



Governing Net Zero: assessing convergence and gaps in the voluntary standards and guidelines landscape

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Acknowledgements & Citation Information

Overview

This report represents the results of a systematic mapping of 37 net zero voluntary standards and guidance. It identifies the latest areas of convergence, divergence and gaps across initiatives advising on corporate climate action.

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The codebook with finalised questions can be found [here](#). Our full dataset is available [here](#).

Please note, this report was updated on 05.06.2024 to add clarity to the Executive Summary (p. 5) and to analysis within Section 5 'Counterbalance'.

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About Oxford Net Zero

Oxford Net Zero is an interdisciplinary research initiative based on the University of Oxford's fifteen years of research on climate neutrality. Our research fellows are working to track progress, align standards and inform effective solutions in climate science, law, policy, economics, clean energy, transport, land and food systems and Carbon Dioxide Removal.

Our aim is to address the issue of how we limit the cumulative net total CO₂ in the atmosphere, in line with the goals of the Paris Agreement, while acknowledging that it is now inevitable that more CO₂ will be generated from energy, industry and land-use change than our goals allow.

Our mission is to inform effective and ambitious climate action among those setting net zero targets in institutions and governments across the globe. Oxford coordinates with other academic institutions and research hubs around the world to undertake a series of engagement exercises with publics and with key stakeholders in policy, industry and civil society/ climate action circles. We are engaging net zero committers through [principles and policies](#), [practical tools](#) and [progress tracking](#).

You can learn more about Oxford Net Zero's Engagement Team [here](#).

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Executive Summary

Net-zero governance instruments demonstrate increasing convergence around key issues, but major gaps remain to ensure emissions reduction targets and plans are urgent, rigorous and effective.

Net zero pledges have proliferated in the last years, now covering 92% of global GDP [1]. Though these net-zero commitments are welcome, they must be accompanied by a robust governance system to ensure that promises translate into action. The voluntary governance landscape has played a critical role in galvanising ambition, identifying best practice, and aligning actors' behaviour towards net zero.

The important role of voluntary net-zero governance has been filled by a wide array of resources and initiatives that fall along the 'conveyor belt' of net-zero governance, including guidance documents, disclosure instruments and assessment frameworks [2]. Each of these resources offers a set of recommendations on best practice for 'good net zero'. These can provide a robust baseline for future policy and regulatory interventions, which are essential to level the playing field and provide clear and fair ground rules for all.

To provide clarity on the voluntary governance landscape, Oxford Net Zero mapped key criteria across resources in 2022. We traced common and emerging good practice across this landscape [3].

In this 2024 edition, we review 37 voluntary governance instruments used internationally by non-state actors to guide net-zero action. We assess these instruments (also referred to as 'resources') against almost 60 criteria that explore the integrity of net-zero voluntary governance.

These criteria cover the seven stages of a net zero target:

PREPARE i.e., leadership and governance practices to deliver on net zero targets

QUANTIFY, i.e., quantifying emissions, including guidance on what scopes and emissions should be measured

TARGET i.e., organisational and operational boundaries for targets, time-scales and ambition for net-zero targets and sectoral and geographically-aligned target setting

PLAN i.e., emissions reductions actions outlined in transition plans

COUNTERBALANCE i.e., guidance on carbon credits and offsetting, including conditions on permanence, additionality and quality

IMPACT i.e., equity impacts, lobbying and advocacy guidance

REPORT i.e., disclosure of climate-related information, including reporting frequency, emissions coverage, progress on targets

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1. Net Zero Tracker, 2024. Energy and Climate Intelligence Unit, Data-Driven EnviroLab, NewClimate Institute, Oxford Net Zero. Available from: <https://zerotracker.net/>
 2. Hale, T., 2022. *The Net-Zero Governance Conveyor Belt*. Kleinman Center for Energy Policy. Available from <https://kleinmanenergy.upenn.edu/research/publications/the-net-zero-governance-conveyor-belt/>
 3. McGivern, A., et al., 2022. Defining Net Zero for organisations: how do climate criteria align across standards and voluntary initiatives? Available from: <https://netzeroclimate.org/wp-content/uploads/2022/10/SUMMARY-REVIEW-21-OCT-FINAL.pdf>

Executive Summary

Our work highlights strengthened convergence amongst net-zero governance resources in comparison to an earlier study completed in 2022. Since 2022, we see major developments amongst governance instruments, with the following now being widespread and standard:

- Recommending science-based net-zero targets for 2050
- Setting interim targets on the path to net zero
- The need to quantify and set targets for Scope 3 emissions
- Accounting for offsets and credits separately from reductions in organisations' inventories
- Recognition of the strategic importance business executives pay in setting firms' net-zero pledges and targets
- The need to align business lobbying and advocacy with a Paris-aligned climate future
- The need for organisations' product and service portfolios to shift towards 'climate solutions' or low-carbon alternatives
- Consideration of transition plans' impacts on a 'just transition'







However, our analysis also shows that recommendations to act or disclose activity around the following vary and could be improved to reduce ambiguity and increase the rigour of any organisations' targets, transition plans, and reductions claims:

- Better defining 'relevant' emissions sources for Scope 3 targets
- Clarity on how base year should be selected for targets and emissions reductions calculations
- Reporting limitations and discrepancies in data on organisations' progress to net zero and requiring independent auditing, verification and assurance of reporting
- Recommending interventions including fossil fuel phase out and renewable energy procurement as material ways to decarbonise organisations' value chains
- While there is convergence that offsets should only be used to neutralise residual emissions to meet net zero, and not towards interim targets, 'residual emissions' are poorly defined (though many resources cap the definition at 5-10% of total emissions)
- More detail and is needed on the definitions of additionality and permanence in the use of credits, offsets and sinks
- Defining the frequency at which transition plans and targets should be updated
- Recommending that business models be compatible with a net-zero world, including the role of advisory services and engaging customers
- Setting impact targets for biodiversity and nature, separate from emissions reductions goals
- Investing in and planning for climate adaptation.



To reach net zero with integrity, urgency and equity, examples of best-practice within the voluntary governance landscape should be widely adopted, with this best-practice supporting the emerging regulation and policy landscape.

Executive Summary

Alignment

<p>2050</p> <p>Target science-based net zero by 2050</p>	 <p>Set interim reduction targets</p>	<p>Scope 3</p> <p>Quantify and target scope 3 emissions</p>	 <p>Separate offsets/credits and avoided emissions from reductions in inventories</p>
 <p>Link executive remuneration to climate targets and KPIs</p>	 <p>Engage in Paris-aligned lobbying</p>	 <p>Shift products and services towards climate solutions</p>	 <p>Assess impacts on a just transition</p>

Gaps

 <p>Require coverage of all scope 3 emissions, or define 'relevant'</p>	 <p>Clarify acceptable base year selection methodologies</p>	 <p>Require independent auditing and verification, with reporting on data limitations</p>	 <p>Outline material emissions reduction strategies and business model transformation</p>
 <p>Restrict offset use including through stronger permanence and additionality criteria</p>	 <p>Set separate impact targets for biodiversity and nature</p>	 <p>Recommend action on adaptation to climate change</p>	 <p>Define frequency for transition plan and target updates</p>

NET ZERO GOVERNANCE LANDSCAPE ANALYSIS

Introduction and methods

Achieving the 2015 Paris Agreement's objective to limit warming to within 2°C of pre-industrial levels requires non-state actors to adopt voluntary actions to sharply reduce greenhouse gas emissions (GHGs) and remove residual emissions, in line with global net zero by 2050 [4].

Net zero pledges have proliferated in the last years, now covering 92% of global GDP [5]. Though these net zero commitments are welcome, they must be accompanied by a robust governance system to ensure that promises are translated into action. Within this context, a plethora of net-zero standards, guidelines and initiatives have emerged, together creating a voluntary governance ecosystem that covers the wide range of pledges from countries, cities, regions and publicly listed companies. This infrastructure provides benchmarks and signposting for organisations to measure their GHG emissions, set targets to reduce them and report on their progress.

This paper builds on research by McGivern et al that reviewed the voluntary governance landscape in 2022 and found broad consensus across voluntary initiatives on key features of robust net-zero commitments [6]. The work showed that voluntary initiatives vary in their ambition and focus: some are pace-setters while others lag, and some provide broad advice whilst others zoom in on specific aspects of corporate climate governance [7] (see Hale 2022 for further exploration of the 'conveyor belt' of net-zero governance).

The present study represents the latest effort to develop this line of inquiry, and is conducted to understand and analyse developments in the burgeoning net-zero governance ecosystem. This shifting landscape has undergone remarkable change since 2022, from greater focus on disclosure and target-setting, to the increasingly fraught debates around managing scope 3 emissions. These developments point to the need to remap, reassess, and re-evaluate what exactly the net-zero governance ecosystem is asking of non-state actors, which is precisely the objective of this paper. As the number of companies setting net-zero targets balloons, it is essential that net-zero guidance be coherent, watertight, and ambitious to promote urgency and integrity in global climate action and deliver the goals of the Paris Agreement.

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4. United Nations Climate Change, 2024. *Key aspects of the Paris Agreement*. Available from: <https://unfccc.int/most-requested/key-aspects-of-the-paris-agreement>
 5. Net Zero Tracker, 2024. Energy and Climate Intelligence Unit, Data-Driven EnviroLab, NewClimate Institute, Oxford Net Zero. Available from: <https://zerotracker.net/>
 6. McGivern, A., et al., 2022. Defining Net Zero for organisations: how do climate criteria align across standards and voluntary initiatives? Available from: <https://netzeroclimate.org/wp-content/uploads/2022/10/SUMMARY-REVIEW-21-OCT-FINAL.pdf>
 7. Hale, T., 2022. *The Net-Zero Governance Conveyor Belt*. Kleinman Center for Energy Policy. Available from <https://kleinmanenergy.upenn.edu/research/publications/the-net-zero-governance-conveyor-belt/>

Selection criteria

In this iteration of the research programme, we conducted a systematic review to identify all net-zero standards, guidelines, and initiatives (collectively referred to as resources) created for organisations to develop, implement and report on their net-zero transitions.

Strict inclusion criteria were used to ensure consistency in the type of resource being analysed for our research. To be eligible for inclusion in this report, resources had to:

- Provide guidance on 'Net Zero', not 'Carbon Neutrality' (for this reason, ISO14068, CarbonNeutral Protocol, Climate Neutral Now and PAS2060 Carbon Neutrality were excluded)
- Be published up to January 31, 2024
- Cover or be intended for use by 2+ countries
- Be sector-agnostic
- Be available in the English language
- Be publicly available
- Provide substantive guidance on at least one of the seven net-zero themes identified by McGivern et al (2022), see p.9 for further detail.

The systematic review produced 37 unique resources, listed on p.11.

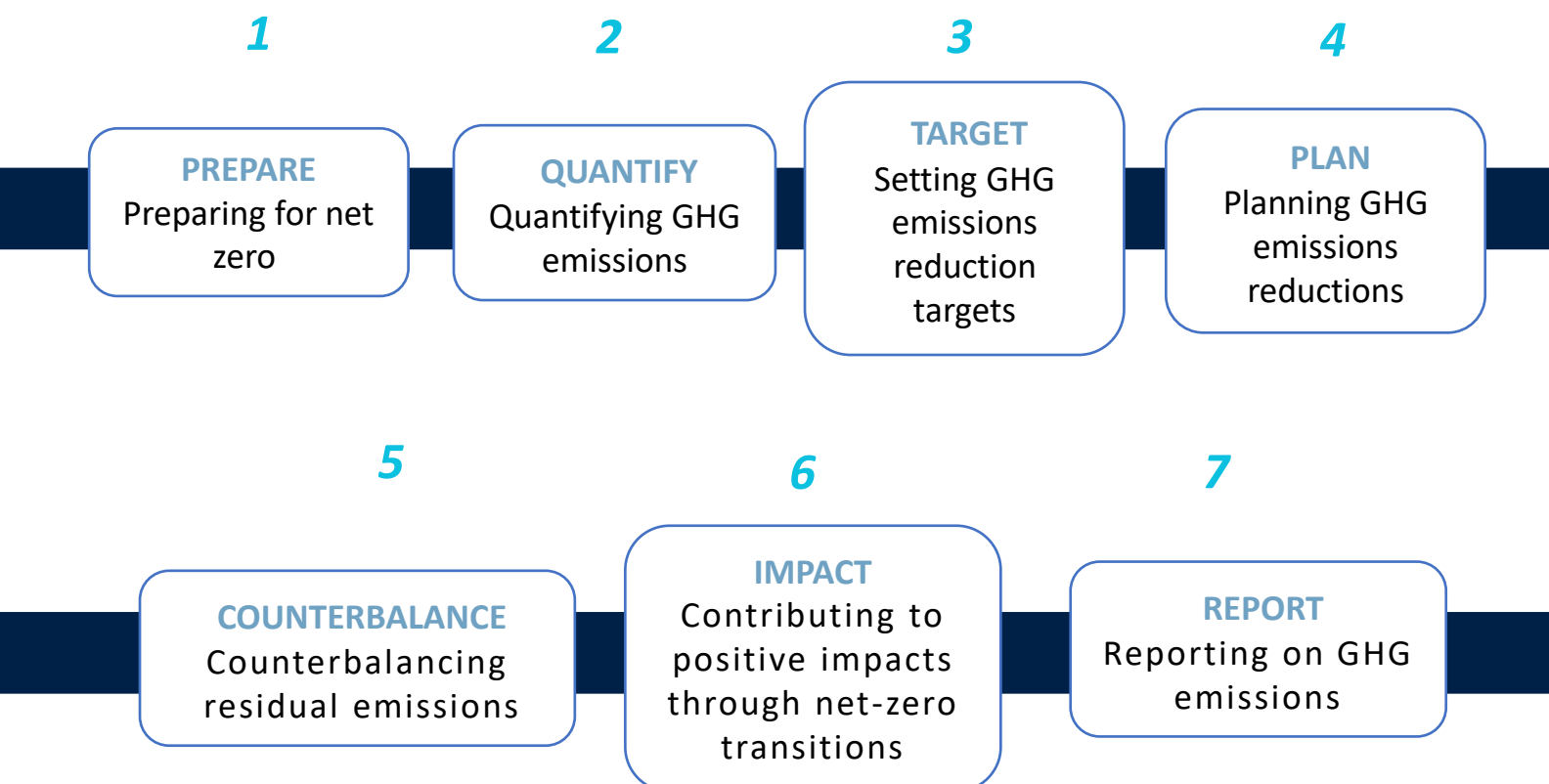
Appendix B lists the 11 resources that were included in 2022 mapping but excluded from the 2024 report, and rationale for their exclusion. Several of these resources provide valuable sector specific guidance or analysis of net-zero governance and corporate progress.

