their claim, scope, or indicate the footprint offset
- Hard for high quality products (like Marie's!) to gain traction

But is that good enough?

We think "No"

- No certainty around calculation of emissions
- No clarity on scope or boundaries
- No need to look at life cycle
- No incentive to lower emissions
- No real contribution to the low carbon transition





So why bother? Why not just ignore the claims?

- Because the claims are there AND
- We can create a robust framework building on existing ISO standards
- And help use carbon neutrality as a staging post on the road to net zero
 - o Allow carbon neutrality claims if three main criteria are met:
 - o Full carbon footprint calculated
 - o Subject has a plan to reduce emissions and can show real savings
 - o Unabated emissions are offset with good quality carbon credits
- Let's look at those in turn and how they are approached in the current draft of ISO 14068

Full carbon footprint calculated



- Can apply to organisations and products or services (including events)
- Will cover all emissions direct and (significant) indirect; and all types of GHG (not just CO₂)

For organisations:	For products or services:
 Must include the entire organisation May include a legally constituted subsidiary, or all operations in a single country Must include all activities – no ring fencing of good or bad parts Claims for just head office will not be acceptable 	 Must be on a life cycle basis (complete value chain) Consumer products cradle to grave B2B may allow cradle to gate (components, semi-finished materials) Events seen as a special case of a service

Calculation methods

- Consistent with EN ISO 14064-1 (organisations), EN 14067 (products)
- Emissions reductions consistent with EN ISO 14064-2 (projects)
- Defaults to absolute emissions, not intensity
- Recognise there may be national methodologies
- Also recognise market position of GHG protocol
 - o In current draft there's an annex comparing GHG Protocol with ISO standards
- Not a calculation standard so not repeating detail of calculation measures
- Transparency highly important







- Required for all subjects so not just offsetting
- Must include ambitious & credible reduction plan
- Still working on how to define ambition
- And on how to match plans to a 1.5°C global target
- Issues around growing companies, especially in carbon reduction sector
 - o If a company manufacturing insulation is growing, can it use an intensity metric rather than absolute emissions?
 - o However, avoided emissions from products will not be factored into a calculation
- Wider issue around growing businesses in general

A plan without action won't suffice



- Carbon Neutrality Management Plans must support the transition
- Need to demonstrate real GHG emissions reductions (or removals enhancements)
 - o For maintenance of carbon neutrality, this has to be ongoing
- Will not be allowed to claim carbon neutrality at the start of the process, even if all emissions are offset
- Same principle for services, and use of life cycle (supply chain) prevents outsourcing GHG emissions to suppliers
- May need to create a business as usual baseline for certain services, such as non-recurring events, to demonstrate GHG emissions reductions against the baseline

What about offsetting?



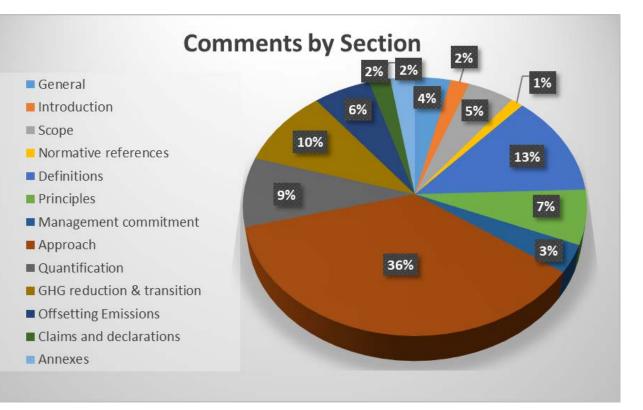
- Only after GHG emissions reductions and removal enhancements have been made
- Offsets are used to balance unabated emissions
 - o Unabated means "not yet reduced"; residual means "not realistic to eliminate"
 - o We see residual emissions as being the ones that still remain at net zero
- Criteria set for carbon credits used for offsetting:
 - Additional
 Measureable
 Permanent
 Transparency
 No forward crediting
 No forward crediting
 Credits must be retired or cancelled in a registry

So, why ISO?



- SBTi focused on net zero longer time scale, primarily at organisational level
- GRI (GHG Protocol) have also passed over carbon neutrality
- Few national standards exist
- PAS 2060: 2014 from BSI is perhaps most widely used (not just in the UK)
 - o But it's only a Publicly Accessible Specification, not a full standard
 - o Stylistically different from a CEN or ISO standard
 - o In need of revision (first edition 2010; current version 2014)
 - o BSI agreed to provide support (convenor, secretariat) for an ISO standard
- And why ISO not CEN?
 - o ISO had the most appropriate technical committee (TC-207 SC7)
 - o SC7 already maintained the three calculation standards (14064-1 & 2, 14067)
 - o Other SCs in TC-207 deal with environmental claims (ISO 14020/1)
 - o Wanted to bring in other players, such as Costa Rica (which had INTE B5)
 - o Many products with existing carbon neutrality claims are traded globally
 - o ISO had the "oven-ready" committee, and wide range of experts

- Progress to date
 - Slowed by need to build consensus on scope (eg. not including avoided emissions) and definition of carbon neutrality
 - Some COVID-induced delays
 - Current progress is steady, but needs to process over 1,800 comments on WD1 through virtual meetings
 - Confident that once consensus reached on core concepts should become faster
 - Still aiming for a 2023 publication









Carbon neutrality can have a useful role to play in the transition to a net zero society

- Currently there is a great variation in what is behind carbon/climate neutrality claims
- Good quality carbon neutrality is not just about offsetting, but requires action to manage and reduce GHG emissions
- Lack of standardization cause confusion, disincentivizes climate action and facilitates greenwashing
- Standards, International and European standards, can help organisations achieve and demonstrate carbon neutrality in a reliable way





Thank you for your attention!





Use the Q&A panel to submit your questions

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When is the next sess	ion?	

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Send anonymously	



Thank you for your participation!

Next webinar

2021-11-30: Webinar 'Anthropometric and strength data of children for use in standardization'