We recognise that some resources (not listed) that we omitted are widely used in conjunction with some resources we have analysed, e.g., RE100. However, these are generally sector-specific or insufficiently address one of the seven net-zero themes.

The systematic review added 18 new or updated resources to our study (marked with an asterisk * in the table on page 11).

Net-Zero Themes and Assessment Criteria

To be included in the study, resources had to provide substantive guidance on at least one of the seven net-zero themes identified by McGivern et al (2022). Please note, that in the 2022 report, 'Quantify' was termed 'Measurement', 'Plan' was termed 'Reduction', and 'Counterbalance' was termed 'Offsetting'.



To analyse the resources, we updated the codebook used for the 2022 mapping project.

The updated codebook comprises questions intended to evaluate resources' alignment with the core pillars of a credible net zero transition outlined by Fankhauser et al (2022): urgency, integrity, and equity [8].

To define the codebook questions, we iteratively drew on best practice guidance from the United Nations HLEG (High Level Expert Group) *Integrity Matters* report, academic literature relating to equity and fairness in net zero transitions (Khosla et al 2023 [9], Armstrong and McLaren 2022[10]), and ambitious, pace-setting guidance within the governance landscape.

The codebook with finalised questions can be found [here](#) and is summarised in Appendix D.

8. Fankhauser et al, 2022. *The meaning of net zero and how to get it right*. Nature Climate Change. 12, 15-21. <https://www.nature.com/articles/s41558-021-01245-w>

9. Khosla et al, 2023. *Can 'Net Zero' still be an instrument of climate justice?* Environmental Research Letters, 18 <https://iopscience.iop.org/article/10.1088/1748-9326/acd130/pdf>

10. Armstrong and McLaren, 2022, *Which Net Zero? Climate Justice and Net Zero Emissions*, Ethics and International Affairs. <https://philpapers.org/rec/ARMWNZ>

Report Overview & Relevance Criteria

Resource types

In our analysis, we distinguish between resources whose purpose is to provide guidance on how to create and execute transition plans (*guidance materials*), and those that present frameworks on disclosures or assessments of organisations' performance (*disclosure frameworks and assessment frameworks*). Tab 0 (*Context*) of our dataset indicates the category to which each resource has been allocated. In sum, there are 22 guidance resources, 8 disclosure frameworks and 7 assessment frameworks. Therefore, when reading codebook questions "Does the resource recommend...", please note that disclosure frameworks generally do not make recommendations to *act*, but rather recommendations to *report*.

'Relevant' resources

As noted above, not all resources are 'relevant' to each theme we assessed. For example, the University of Oxford Offsetting Principles and SBTi Corporate Standard do not specify any guidance relating to the 'prepare' theme. To provide representative conclusions of how well different criteria are addressed amongst resources, we filtered out 'irrelevant' resources from analysis under each theme. Relevance was decided when the resource provided an answer (i.e., a 'yes' or some substantive guidance that did not qualify as a yes to our criteria) to at least one of the questions asked within a theme. If every question was answered 'not specified' and no relevant material was found within the resource, the resource was categorised as irrelevant during analysis.

Data presentation for 'relevant resources'

These are available in the table ahead of each section and listed at the top of each new section. Percentages are calculated out of the number of 'relevant' resources rather than the total number.

These are:

- 1 – PREPARE - 27 resources 'relevant', 10 excluded
- 2 – QUANTIFY – 36 resources 'relevant', 1 excluded
- 3 – TARGET – 35 resources 'relevant', 2 excluded
- 4 – PLAN – 29 resources 'relevant', 8 excluded
- 5 – COUNTERBALANCE – 35 resources 'relevant', 2 excluded
- 6 – IMPACT – 30 resources 'relevant', 7 excluded
- 7 – REPORT – 31 resources 'relevant', 6 excluded

The complete list of resources assessed can be found on the next page.

We include summary tables for each of the sections to provide an overview of guidance. However, **we advise that conclusions should not be drawn from these tables alone, rather any information considered alongside data notes and resource extracts as contained in our dataset.** Not all 'yeses' and 'not specifieds' are equal and there is considerable nuance between resources that must be understood when drawing broad conclusions.

Find our complete dataset [here](#).

List of resources assessed in this report:

Code	Organisation Name	Resource Name
GUIDANCE		
CISL	Cambridge Institute for Sustainability Leadership	Targeting Net Zero: A strategic framework for business action, 2020
CAR4	Carbone 4	Net Zero Initiative, A Framework for Collective Carbon Neutrality, 2020
CERES*	Ceres	Ceres Roadmap 2030
CHAO	Chapter Zero	[1] Board Toolkit [2] Transition Planning Toolkit Scorecard
CA100	Climate Action 100+	Climate Action 100+ Net Zero Company Benchmark 2.0, March 2023
ERI	Exponential Roadmap Initiative	THE 1.5°C BUSINESS PLAYBOOK V3.0, Sept 2023
GOLDS*	Gold Standard	Corporate Climate Stewardship Guidelines
GGPC	Greenhouse Gas Protocol	The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, 2004
GGPS3	Greenhouse Gas Protocol	Corporate Value Chain (Scope 3) Accounting and Reporting Standard, 2011
IIGC*	Institutional Investors Group on Climate Change	Investor Expectations of Corporate Transition Plans: From A to Zero
ISO14064*	International Organization for Standardization	ISO 14064:2018-1 - Greenhouse Gases
IWA42*	International Organization for Standardization	IWA42 2022: Net Zero Guidelines (aka 'ISO Net Zero Guidelines')
IGCC*	Investors Group on Climate Change	CORPORATE CLIMATE TRANSITION PLANS: A guide to investor expectations
OECD*	OECD	Guidelines for Multinational Enterprises on Responsible Business Conduct
RTZ3	Race to Zero 3.0	Race To Zero Starting Line and Leadership Practices 3.0, 2022
SBTIC	Science Based Target Initiative (Corporate Net Zero Standard Criteria)	SBTi Corporate Net-Zero Standard Criteria, Version 1.1, April 2023
OOP	The University of Oxford	The Oxford Principles for Net Zero Aligned Carbon Offsetting, 2020
TNZ*	Transform to Net Zero	Climate Transition Action Plans
HLEG*	UN High Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities	Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions
WMBC*	We Mean Business Coalition	[1] THE 4 A'S OF CLIMATE LEADERSHIP [2] CLIMATE TRANSITION ACTION PLANS
WBCSD	World Business Council for Sustainable Development	SOS 1.5 The road to a resilient, net-zero carbon future, 2020
WEF*	World Economic Forum	How to Set Up Effective Climate Governance on Corporate Boards Guiding Principles and Questions
DISCLOSURE		
CDPGQ	CDP	[1] CDP Climate Change 2023 Questionnaire, v1.8, Aug 2023 [2] CDP Climate Change 2023 Scoring Methodology
ESRS*	European Commission	[1] ESRS (Cross-Cutting) E1 General Requirements [2] ESRS (Cross-Cutting)E2 General Disclosures [3] ESRS (Topical) E1 Climate Change
GFANZ*	Glasgow Financial Alliance for Net Zero	Expectations for Real economy Transition Plans
GRI	Global Reporting Initiative	GRI 305: Emissions 2016, 2018
GRI CED*	Global Reporting Initiative	GRI Topic Standard Project for Climate Change – Climate Change Exposure draft
IFRS*	IFRS/ISSB	IFRS S2 Climate-Related Disclosures
SMECH	SME Climate Hub	[1] SME Climate Hub Report Page [2] About the SME Climate Commitment [3] Rules for Reporting
TPT*	Transition Plan Taskforce	Disclosure Framework
ASSESSMENT FRAMEWORK		
ACT	Assessing Low-Carbon Transition	Assessing low-Carbon Transition, Version 2.0, 2023
BCORP*	B Lab	DRAFT Climate Action Standard for BCorp Certification, Jan 2024
CBI*	Climate Bonds Initiative	Climate Bonds Standard Version 4.0
ICVCM	Integrity Council for the Voluntary Carbon Market	Core Carbon Principles, Assessment Framework and Assessment Procedure, July 2023
NCI	New Climate Institute	[1] Corporate Climate Responsibility, Guidance and Assessment Criteria for Good Practice [2] Corporate Emission Reduction and Net Zero Targets, Version 3.0, Feb 2023
TPI	Transition Pathway Initiative	TPI's methodology report: Management Quality and Carbon Performance v5.0, 2023,
VCMI	Voluntary Carbon Market Initiative	VCMI Claims Code of Practice, Nov 2023, v.2

* Signifies new or updated resource

1. PREPARE

Organisations should tie executive remuneration to climate performance and build internal climate-related capacity.

About this section

This section addresses guidance on policies, commitments or information needed for organisations to set up their leadership and governance to deliver on net zero targets. The research included one existing and three new criteria against which resources were evaluated:

- the linking of executive remuneration with achievement of climate targets
- capacity building through skills development
- organisational strategic alignment and outlining of accountability mechanisms for companies by resources.

These questions were developed using recommendations within the HLEG "Integrity Matters" report.

Number of relevant resources for this section: 27 (see p.10 for 'relevance' criteria).

Areas of alignment:

- Resources are aligned on the need to tie executive remuneration to the achievement of climate targets
- Capacity building is highlighted as key for carrying out net-zero transition plans

Areas for Improvement/Gaps:

- Stronger wording and wider adoption of guidance to align organisations' purposes and business strategies with their net zero pledges
- Few resources describe mechanisms to ensure ongoing compliance (e.g. recertification), risking complacency

Recommendations: As standard, executive remuneration and capacity building should be included in any future or updated net-zero guidance, disclosure or assessment frameworks. Strategic guidance should also be provided, with stronger wording to inspire business model transformation, rather than less impactful 'tweaks' (e.g., making statements about climate change). A key area for improvement is around publicly outlining accountability mechanisms organisations will be held to, should they fail to meet net-zero targets.

1. PREPARE

	Executive Remuneration	Skills and Competencies	Strategy Alignment	Accountability Mechanism
CISL	Yes	Yes	Yes	Not Specified
CAR4	Not Specified	Not Specified	Not Specified	Not Specified
CERES	Yes	Yes	Yes	Not Specified
CHA0	Yes	Yes	Yes	Not Specified
CA100	Yes	Yes	Not Specified	Not Specified
ERI	Yes	Yes	Yes	Not Specified
GOLDS	Not Specified	Not Specified	Yes	Not Specified
GGPC	Not Specified	Not Specified	Not Specified	Not Specified
GGPS3	Not Specified	Not Specified	Not Specified	Not Specified
IIGC	Yes	Not Specified	Not Specified	Not Specified
ISO14064	Not Specified	Yes	Not Specified	Not Specified
IWA42	Yes	Yes	Yes	Not Specified
IGCC	Not Specified	Not Specified	Not Specified	Not Specified
OECD	Yes	Yes	Not Specified	Not Specified
RTZ3	Not Specified	Not Specified	Not Specified	Not Specified
SBTIC	Not Specified	Not Specified	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified	Not Specified
TNZ	Not Specified	Yes	Yes	Not Specified
HLEG	Yes	Yes	Not Specified	Not Specified
WMBC	Yes	Yes	Yes	Not Specified
WBCSD	Yes	Yes	Yes	Not Specified
WEF	Yes	Yes	Yes	Not Specified
CDPGQ	Yes	Not Specified	Not Specified	Not Specified
ESRS	Yes	Yes	Yes	Not Specified
GFANZ	Yes	Yes	Yes	Not Specified
GRI	Not Specified	Not Specified	Not Specified	Not Specified
GRI CED	Yes	Yes	Yes	Not Specified
IFRS	Yes	Yes	Not Specified	Not Specified
SMECH	Not Specified	Not Specified	Yes	Yes
TPT	Yes	Yes	Yes	Not Specified
ACT	Yes	Not Specified	Not Specified	Not Specified
BCORP	Yes	Yes	Yes	Yes
CBI	Yes	Yes	Yes	Yes
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified
NCI	Not Specified	Not Specified	Not Specified	Not Specified
TPI	Yes	Not Specified	Not Specified	Not Specified
VCMI	Yes	Not Specified	Not Specified	Not Specified

Resources categorised as 'not relevant' - total 10 – CAR4, GGPC, GGPS3, IGCC, RTZ3, SBTIC, OOP, GRI, ICVCM, NCI

NB: all data must be read in conjunction with detail in our [dataset](#).

1. PREPARE

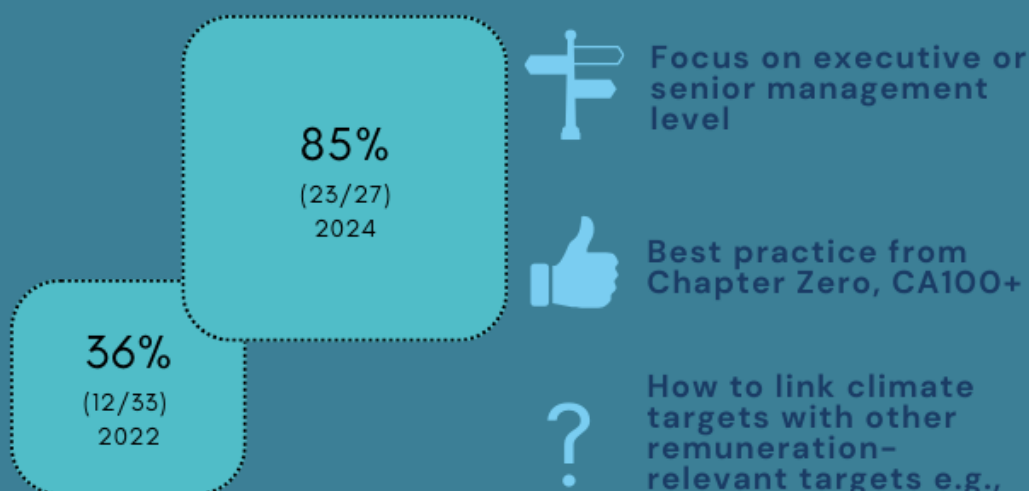
1.1 Does the resource call for executive remuneration to be tied to the achievement of climate targets, or other climate-related KPIs? (Yes/No/Not specified)

85% of relevant resources recommend, or require disclosure of, executive remuneration ties to achievement of climate targets.

1.1 Overview

85% (23/27) of relevant resources contain recommendations to link executive remuneration to delivery of climate targets or transition plans, including most of the disclosure and assessment frameworks. Of those 14 resources that do not specify executive remuneration be tied to achievement of climate targets, 12 provide no guidance on the 'preparing for net zero' phase. Therefore, of those with applicable guidance or disclosure requirements for the preparation phase, over 85% have executive remuneration as a recommendation/disclosure requirement.

85%
of relevant
resources
recommend, or
require disclosure
of, executive
remuneration ties
to achievement of
climate targets.



Resources generally focus on remuneration at the executive or senior management level, but some (e.g., CHAO, CISL, CBI, WBCSD, ERI) also recommend tying compensation to climate KPIs at the employee level too. There is generally little detail on exactly which KPIs to link to remuneration, or the proportion of remuneration to be linked. However, IFRS calls for disclosure of “the percentage of executive management remuneration recognised in the current period that is linked to climate-related considerations”.

1. PREPARE

1.1 Details of Guidance

There is little to no guidance on how the climate targets linked to remuneration relate to the other various targets that influence executive remuneration (e.g. sales, profits, etc.). WEF is the only resource to address this, noting that *“In some cases, companies may be required to reassess current management schemes to ensure that incentives are not offered for inappropriate risks that put the future value of the company in jeopardy.”*

CHA0 is an example of a succinct, ambitious recommendation: *“Corporate climate goals have been cascaded into the accountabilities, performance targets and incentives of teams and individuals to drive and align actions and behaviours (at all levels, starting with the board).”*

CA100+ is an example of an unambiguous recommendation with safeguards against greenwashing: *“The company’s CEO and/or at least one other senior executive’s remuneration arrangements specifically incorporate climate change performance as a Key Performance Indicator determining performance-linked compensation (references to ‘ESG’ or ‘sustainability performance’ are insufficient). The company’s CEO and/or at least one other senior executive’s remuneration arrangements incorporate progress towards achieving the company’s GHG reduction targets as a Key Performance Indicator determining performance-linked compensation.”*

Other examples leave room for interpretation: GFANZ: *“Disclose, **to an appropriate extent**, how compensation and other incentives for senior management with responsibility for climate-related issues are aligned to the objectives of the company’s transition plan.”*

1.1 Comparison to 2022 Mapping

In 2022, only 12/33 (36%) of assessed initiatives called for executive remuneration to be tied to the achievement of climate targets. As highlighted in the infographic on the previous page, this has increased to 85%. This demonstrates that the strategic importance of executive-level incentives has become recognised and widely embedded in voluntary governance structures in updates since 2021.

1. PREPARE

1.2 Does the resource recommend capacity building to execute its climate transition? (Yes/No/Not Specified)

Nearly 75% of relevant resources recommend, or require disclosure of, capacity building to execute transition plans.

1.2 Overview

Nearly three-quarters of resources (20/27) recommend that organisations pursue capacity building to execute their climate transition. Roughly half of guidance and disclosure resources recommend/require disclosure of capacity building, whilst assessment frameworks generally do not evaluate entities on this aspect of preparation for net zero. More often than not, guidance on capacity building is targeted at organisations' executive leadership.



75%
of relevant resources
recommend, or require
disclosure of, capacity-
building to execute
transition plans.

1. PREPARE

1.3 Does the resource recommend organisations align their overall strategy with their net zero pledge? (Yes/No/Not Specified)

Over 60% of relevant resources recommend, or require disclosure of, how an organisation's strategy should align with its net-zero pledge.

1.3 Overview

Just over three-fifths of relevant resources (17/27) recommend aligning organisational strategy with net-zero commitments. These recommendations are often in the form of integrating net-zero commitments or transition plans into organisations' business strategies or company purpose, and often also reference alignment with financial planning or investment strategy.

1.3 Detail of Guidance

ERI, for example, offers a recommendation as to how to align an organisation's strategy to net zero: *"Such a shift requires the alignment of the company's mission, strategy, R&D, marketing, value proposition and customer offerings with the 1.5°C ambition. [...] Update your company's vision and mission statement to reflect your commitment to contributing to the 1.5°C ambition, including protection and restoration of nature and ecosystems. [...]"*

NB: Six resources were categorised as 'not specified' because the wording within the resource was not strong enough to recommend or require disclosure of overarching strategic changes to an organisation's operations.

1. PREPARE

1.4 Does the resource publicly outline an accountability mechanism for organisations that fail to meet their targets? (Yes/No/ Not Specified)

Only four resources have a clear accountability mechanism for organisations that do not meet their net-zero targets.

1.4 Overview

Four out of 27 'relevant' resources contain accountability mechanisms for underperforming organisations: SMECH, BCORP, SBTi and CBI. The low number of resources meeting this criterion is partly because ongoing assessment of organisations' performance is related to the function of orchestration campaigns (e.g., SMECH, SBTi) or certification bodies (e.g., BCORP and CBI). Other types of resources, such as standards and reporting frameworks, are not designed to assess ongoing compliance of organisations, and therefore do not contain accountability mechanisms.

1.4 Details of Guidance

The accountability mechanisms described by the three resources include mandatory recertification every five years (BCORP), revocation of certification when verification engagements discover non-compliance (CBI), and mandatory annual reporting (SMECH).

SMECH outlines the consequences for failing to meet interim emissions reductions targets, noting that companies will be removed for failing to meet their targets unless they explain reasons for failures, corrective measures, and necessary support measures to meet their commitments.

It is important to note that details of SBTi's accountability mechanism does not sit within its Corporate Standard guidance document, but rather in its Commitment Compliance Policy [11]. It outlines the scenarios under which companies can have their commitments removed: *"Expired commitment - company did not submit targets within commitment time frame and/or did not reach successful validation of their targets according to their commitment. • Withdrawn commitment - company withdraws its commitment. • Company change - company ceases to exist, company merged with or acquired by another company, parent company submits target instead"*.

HLEG guidance calls for net-zero initiatives to enhance accountability and ensure that underperforming organisations have their membership revoked.

This presents a gap in cases where orchestration campaigns and certification bodies do not outline accountability mechanisms for organisations that do not meet their targets or fail to achieve ongoing compliance.

However, recent events have shown that other forms of accountability do exist, for example SBTi removing companies from its approval process. However, we recommend that such mechanisms be formalised and consequences for laggards made explicit.

11. Science-Based Targets Initiative, 2022. Commitment Compliance Policy. CET-PRO 003/ Version 3.0. November 2022. Available from: <https://sciencebasedtargets.org/resources/files/Commitment-Compliance-Policy.pdf>

2. QUANTIFY

It is broadly agreed with near-unanimity that organisations must quantify their Scope 3 emissions and account for offsets and emissions separately. As of 2023/4, reporting only net emissions is unacceptable.

About this section

This section maps guidance on the quantification of emissions, mainly related to what scopes and emissions should be measured by the actor. It also maps guidance on ensuring the integrity of an actor's emissions inventory through disclosure of any offsets/avoided emissions in addition to quality assurance.

Number of relevant resources for this section: 36 (see p.10 for 'relevance' criteria).

Areas of alignment:

- Organisations must quantify their Scope 3 emissions: consensus here is near-unanimous
- Emissions and offsets must be accounted for separately – reporting net emissions is unacceptable; this consensus is new, emerging only in 2023/4

Areas for improvement/gaps:

- Not all resources require full coverage of Scope 3 emissions quantification
- Many resources do not specify need for third-party assurance of emissions data
- Recommendations to quantify historical (cumulative) emissions are rare
- Quantification of impacts on nature is not widespread, but disclosure frameworks lead on requirements for this

Key Findings

There is strong coherence in the landscape that Scope 3 emissions should be quantified, and that offsets and avoided emissions should be quantified separately from an organisation's emissions. This demonstrates significant progress and alignment since 2022, showing that Scope 3 measurement has become norm and that delineation between an organisation's emissions and its offsets is expected. We also see that quality assurance and verification is recommended by many resources, although gaps remain as to whether auditing should be conducted by an independent third-party or done internally to an organisation.

In this section, we see divergence in standards and different approaches to what proportion of Scope 3 emissions should be quantified, and whether historical emissions should be accounted for in inventories. Only a handful of resources require organisations to quantify impacts on nature. There is therefore a gap amongst those recommendations that could be counted towards equity and impact - e.g., historical/cumulative emissions, nature and biodiversity.

2. QUANTIFY

	Scope 3 quantification	Portion of scope 3 quantification	Quantification of historical emissions	Separate accounting of offsets and avoided emissions?	Quality assurance for quantification?	Quantify impact on nature?
CISL	Yes	95% or more	Not Specified	Not Specified	Yes	Not Specified
CAR4	Yes	Not Specified	Not Specified	Yes	Not Specified	Not Specified
CERES	Not Specified	Not Specified	Not Specified	Not Specified	Yes	Not Specified
CHA0	Yes	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
CA100	Yes	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
ERI	Yes	95% or more	Yes	Yes	Yes	Yes
GOLDS	Yes	95% or more	Not Specified	Yes	Yes	Not Specified
GGPC	Optional	Not Specified	Not Specified	Yes	Yes	Not Specified
GGPS3	Yes	95% or more	Not Specified	Yes	Yes	Not Specified
IIGC	Yes	Most relevant categories	Not Specified	Yes	Yes	Not Specified
ISO14064	Yes	Not Specified	Not Specified	Yes	Yes	Not Specified
IWA42	Yes	95% or more	Yes	Yes	Yes	Yes
IGCC	Yes	Not Specified	Not Specified	Yes	Yes	Not Specified
OECD	Yes	Not Specified	Not Specified	Yes	Not Specified	Yes
RTZ3	Yes	75-95%	Yes	Yes	Not Specified	Not Specified
SBTIC	Yes	95% or more	Not Specified	Yes	Yes	Not Specified
OOP	Yes	95% or more	Not Specified	Yes	Not Specified	Not Specified
TNZ	Yes	95% or more	Not Specified	Not Specified	Yes	Not Specified
HLEG	Yes	95% or more	Not Specified	Yes	Yes	Not Specified
WMBC	Yes	Not Specified	Not Specified	Yes	Yes	Not Specified
WBCSD	Yes	95% or more	Not Specified	Not Specified	Not Specified	Not Specified
WEF	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
CDPGQ	Yes	<75%	Not Specified	Yes	Yes	Not Specified
ESRS	Yes	Most relevant categories	Not Specified	Yes	Yes	Yes
GFANZ	Yes	Most relevant categories	Not Specified	Yes	Not Specified	Yes
GRI	Yes	Not Specified	Not Specified	Yes	Not Specified	Not Specified
GRI CED	Yes	95% or more	Not Specified	Yes	Not Specified	Yes
IFRS	Yes	Not Specified	Not Specified	Yes	Yes	Not Specified
SMECH	Optional	95% or more	Not Specified	Yes	Not Specified	Not Specified
TPT	Yes	Not Specified	Not Specified	Yes	Yes	Yes
ACT	Yes	Not Specified	Not Specified	Not Specified	Yes	Not Specified
BCORP	Yes	95% or more	Yes	Yes	Yes	Yes
CBI	Yes	Not Specified	Not Specified	Yes	Yes	Yes
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Yes
NCI	Yes	95% or more	Yes	Yes	Not Specified	Not Specified
TPI	Yes	Most relevant categories	Not Specified	Not Specified	Yes	Not Specified
VCMI	Yes	95% or more	Not Specified	Yes	Yes	Not Specified

Resources categorised as 'not relevant': WEF

NB: all data must be read in conjunction with detail in our [dataset](#)

2. QUANTIFY

2.1 Does the resource recommend quantification of Scope 3 emissions? (Yes/No/Optional/Not specified)

Nearly 90% of relevant resources recommend the quantification of, or disclosure of quantified, scope 3 emissions.

2.1 Overview

Quantifying Scope 3 is recommended by 32 out of 36 (88%) relevant resources. Only the GGPC and SMECH state Scope 3 measurement is optional.

Significantly for GGPC, this optionality results in a grey area: due to the GGPC's reputation and use as a global standard, some resources refer in full to 'the Greenhouse Gas Protocol' for measurement of scope 3 emissions, but sometimes without specifying which exact standard (i.e., whether the Greenhouse Gas Protocol Scope 3 guidance, which requires organisations to quantify scope 3 emissions, or whether just the corporate standard, for which measurement is optional). Therefore, by not naming the GHGP Scope 3 standard, citing resources risk ambiguity as to what is required for quantification. This also presents ambiguity for defining *which* GHGs should be quantified (see 3.14).

2.1 Comparison to 2022 Mapping

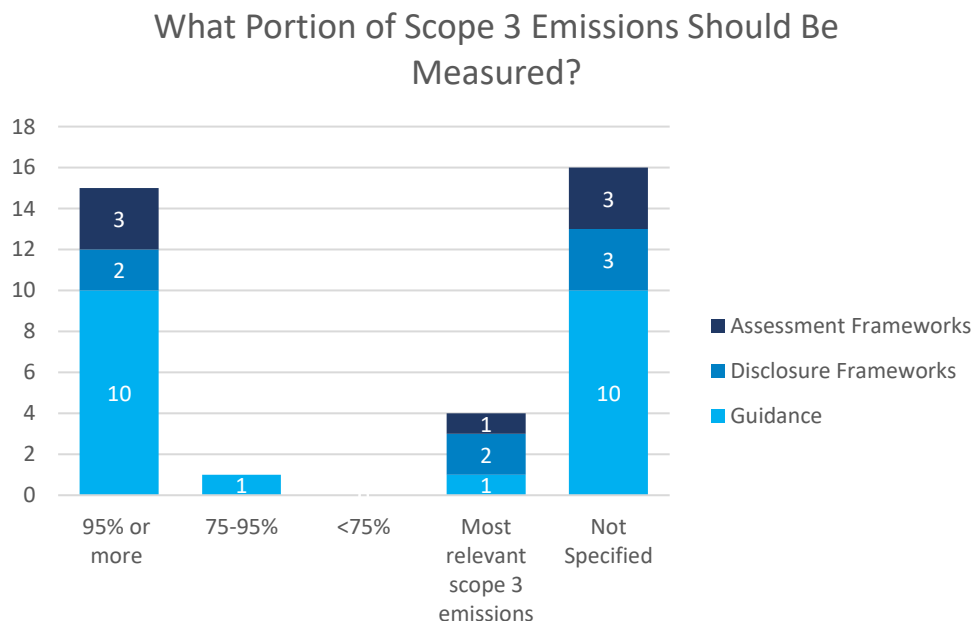
2022 mapping showed that only 76% (25/33) of resources recommended quantifying emissions in scope 3. Scope 3 quantification has therefore developed to become a standard recommendation or disclosure requirement across the voluntary governance landscape.

2. QUANTIFY

2.2 What portion of Scope 3 emissions does the resource suggest the organisation quantify?

(>=95% / 75-95% / <75% / Most relevant Scope 3 emissions categories / Not Specified)

For those that do specify Scope 3 measurement, just under half of resources recommend measurement of >95% or more of Scope 3 emissions.



2.2 Overview

Out of the 32 resources that specify that Scope 3 emissions should be quantified, just under half (15) require that 95% or more of an entity's greenhouse gas emissions should be quantified.

2. QUANTIFY

2.2 Details of Guidance

Half of resources are classed as 'not specified' (i.e., 16 of 32 recommending measurement of Scope 3 emissions). Resources provide high levels of flexibility for emissions boundaries (e.g., ACT), and refer users to the Greenhouse Gas Protocol Corporate Standard, where scope 3 quantification is optional (e.g., WMBC and GRI 305).

Where resources recommended coverage follow GHGP coverage without specifying the Scope 3 Standard, they were recorded as 'not specified' because no boundary quantification guidance is provided in the Corporate Standard. The Corporate standard treats Scope 3 measurement as optional, whereas the GHGP Scope 3 Standard requires $\geq 95\%$ measurement.

Of the initiatives that specify a portion of scope 3 emissions to measure, 15 recommend a comprehensive approach, aiming to cover at least 95% of total emissions.

Some resources, such as the Voluntary Carbon Market Initiative (VCMI) and BCORP, refer to GHGP's Scope 3 standard for measurement and are therefore coded as $\geq 95\%$. Race to Zero 3.0 and CDP are the only initiatives that specify a percentage of less than 95% (90% and 70% respectively).

Four initiatives (including Transition Pathway Initiative and ESRS) suggest measuring the most relevant Scope 3 emissions categories (according to GHGP Scope 3 standard). This approach implies a selective measurement based on relevance to the organisation's operations or sector.

Reference to 'the Greenhouse Gas Protocol' was not considered sufficient guidance for what proportion of greenhouse gases to quantify, as the corporate standard does not set a boundary.

2.2 Comparison to 2022 Mapping

Across the resources, there is only a small increase in the guidance to organisations for what proportion of scope 3 emissions to quantify. In 2022, 12/33 resources recommended organisations account fully for their scope 3 emissions, with 15 recommending this today. There has been an increase since 2022 in the number of resources not making any recommendation as to the proportion of scope 3 emissions that should be measured - up from 5 to 16.

2. QUANTIFY

2.3 Does the resource encourage the quantification of historical emissions? (Yes/No/Not specified)

Only 5 resources recommend historical emissions be quantified.

2.3 Overview

Only 5 resources recommend quantifying historical emissions: New Climate Institute, BCORP, Race to Zero, ISO Net Zero Guidelines, and ERI. BCORP has a soft recommendation to contribute to carbon removals outside of its value chain to remove all historical emissions, whereas Race to Zero frames historical emissions as cumulative emissions. ERI highlights that historical emissions cannot be counted towards the halving of emissions.

Race to Zero includes historical emissions to “*estimate with integrity and transparency*” and encourages measurement of cumulative emissions “*especially where these are significant (for all actors)*” to set targets compatible with achieving a global net-zero state.

2.3 Comparison to 2022 Mapping

In 2022, 7/33 resources mapped recommended organisations to quantify historical emissions. One of those seven resources (Net Zero Tracker) were not mapped in this iteration of the project. VCMi has historical emissions included in its ‘Provisional Claims Code of Practice, 2022’, but this was omitted from the 2023 version of that document. The Greenhouse Gas Protocol Corporate Standard, WBCSD and CISL were mapped as ‘yes’ in 2022, but under subsequent review, we read that the resources use the term ‘historical emissions’ in the context of setting a base-year for calculating GHG emissions.

The new, 2023/24 resources to include historical emissions are ISO Net Zero Guidelines, Race to Zero and BCORP.



Only 5
of relevant resources
recommend quantifying
historical emissions

2. QUANTIFY

2.4 Does the resource encourage the separate accounting of offsets and/or avoided emissions in the quantification of an organisation's emissions? (Yes/No/Not specified)

75% of relevant resources require the separate accounting of offsets/credits and avoided emissions from reductions in inventories. This includes all disclosure frameworks.

2.4 Overview

Separate accounting of offsets/credits and avoided emissions from emissions reductions in inventories is widely recommended and is required by disclosure frameworks (27/35 relevant resources). This is outlined by specifying removals/avoided emissions shall be “*rigorously distinguished and counted separately*” (CAR4), or more indirectly by requiring disclosure of ‘gross’ GHG emissions.

2.4 Details of Guidance

Of those resources classed as 'not specified', CA100 requires only disclosure of retirement of credits, with no mention of separate accounting; and TNZ provides detail of removals plans and companies' approach to emissions reduction using offsets, with no mention of separate accounting.

2.4 Comparison to 2022 Mapping

In 2022, only 10/33 resources recommended separate accounting of offsets/credits and avoided emissions from inventories. This number has almost tripled in 2024, demonstrating that separate accounting of offsets and avoided emissions is understood as standard across the voluntary governance landscape.

2. QUANTIFY

2.5 Does the resource recommend measurements be quality assured or verified? (Yes/No/Not specified)

Over two-thirds of resources recommend that measurements be quality assured

2.6 If yes, how, by whom and in what format does the resource recommend measurements be quality assured? (Text)

2.6 Overview

Over two-thirds of resources (23/36) recommend third-party verification, whilst the remainder either do not specify how verification should be undertaken (3 resources) or allow for either internal or external quality assurance (5 resources).

Independent third-party assurance is recommended by a large majority (14 resources). Internal assurance according to an international assurance standard is the second most common recommendation. Some resources, e.g., the IFRS/ISSB, provide added detail that specifies that verification can take place in several ways, including on-site checking, reviewing calculations, or cross-checking of data against other sources.

HLEG guidance recommends that capacity be built to quality assure emissions data: *“Non-state actors must have their reported emissions reductions verified by independent third parties. Special attention will be needed to build sufficient capacity in developing countries to verify emission reductions.”*

2. QUANTIFY

2.7 Does the resource encourage disclosure and quantification of the impact on nature, biodiversity and natural ecosystems? (Yes/No/Not specified).

Less than 30% of relevant resources encourage quantification of impacts on nature, biodiversity and natural ecosystems. Disclosure frameworks lead requirements for this.

2.7 Overview



<30%
of relevant resources encourage
quantification of impacts on
nature, biodiversity and natural
ecosystems

Only 10 out of 36 relevant resources (27%) recommend the impacts on nature, biodiversity and natural ecosystems be quantified as part of a net-zero target. Some resources (e.g., ERI, OECD) provide examples of what these impacts might be (soil degradation or biodiversity loss). ISO Net Zero Guidelines are ambitious, recommending organisations strive for positive impacts on the natural environment, including supporting and enhancing biodiversity. The ICVCM provides this advice in relation to carbon crediting programmes.

It is worth noting, however, that initiatives may have separate guidance on this topic. BCORP, OECD and ESRS all have a broader sustainability scope, whereas the resources coded as “Not Specified” tend to have a climate-focus. CDP does have questions on impact on nature, but does not score them.

3. TARGET

2050 (or earlier) is the standard net-zero target year, yet there is not unanimous consensus on this. There is strong convergence that targets must include Scope 3 emissions and that 5 years is an appropriate interval for interim targets.

About this section

This section maps guidance on the way targets should be set. It covers recommendations for scope 3 targets, organisational and operational boundaries; time-scales and ambition for net-zero targets; and sectoral and geographically-aligned target setting. The objective is to provide an overview of resources' ambition in accordance with science-aligned net-zero pathways, identify pace-setters for new criteria such as negative emissions, serviced emissions, and embedded emissions.

Number of relevant resources for this section: 35 (see p.10 for 'relevance' criteria).

Areas of alignment:

- 2050 (or earlier) is the standard net-zero target year, but consensus is not unanimous; some resources do not specify deadlines
- Targets must include Scope 3 emissions; strong convergence on this in 2023/24
- Organisations should set interim targets, usually to be achieved within 5-10 years
- Setting science-based targets is a requirement across most resources
- Most resources recommend sector- and/or region-specific pathways be used when setting/reporting transition plans.

Areas for improvement/gaps:

- Many resources signpost to the GHGP for the GHGs that should be included in target-setting, but the GHGP corporate standard does not advise on which GHGs should be in targets (rather, only what should be measured & reported).
- Tighter guidance needed to promote scope-specific targets; most resources allow aggregate targets
- Stronger guardrails needed around the use of intensity targets
- Mixed guidance on scope 3 coverage in targets: some specify a percentage to cover (often between 75-95%), some ask for only 'most relevant' emissions, many do not specify at all
- Disparate guidance on choosing baseline years: many resources do not require explanation of or provide guidance for baseline year selection
- Governance landscape is carbon-centric: most resources do not specify which GHGs to cover, and close to zero recommend setting GHG-specific targets
- Very little guidance on pursuing net-negative emissions
- Little convergence on allowing organisations to transition at different paces relative to developmental circumstances
- Only two resources specify increasing ambition for emissions reductions through time or give guidance on embedded emissions
- Few resources require initial targets to be set within a year of organisations setting a pledge
- Less than half of resources recommend targets cover all areas of a business - including its subsidiaries and only two specify that targets should over serviced emissions.

3. TARGET

Key Findings

Scope 3 target setting: 85% of relevant resources recommend organisations set (or disclose) targets that include scope 3 emissions. The recommendation for targets to include scope 3 emissions has grown from 73% in 2022. However, whilst not all resources require targets to be science-based, and only half of relevant resources recommend net-zero targets be set for 2050 or earlier, over 70% of resources do recommend setting interim targets, which is important for setting and achieving credible long-term targets.

Scope 3 target coverage: As we explored aspects of scope 3 target setting, guidance began to vary, or become patchy. For example, only half of relevant resources make recommendations for what proportion of emissions scope 3 targets should cover. Within this, 'Most relevant' scope 3 emission sources is the main provision given for target setting, with well-known challenges existing in defining what 'relevant' or 'material' emissions mean for organisations.

Absolute or intensity targets: There is consistency across resources that either absolute or intensity reduction targets are allowable, with conditions for the circumstances in which intensity targets are allowed over the preferable absolute emissions reduction targets.

GHG coverage: There is also relative consistency across resources that relevant GHGs are those as defined by the Greenhouse Gas Protocol (i.e., the Kyoto Protocol). As outlined in section 3.14, referring to the GHG Protocol for target-setting does leave instruction open to (mis)interpretation, since the GHG Protocol does not strictly deal with target-setting, but rather accounting. We suggest most resources would benefit from greater specificity as to which GHGs they expect organisations to target/disclose targets for, by referring to the Kyoto Protocol to close this potential loop-hole.

Baselines: Gaps exist around some crucial aspects of target setting: less than two-thirds of resources provide any recommendation for how base years (baselines) for emission targets should be set, nor require any explanation of how baselines have been chosen, a major omission for high-integrity and comparable target-setting.

Net negative emissions and GHGs: We mapped new criteria: striving for negative emissions (only 20% of relevant resources recommended this); coverage of serviced emissions in targets (only Race to Zero and HLEG); guidance on embedded emissions (GHG Protocol and HLEG); separate targets for non-CO2 GHGs like methane (only 5 resources) and allowing organisations to transition at different paces in light of developmental circumstances.

Summary

We consider that some significant improvements have been made in the guidance surrounding target-setting, with a near-majority requiring scope 3 to be included, for example. But whilst this aspect of guidance has been strengthened, the detail of what it actually means to set (scope 3) targets with integrity leaves some room for improvement. A major area of omission that requires additional guidance is what portion of scope 3 should have targets set, and the meaning of material or relevant emissions in this context.

3. TARGET

	Target Type	Scope 3 Target	Separate targets Scope 1, 2 and 3	Coverage of Scope 3 Target
CISL	Absolute OR intensity	Yes	Not Specified	Not Specified
CAR4	Absolute OR intensity	Yes	Separate targets	75-95%
CERES	Absolute only	Yes	Not specified	Not Specified
CHAO	Not specified	Not Specified	Not specified	Not Specified
CA100	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Yes	S1&2, separate S3	Most relevant categories
ERI	Absolute OR intensity	Yes	Not Specified	Not Specified
GOLDS	Not specified	Not Specified	Not specified	Not Specified
GGPC	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Not Specified	Not specified	Not Specified
GGPS3	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Yes	Not specified	Not Specified
IIGC	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Yes	Not specified	Most relevant categories
ISO14064	Absolute OR intensity	Not Specified	Not specified	Not Specified
IWA42	Not specified	Yes	Separate targets	95% or more
IGCC	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Yes	Not specified	Not Specified
OECD	Absolute AND intensity where relevant	Yes	Not specified	Not Specified
RTZ3	Absolute AND intensity where relevant	Yes	Not Specified	75-95%
SBTIC	Absolute OR intensity	Yes	Separate targets	75-95%
OOP	Not specified	Yes	Not specified	Not Specified
TNZ	Absolute AND intensity where relevant	Yes	Not specified	Not Specified
HLEG	Absolute AND intensity where relevant	Yes	Not specified	95% or more
WMBC	Absolute OR intensity	Yes	Not Specified	Not Specified
WBCSD	Not specified	Yes	Not specified	75-95%
WEF	Not specified	Not Specified	Not specified	Not Specified
CDPGQ	Absolute OR intensity	Yes	S1&2, separate S3	<75%
ESRS	Absolute AND intensity where relevant	Yes	No	Most relevant categories
GFANZ	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Yes	Not specified	Most relevant categories
GRI	Intensity only	Not Specified	Not specified	Not Specified
GRI CED	Absolute OR intensity	Yes	No	Most relevant categories
IFRS	Absolute OR intensity	Yes	Not specified	Not Specified
SMECH	Absolute OR intensity	Yes	Separate targets	Not Specified
TPT	Absolute OR intensity	Yes	S1&2, separate S3	Most relevant categories
ACT	Intensity preferred; absolute where no pathways exist	Yes	S1&2, separate S3	Most relevant categories
BCORP	Absolute OR intensity	Yes	Not specified	75-95%
CBI	Absolute OR intensity	Yes	S1&2, separate S3	Most relevant categories
ICVCM	Not specified	Not Specified	Not specified	Not Specified
NCI	Absolute preferred. Intensity targets to be accompanied by absolute emissions reductions	Yes	Not specified	95% or more
TPI	Absolute OR intensity	Yes	Not specified	Not Specified
VCMI	Absolute OR intensity	Yes	Separate targets	75-95%

Resources categorised as 'not relevant' (2/37): WEF and ICVCM

NB: all data must be read in conjunction with detail in our [dataset](#)

3. TARGET

	Baseline Year for Targets	Net Zero Timeline	Different rates to transition based on local context	Interim Targets
CISL	Not specified	2050	Not Specified	Yes
CAR4	Not specified	2050	Not Specified	Not Specified
CERES	Not specified	2040	Not Specified	Yes
CHA0	Not specified	Not specified	Not Specified	Not Specified
CA100	Not specified	2050	Not Specified	Yes
ERI	Criteria for baseline year	2040	Not Specified	Yes
GOLDS	Not specified	Not specified	Not Specified	Not Specified
GGPC	Criteria for baseline year	Not specified	Not Specified	Not Specified
GGPS3	Criteria for baseline year	Not specified	Not Specified	Not Specified
IIGC	Not specified	2050	Not Specified	Yes
ISO14064	Criteria for baseline year	Not specified	Not Specified	Not Specified
IWA42	Explain baseline choice	2050	Yes	Yes
IGCC	Criteria for baseline year	2050	Not Specified	Yes
OECD	Not specified	Not specified	Not Specified	Yes
RTZ3	Not specified	2050	Yes	Yes
SBTIC	Criteria for baseline year	2050	Not Specified	Yes
OOP	Not specified	Not Specified	Not Specified	Not Specified
TNZ	Not specified	2050	Yes	Yes
HLEG	Not specified	2050	Yes	Yes
WMBC	Criteria for baseline year	2050	Yes	Yes
WBCSD	Not specified	2050	Not Specified	Yes
WEF	Not specified	Not Specified	Not Specified	Not Specified
CDPGQ	Not specified	2050	Not Specified	Yes
ESRS	Criteria for baseline year	2050	Not Specified	Yes
GFANZ	Criteria for baseline year	2050	Not Specified	Yes
GRI	Explain baseline choice	Not specified	Not Specified	Not Specified
GRI CED	Explain baseline choice	Not Specified	Not Specified	Yes
IFRS	Not specified	Not Specified	Not Specified	Not Specified
SMECH	Specifies baseline year	2050	Not Specified	Yes
TPT	Not specified	Not specified	Not Specified	Yes
ACT	Criteria for baseline year	Not specified	Not Specified	Yes
BCORP	Not specified	2050	Not Specified	Yes
CBI	Not specified	2050	Not Specified	Yes
ICVCM	Not specified	Not specified	Not Specified	Not Specified
NCI	Explain baseline choice	2050	Not Specified	Yes
TPI	Not specified	Not specified	Not Specified	Not Specified
VCM1	Specifies baseline year	2050	Not Specified	Yes

Resources categorised as 'not relevant' (2/37): WEF and ICVCM

NB: all data must be read in conjunction with detail in our [dataset](#)

3. TARGET

Recommended Intervals for Targets		Science-Based Targets	Increase Ambition over Time
CISL	Not specified	Yes	Not Specified
CAR4	Not specified	Yes	Not Specified
CERES	Not specified	Yes	Not Specified
CHA0	Not specified	Yes	Yes
CA100	short- (2023 to 2026), medium- (2027 to 2035) and long-term (2036 to 2050)	Yes	Not Specified
ERI	Not specified	Yes	Not Specified
GOLDS	Not specified	Yes	Not Specified
GGPC	Not Specified	Not Specified	Not Specified
GGPS3	Not Specified	Not Specified	Not Specified
IIGC	short- (<2026), medium- (2026-2036) and long-term (i.e., 2050) targets	Yes	Not Specified
ISO14064	Not specified	Not Specified	Not Specified
IWA42	2 to 5 years	Yes	Yes
IGCC	Not specified	Yes	Not Specified
OECD	Not specified	Yes	Not Specified
RTZ3	In next decade	Yes	Not Specified
SBTIC	5 to 10 years	Yes	Not Specified
OOP	Not specified	Not Specified	Not Specified
TNZ	In next decade	Yes	Not Specified
HLEG	5 years	Yes	Not Specified
WMBC	5 to 10 years	Yes	Not Specified
WBCSD	Not specified	Yes	Not Specified
WEF	Not specified	Not Specified	Not Specified
CDPGQ	5 to 10 years	Yes	Not Specified
ESRS	5 years	Yes	Not Specified
GFANZ	Not specified	Yes	Not Specified
GRI	Not Specified	Not Specified	Not Specified
GRI CED	Not specified	Yes	Not Specified
IFRS	Not specified	Yes	Not Specified
SMECH	5-10 years	Not Specified	Not Specified
TPT	Not specified	Yes	Not Specified
ACT	5 years	Yes	Not Specified
BCORP	5 years	Yes	Not Specified
CBI	Three-yearly targets for the nine years following CBI certification, then five-yearly targets thereafter.	Yes	Not Specified
ICVCM	Not specified	Not Specified	Not Specified
NCI	5 years	Yes	Not Specified
TPI	Not specified	Yes	Not Specified
VCMI	5 to 10 years	Yes	Not Specified

Resources categorised as 'not relevant' (2/37): WEF and ICVCM

NB: all data must be read in conjunction with detail in our [dataset](#)

3. TARGET

	Sector/geog.- specific pathways	GHG Coverage for Targets	Separate targets for different GHGs	Embedded Emissions
CISL	Yes	All per GHGP	Not Specified	Not Specified
CAR4	Yes	All per GHGP	Not Specified	Not Specified
CERES	Not Specified	Not Specified	Not Specified	Not Specified
CHA0	Not Specified	Not Specified	Not Specified	Not Specified
CA100	Yes	Not Specified	Not Specified	Not Specified
ERI	Not Specified	All per GHGP	Not Specified	Not Specified
GOLDS	Not Specified	Not Specified	Not Specified	Not Specified
GGPC	Not Specified	All per GHGP	Not Specified	Yes
GGPS3	Not Specified	All per GHGP	Not Specified	Not Specified
IIGC	Yes	All per GHGP	Not Specified	Not Specified
ISO14064	Yes	Not Specified	Not Specified	Not Specified
IWA42	Yes	All per GHGP	Not Specified	Not Specified
IGCC	Yes	Not Specified	Not Specified	Not Specified
OECD	Yes	Not Specified	Not Specified	Not Specified
RTZ3	Yes	Not Specified	Yes	Not Specified
SBTIC	Yes	All per GHGP	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified	Not Specified
TNZ	Yes	Not Specified	Yes	Not Specified
HLEG	Yes	All per GHGP	Yes	Yes
WMBC	Yes	All per GHGP	Not Specified	Not Specified
WBCSD	Yes	All per GHGP	Not Specified	Not Specified
WEF	Not Specified	Not Specified	Not Specified	Not Specified
CDPGQ	Yes	Not Specified	Not Specified	Not Specified
ESRS	Yes	All per GHGP	Not Specified	Not Specified
GFANZ	Yes	Not Specified	Yes	Not Specified
GRI	Not Specified	Not Specified	Not Specified	Not Specified
GRI CED	Not Specified	Not Specified	Not Specified	Not Specified
IFRS	Yes	All per GHGP	Not Specified	Not Specified
SMECH	Not Specified	All per GHGP	Not Specified	Not Specified
TPT	Yes	All per GHGP	Yes	Not Specified
ACT	Yes	All per GHGP	Not Specified	Not Specified
BCORP	Yes	All per GHGP	Not Specified	Not Specified
CBI	Yes	All per GHGP	Not Specified	Not Specified
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified
NCI	Yes	All per GHGP	Not Specified	Not Specified
TPI	Yes	Not Specified	Not Specified	Not Specified
VCMI	Not Specified	Not Specified	Not Specified	Not Specified

Resources categorised as 'not relevant' (2/37): WEF and ICVCM

NB: all data must be read in conjunction with detail in our [dataset](#)

3. TARGET

	Initial Targets within a Year of making a Pledge	Targets to cover all business activities and subsidiaries	Coverage of serviced emissions?	Negative emissions after meeting net zero?
CISL	Not Specified	Not Specified	Not Specified	Not Specified
CAR4	Not Specified	Not Specified	Not Specified	Yes
CERES	Not Specified	Not Specified	Not Specified	Not Specified
CHA0	Not Specified	Not Specified	Not Specified	Not Specified
CA100	Not Specified	Not Specified	Not Specified	Not Specified
ERI	Not Specified	Yes	Not Specified	Yes
GOLDS	Not Specified	Not Specified	Not Specified	Not Specified
GGPC	Not Specified	Yes	Not Specified	Not Specified
GGPS3	Not Specified	Not Specified	Not Specified	Not Specified
IIGC	Not Specified	Not Specified	Not Specified	Not Specified
ISO14064	Not Specified	Not Specified	Not Specified	Not Specified
IWA42	Not Specified	Yes	Not Specified	Yes
IGCC	Not Specified	Not Specified	Not Specified	Not Specified
OECD	Not Specified	Not Specified	Not Specified	Not Specified
RTZ3	Yes	Not Specified	Yes	Yes
SBTIC	Yes	Yes	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified	Not Specified
TNZ	Not Specified	Not Specified	Yes	Yes
HLEG	Yes	Yes	Not Specified	Not Specified
WMBC	Not Specified	Yes	Not Specified	Not Specified
WBCSD	Not Specified	Yes	Not Specified	Not Specified
WEF	Not Specified	Not Specified	Not Specified	Not Specified
CDPGQ	Not Specified	Yes	Not Specified	Not Specified
ESRS	Not Specified	Yes	Not Specified	Not Specified
GFANZ	Not Specified	Yes	Not Specified	Not Specified
GRI	Not Specified	Not Specified	Not Specified	Not Specified
GRI CED	Not Specified	Not Specified	Not Specified	Not Specified
IFRS	Not Specified	Not Specified	Not Specified	Not Specified
SMECH	Yes	Not Specified	Not Specified	Not Specified
TPT	Not Specified	Yes	Not Specified	Not Specified
ACT	Not Specified	Yes	Not Specified	Not Specified
BCORP	Not Specified	Not Specified	Not Specified	Not Specified
CBI	Yes	Yes	Not Specified	Not Specified
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified
NCI	Not Specified	Yes	Not Specified	Yes
TPI	Not Specified	Not Specified	Not Specified	Not Specified
VCMI	Not Specified	Not Specified	Not Specified	Yes

Resources categorised as 'not relevant' (2/37): WEF and ICVCM

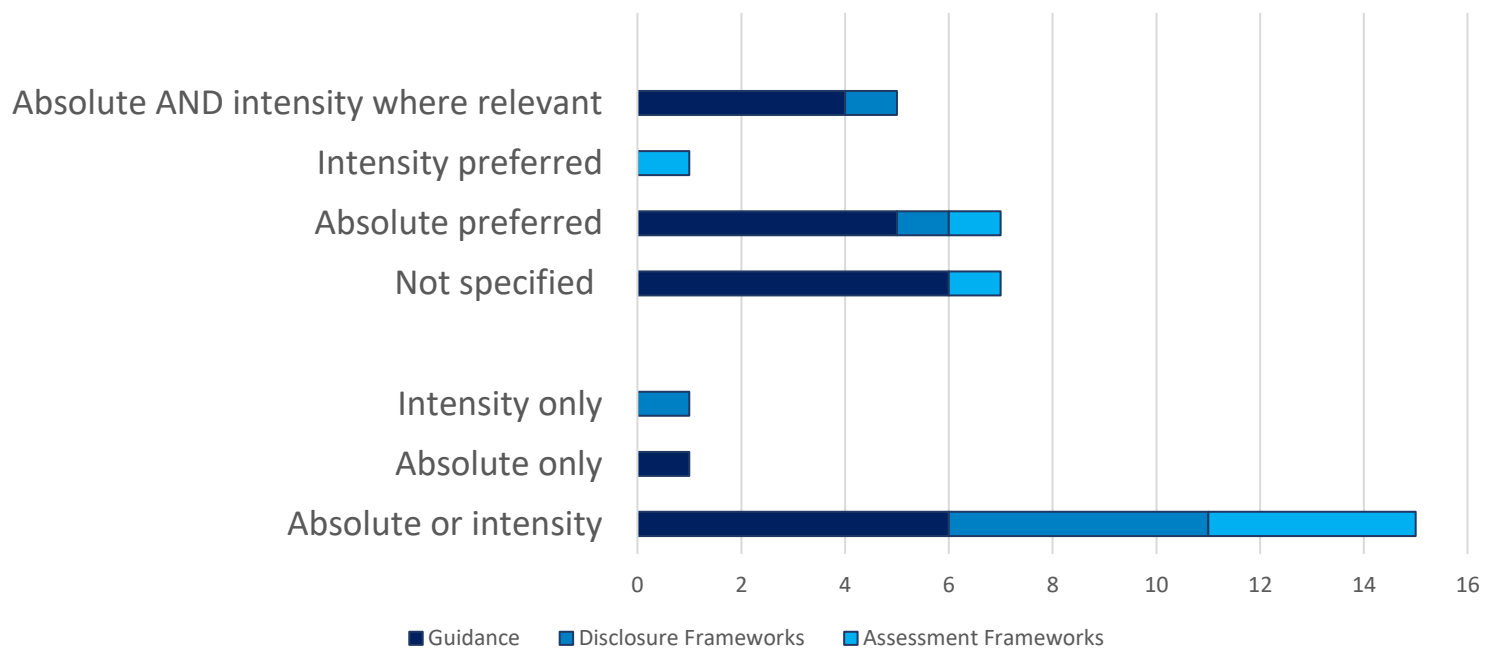
NB: all data must be read in conjunction with detail in our [dataset](#)

3. TARGET

3.1 Which type of target does the resource recommend organisations set? (Absolute OR intensity / Absolute only / Intensity only / Absolute preferred; Intensity preferred; Absolute AND Intensity/ Not specified)

Just over 40% of relevant resources allow organisations to set, or disclose upon, targets for absolute or intensity emissions reductions.

What Type of Target Should Organisations Set?



3.1 Overview

The resources assessed allow flexibility as to what type of targets organisations should set. 40% (15/35) resources explicitly allow either absolute or intensity targets; 14% (5/35) request absolute and intensity where relevant; and 23% (8/35) resources allow either, but express preference for one type. Only one resource recommends targeting absolute emissions only (CERES), and one intensity emissions only (GRI 303).

3. TARGET

3.1 Details of Guidance

Absolute or intensity

The majority of resources (15) stipulate no preference between absolute or intensity emissions reductions targets. Absolute targets are considered the default or most important target type by a range of resources (ERI, CAR4, RtZ, SMECH, BCORP, OECD, GRI CED, UN HLEG), although those resources allow for both absolute and intensity targets to be set (e.g., RtZ recommends including both as a default). The main cases where intensity targets are allowed are:

- 2030 intermediate targets
- targets by small companies (<50 employees)
- to follow sector-specific (physical) intensity pathways, and
- companies providing climate solutions (as per ERI, RTZ).

SBTi is referred to mostly for guidance on target setting, followed by Race to Zero and the Transition Pathway Initiative.

Absolute preferred; recommends intensity targets to be accompanied by absolute emissions reductions

Many resources stipulate that while either an absolute or intensity target can be set, companies should disclose what intensity targets mean in absolute terms and align to net zero by 2050 or sooner in absolute terms (IGCC, GHGP, CA100+, GFANZ).

Intensity preferred; absolute where no pathways exist

ACT is the only resource that prefers intensity targets based on sectoral pathways, where available. Alternatively, a default pathway based on contraction of absolute emissions may be used in ACT.

Absolute only

Ceres specifies absolute targets, but only provides guidance on this matter for intermediate targets.

Intensity only

GRI is the only resource that only stipulates setting intensity targets.

Absolute AND intensity where relevant

Race to Zero stipulates that declaring both types of targets provides the most clarity, citing examples where either type may be appropriate, e.g., for climate solutions (like renewables), or for financial institutions: *“for finance institutions and others with “indirect” emissions, intensity targets may be helpful for tracking the process of decarbonization. For example, putting additional investment into the steel sector to finance the development of zero-carbon production technology may lead to a temporary increase in absolute financed emissions, but represents an activity that is needed to drive transformative decarbonization, which could be traced by measuring the carbon intensity of the steel sector over time.”*

3.1 Comparison to 2022 Mapping

There has been an increase in guidance provided by resources to entities, with only 11/33 resources allowing organisations to declare absolute *or* intensity targets in 2022, compared to considerably more nuance in the landscape today, with different resources stipulating under which conditions an intensity target could be appropriate.

3. TARGET

3.2 Does the resource recommend setting targets for scope 3? (Yes/No/Not Specified)

85% of relevant resources recommend organisations set, or disclose targets for, scope 3 emissions reductions, including all relevant assessment frameworks.

3.2 Overview

A significant majority of relevant resources (30/35) require targets for scope 3 to be set or disclosed. Of those relevant resources that do not specify this recommendation (Chapter Zero, Gold Standard, ICVCM, and GRI) little guidance is given regarding target setting more broadly. However, GHGP Corporate Standard and the ISO14064 standard allow companies to decide whether to set scope 3 targets.

3.2 Comparison to 2022 Mapping

The current voluntary governance landscape demonstrates that recommendations for Scope 3 target setting has increased significantly since 2022. In 2022, only 73% of resources made this recommendation, compared with early 85% today.



85%
of relevant resources
recommend organisations
set, or disclose targets
for, Scope 3 emissions
reductions.

3. TARGET

3.3 If organisations should set scope 3 targets, then how?

Guidance varies around how organisations should set Scope 3 targets

3.3 Details of Guidance

Of those relevant resources that require scope 3 targets to be set, there is variation in *how* organisations are recommended to set targets.

Ten resources allow companies to define the most **material or relevant** Scope 3 emissions themselves (including SBTi, CBI, GFANZ, RtZ, BCORP) whilst more stringent resources (e.g., NCI, IWA) require **all GHGP Scope 3 sources to be included in targets**. Others require targets to cover a company's **upstream and downstream emissions** (ERI, OOP, WBCSD, WMBC), others those emissions within their **sphere of influence** (OOP), and others those emissions that can be **reasonably quantified** (OECD).

There are also differences in recommendations relating to timing - with **greater stringency for long-term targets**, with 'relevant' or 'material' emissions to be targeted in the short-term.

There is, therefore, varying language and definition of what should be included in Scope 3 target setting.

3. TARGET

3.4 Does the resource recommend targets are set separately for scopes 1, 2 and 3? (Yes, separate targets for all Scopes/Yes, separate targets for Scope 1+2 and Scope 3/No/Not specified)

Just under one-third of organisations recommend that targets be set or disclosed separately for Scopes 1, 2, and 3.

3.4 Overview

Whilst most resources make no recommendation as to how targets should be disaggregated by scope, of those that do, five allow scope 1 and 2 to be bundled, with scope 3 separated; and five require all scopes to be separated (these combined make 10/35, 28%). Three (GGPS3, GRI CED and ESRS) all specify that targets may be set both separately and/or combined.

3.4 Details of Guidance

Just 5 resources recommend setting separate targets for all scopes, either themselves or by referring to SBTi.

GHGP Scope 3, GRI CED and ESRS (regulatory) are the only resources that specify allowing combined targets. SBTi has a similar approach: although their main recommendation is to set separate targets for each Scope, they allow combining Scopes "if SBTi can review ambition of the individual target components and confirm that each meets the relevant ambition criteria".

Additionally, five resources recommend Scope 1 & 2 targets to be set separately from Scope 3. ISO Net Zero Guidelines allow for combined Scope 1 & 2 targets only if the organisation has limited Scope 1 emissions.

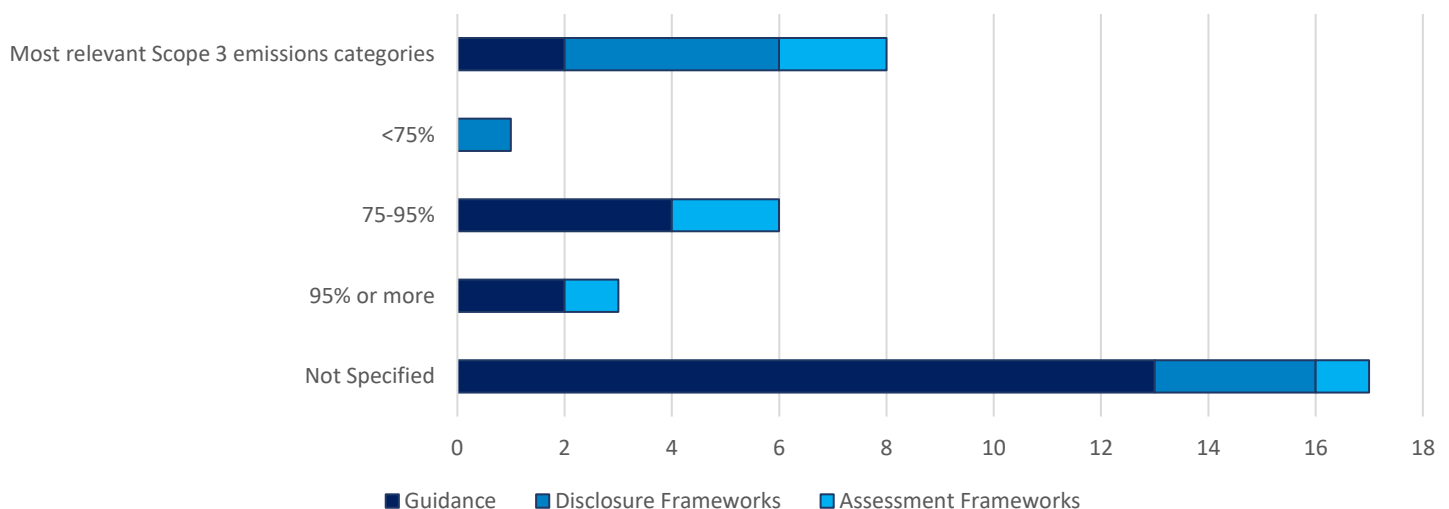
25/35 resources (just over 70%) do not specify any guidance on this topic.

3. TARGET

3.5 What portion of Scope 3 emissions does the resource recommend targets to cover? ($\geq 95\%$ / 75-95% / $< 75\%$ / Most relevant Scope 3 emissions categories / Not Specified)

Half of relevant resources make recommendations for what proportion of scope 3 targets should cover. 'Most relevant' Scope 3 emission sources is the main provision given for target setting.

What Proportion of Scope 3 Emissions Should Be Covered by a Net Zero Target?



The Scope 3 Target Gap

- High agreement on Scope 3 inclusion in net zero targets (see 2.1)
- However, wide variety over portion of Scope 3 emissions for a net zero target
- Large gap between emissions target coverage between e.g., $\geq 95\%$ of Scope 3 emissions vs. 'most relevant Scope 3 emissions categories'



3. TARGET

3.5 Overview

Half (48%) of relevant resources make recommendations for what portion of Scope 3 targets should cover. Of these, three recommend targets cover 95% or more of Scope 3 emissions, six recommend targets cover between 75-95% of Scope 3 emissions, and the remaining eight recommend targets cover most relevant Scope 3 emissions. The remaining 19 relevant resources make no recommendation for target coverage of Scope 3.

3.5 Details of Guidance

Several resources make different recommendations for intermediate vs long-term targets. SBTi for example has an 'expansive boundary' approach for Scope 3, only requiring Scope 3 in near-term targets if Scope 3 emissions represent >40% of an organisation's total emissions, with near-term targets then covering >67% of Scope 3 emissions. Long-term targets must cover at least 90% of Scope 3 emissions. SBTi defines this as the *"materiality threshold of 90%: all material sources of emissions in the value chain"*.

Both ERI and GGP Scope 3 specify a measurement coverage but no target coverage, and thus are coded as 'not specified'. This may be unintended, as the tone of many resources' texts suggests an assumption that any Scope 3 targets should cover all emissions quantified. However this isn't stated anywhere. ESRS however is explicit about this assumption: *"If the boundary of the GHG emission reduction target diverges from that of the GHG emissions reported under Disclosure Requirement E1-6, the undertaking shall disclose which gases are covered, the respective percentage of Scope 1, 2, 3 and total GHG emissions covered by the target."*

"Most relevant scope 3 emissions" is also understood to mean all material GHG emissions. This provision leaves room for interpretation, with materiality undefined. However, New Climate Institute states that *"While the wording of the ISO Net Zero Guidelines – that all 'relevant' emission scopes should be covered – may be interpreted inconsistently, we understand that this excludes only emission categories that are irrelevant by definition of there being zero GHG emissions from those categories; all emission sources from which companies have any GHG emissions are clearly 'relevant'."* NCI itself recommends coverage of all mandatory Scope 3 emission categories rather than just the most relevant categories. Meanwhile, CA100 requires coverage of the most relevant Scope 3 GHG emissions categories for the company's sector.

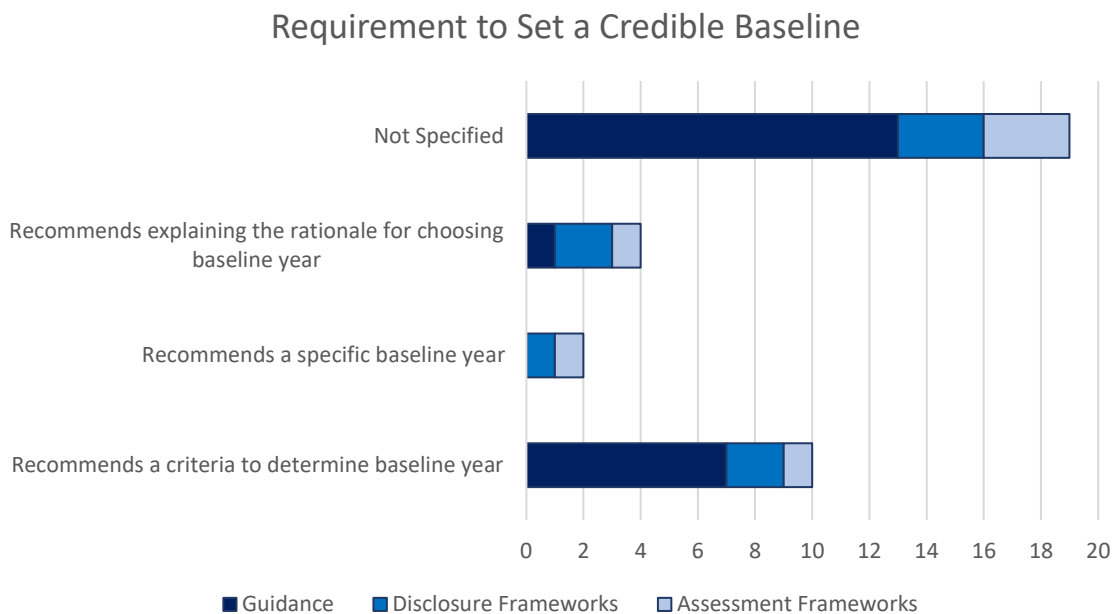
3.5 Comparison to 2022 Mapping

In 2022, 13 resources did not specify what proportion of Scope 3 emissions should have targets set. We believe the increase in the number of resources not specifying any instruction on this is a result of what is reflected across Scope 3 advice more generally - that although recommendations exist across the landscape to measure and target Scope 3, detail of how organisations should deal with Scope 3 in terms of boundary coverage remains to be filled in.

3. TARGET

3.6 Does the resource have specific requirements on how to set a credible baseline year for emissions reduction targets? (Recommends a criteria to determine baseline year / Recommends a specific baseline year / Recommends explaining the rationale for choosing baseline year / Not specified)

60% of resources provide no requirement for how baseline years should be selected, nor require explanation of rationale for choosing baseline years.



60%
of relevant resources
provide no guidance
on how baseline years
should be selected



Despite the importance of an appropriate baseline year in setting a credible emissions reduction pathway

3. TARGET

3.6 Overview

Although three-quarters of resources require a baseline (or base year) to be set for emissions reductions targets, only 16 of those resources provide any guidance for or require any qualification of why baselines were chosen by organisations.

3.6 Details of Guidance

Several resources consider that, in choosing baseline years, **representativeness** against an organisation's emissions is most important (ERI, GGP, NCI, SBTi, ISO14064, GFANZ). Other criteria to determine a baseline year include **verifiable emissions data** (GGPC, SBTi, ISO14064), a base year **no earlier than 2015** (SBTi) or 2019 (SMECH, IGCC) or **no more than two years back** (ERI).

There is disagreement on whether the baseline year should be the most recent year for which data is available (ERI, VCMI, IGCC), versus choosing the earliest relevant point in time with reliable data (GGPC).

Resources encourage using the **same base year for all targets and scopes** (ERI, GGPS) and/or for near- and long-term targets (NCI, SBTi, VCMI), although here too, representativeness is of greatest importance.

A **fixed target base year**, a **consecutive multi-year average** and a **rolling target base year** are commonly accepted (ERI, GGPC, ISO14064, IGCC, ESRS): although not all methods are mentioned by all resources, no method is explicitly considered inferior.

Explaining the **rationale for choosing the base year** is recommended also by resources with criteria on selecting a year (GGPC, GGPS, ISO14064, ESRS).

Terminology: Although the majority of resources use base year, others like ISSB and TPT speak of a base period rather than a year, as this may be more accurate when organisations use a multi-year average.

3.6 Comparison to 2022 Mapping

In 2022, only 5/33 resources gave provisions for how or in what year base lines should be set. In 2024, this has more than doubled. 2022 mapping did not disaggregate by requirements for companies, and did not count how many resources required baselines to be selected by organisations.

3. TARGET

3.7 By what year does the resource recommend organisations target net zero? (Year/Not specified)

Over half of resources recommend organisations set net-zero targets for 2050.

3.7 Overview

20 out of 35 (57%) of relevant resources recommend organisational net zero by 2050, with ERI and CERES showing more ambition (2040). WMBC, BCORP and HLEG encourage reaching net-zero sooner, according to capacity or level of ambition, while still allowing 2050. Some resources (SBTi, BCORP) recommend the use of sectoral pathways (3.13 elaborates on this). NCI cites IPCC on aiming for “*net-zero global CO₂ emissions by around 2050, net-zero GHG emissions by around 2070, and net-negative emissions thereafter (IPCC, 2022)*”.

3.7 Comparison to 2022 Mapping

In 2022, 15/33 resources recommended net zero by 2050 at the latest, one resource recommended net zero by 2030 (BCORP), one by 2040 (CERES), 16/33 did not specify a target date for net zero.

Our 2024 mapping therefore demonstrates a marginal increase in the number of resources advocating for reaching net zero sooner by 2050, though the majority of resources are still recommending organisational net zero by 2050.

3. TARGET

3.8 Does the resource allow for organisations to transition at different paces in light of different national circumstances (e.g. development status)? (Yes/No/Not specified)

Only 5 resources allow for organisations to transition at different paces considering developmental circumstances.

3.8 Overview

Allowing organisations to transition to net zero at different paces dependent on different developmental circumstances is not well covered across the resources, with only 6 resources accommodating for different paces depending on national circumstances (RtZ, ISO Net Zero Guidelines, HLEG, WMBC and TNZ - TNZ by referring to RtZ). As is to be expected, allowance for this comes from net-zero guidance rather than assessment or disclosure frameworks.

3.8 Details of Guidance

There are two approaches amongst resources outlining different transition paces: some resources recommend a **general net-zero target year and allow for slower transitions by those who need it** (RtZ, IWA), whereas other resources **maintain a general net-zero target year and encourage any organisations with the capacity to go faster** (WMBC).

Whilst B CORP recommends 2050 as net-zero target date and encourages organisations with "*significant contributions to GHG emissions*" to go faster, this allowance is not made in reflection of different developmental circumstances and is therefore not counted as a 'yes'.

VCMI and GFANZ acknowledge the difficulty of a net-zero transition for (amongst others) organisations in the Global South, but do not specify allowing a different net zero timeline.

Two Approaches to Fair Share

Limited discussion of fair share: only 5 resources allow for organisations to transition at different paces in light of developmental circumstances

Allowing slower transitions for those who need it

Encouraging a faster pace for those with capacity

3. TARGET

3.9 Does the resource recommend entities to set interim targets?
(Yes/No/Not specified)

Over 70% of relevant resources recommend setting interim targets.

3.9 Overview

25 out of 35 resources recommend setting some form of interim targets. Wording varies between short-, medium- and long-term targets vs near-term and long-term targets vs milestones vs interim targets.

3.9 Comparison to 2022 Mapping

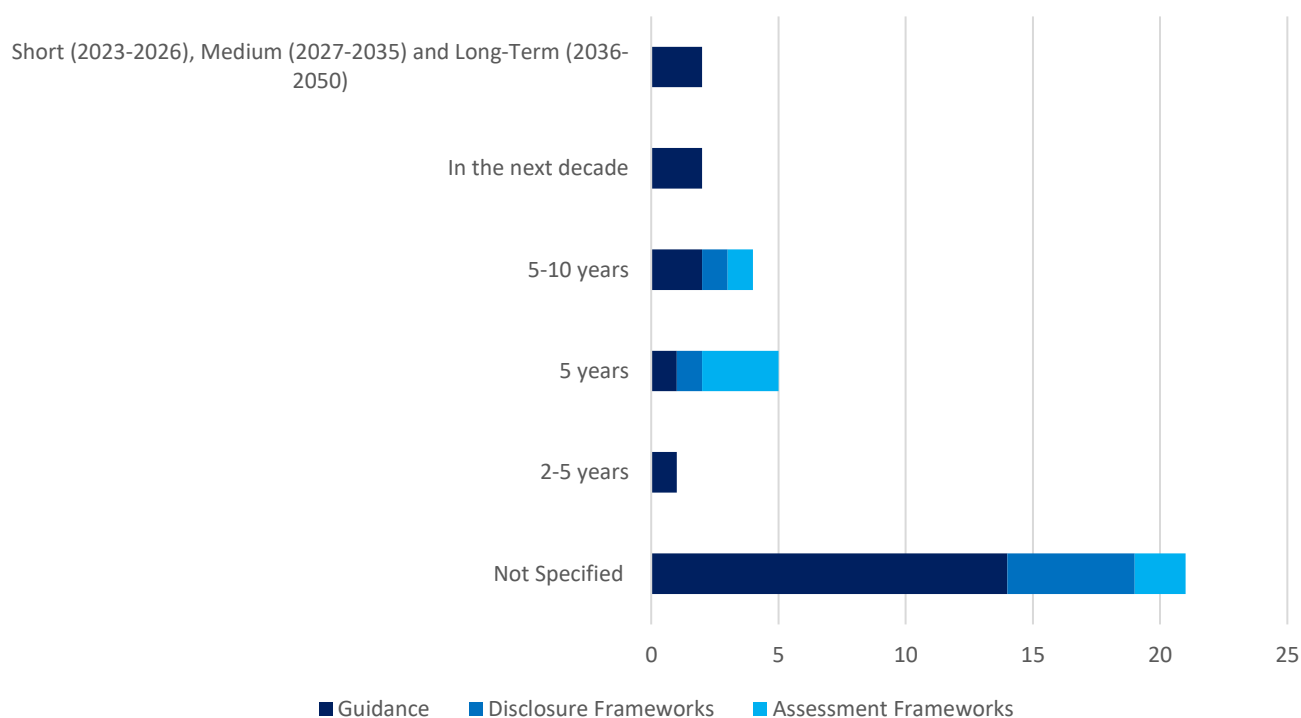
In 2022, 18/33 (just over half) of resources ask entities to set an interim target, showing that the importance of interim target-setting has become more widely understood for ensuring that entities' targets are viable, credible and address immediate GHG reduction needs.

3. TARGET

3.10 What is the recommended time interval for interim targets suggested by the resource? (Text/Not specified)

3.10 Conditions of Guidance

What is the recommended time interval for interim targets suggested by the resource?



CA100 lists three defined periods for an organisation's short-, medium-, and long-term targets (respectively between 2023 to 2026, 2027 to 2035 and 2036 to 2050). These timeframes differ slightly from IIGC, which otherwise uses the same format: short (<2026), medium (2026-2036) and long term (i.e. 2050). RtZ recommends setting an interim target to achieve "in the next decade" whilst SBTi requires interim targets only if the net-zero target date is 10 years or more from now. CBI requires interim targets on a three-yearly basis for the nine years following the date of certification and a five-yearly basis thereafter.

3. TARGET

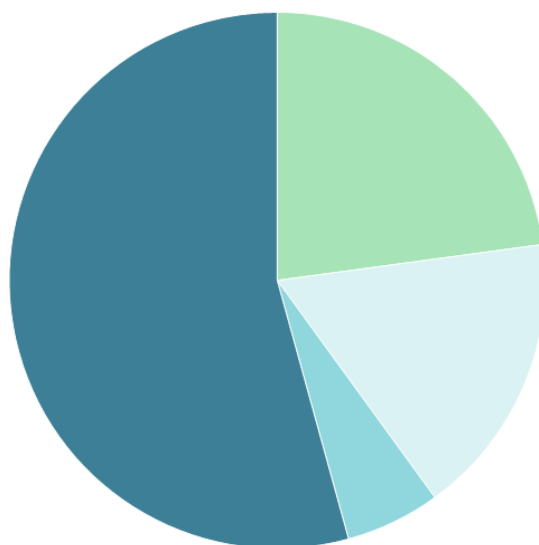
3.11 Does the resource recommend targets be science-based and set with reference to climate scenarios from organisations such as the IEA or IPCC? (Yes/No/Not specified)

Over 80% of relevant resources require setting science-based targets.

3.11 Overview

The term “science-based targets” is contested and normative, so this question focused on targets according to scenario pathways e.g., IPCC or IEA. Setting science-based targets is considered widely-accepted, recommended by 29 resources. This recommendation is particularly strong amongst relevant disclosure and assessment frameworks, with all except GRI 305 and the SME Climate Hub requiring science-based targets to be set.

Which climate scenarios do resources recommend organisations follow?



- IPCC: ERI, CAR4, CA100; RtZ, WBCSD, VCMi, OECD, HLEG
- IEA: ACT, CAR4, CA100, RtZ, WBCSD, HLEG
- SBTi: GDP, CHA0
- 1.5C / Paris: CISL, NCI, SBTi, TPI, IWA42, IFRS, TPT, BCORP, CERES, OECD, GOLDS, WMBC, TNZ, GRI CED, GFANZ, CBIG, IGCC, IIGC, ESRS

3. TARGET

3.12 Does the resource recommend organisations to increase their ambition over time?

Only two resources specify increasing ambition over time.

3.12 Overview

There are two pace-setters specifying that entities should increase their ambition over time. Those are Chapter Zero and ISO Net Zero Guidelines.

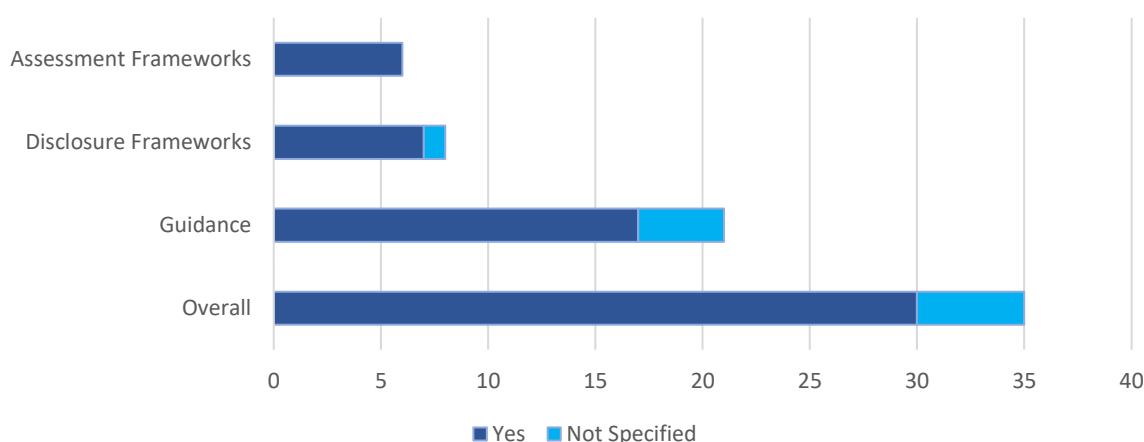
This question relates to updating targets as policy and technology environments evolve, and the limited associated recommendation demonstrates lack of attention to ratcheting ambition for targets.

3.13 Does the resource recommend the use of sector-specific or geographically-specific methodologies/ pathways to set targets? (Yes/No/Not specified)

Over two-thirds (68%) of relevant resources recommend sector- and/or region-specific pathways be used or disclosed when setting/reporting transition plans.

25 resources recommend sector- and/or region-specific pathways be used or disclosed when setting targets. Carbone4 refers to using sectoral frameworks like SBTi to define trajectories, and failing this, to refer to global (IPCC/IEA), national (NDCs) or local scenarios. WBCSD refers to developing custom scenarios with an appropriate range of uncertainty.

"Yes" vs. "Unspecified" Answer Breakdown per Resource Type



3. TARGET

3.14 Which GHGs does the resource recommend targets cover?
(All according to the GHG Protocol* / Some / CO2 Only / Not Specified)

Over half of relevant resources refer to the Greenhouse Gas Protocol for GHG emissions targets coverage

There is a misconception that the GHGP Corporate Standard provides guidance for target setting, when it provides guidance for accounting and reporting only.

3.14 Overview

Assessing guidance on this question was one of the most contentious for the research team. Over half of relevant resources (19/35) refer to the Greenhouse Gas Protocol for target coverage for emissions, and the GHGP itself covers the **accounting and reporting** of six gases under the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide, (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆).

However, the GHGP does not provide guidance for target setting, and therefore, using a strict reading of our question, “which GHGs does the resource recommend **targets** to cover”, this would result in all those citing the GHGP being classified as ‘not specified’. However, this does not reflect how resources intend to reference to the GHGP to be used. The emphasis is upon the categories of GHG types that the GHGP covers, rather than GHGP’s use of these categories for accounting purposes.

We note that this could leave room for interpretation and suggest that this potential loop-hole be closed by adding wording referring to the six main GHGs or the Kyoto Protocol (as is done by ACT).

There are instances, e.g., Race to Zero and HLEG that state targets should cover “all greenhouse gas emissions”. However, only HLEG was coded as ‘All According to the GHG Protocol’ because of their caveat that this should be ‘based on internationally approved measures of warming effects’ which should be read as the six listed by the Kyoto Protocol. Race to Zero did not make this explicit and was counted as ‘not specified’.

3. TARGET

3.15 Does the resource recommend separate targets for material non-CO2 greenhouse gas emissions? (Yes/No/Not Specified)

Only five resources recommend separate targets for non-CO2 GHGs, emphasising methane.

3.15 Overview

HLEG, Race to Zero and Transform to Net Zero recommend separate targets for methane, whilst TPT and GFANZ have a disclosure requirement on *“any additional targets set, e.g. on methane”*.

Some resources refer to GHGP or SBTi for target setting, without specifying which GHG targets should cover. Many resources mention what GHGs should be measured or reported, without stipulating which should be included in an organization’s net-zero target.



Only 5
of relevant resources
recommend separate
targets for non-CO2
GHGs, specifically
methane.

3. TARGET

3.16 Does the resource recommend embedded emissions (fossil fuel reserves, sequestration) are accounted for separately? (Yes/No/Not specified)

Only the GHG Protocol and HLEG provide guidance on embedded emissions.

3.16 Overview

Both HLEG and GGPC recommend embedded emissions should be accounted for separately. However, the GGPC states that companies should outline methods used, as there was no consensus method (at time of its writing) for sequestered carbon quantification.

3.16 Details of Guidance

GGPC: *“The GHG Protocol Corporate Standard does not include consensus methods for sequestered carbon quantification. Companies should, therefore, explain the methods used. Until consensus methods are developed for characterizing impacts on sequestered atmospheric carbon along the value chain, this information can be included in the “optional information” section of the inventory (See chapter 9). Information on sequestered carbon in the company’s inventory boundary should be kept separate from project-based reductions at sources that are not in the inventory boundary.”*

HLEG: *“Embedded emissions within fossil fuel reserves as well as any land-use related emissions and risk adjusted sequestration in biomass, such as forests, peatlands and wetlands, should be accounted for separately.”*

3. TARGET

3.17 Does the resource recommend initial targets are set within a year of making a pledge? (Yes/No/Not specified)

Five resources require that initial targets are set within a year of making a pledge.

3.17 Overview

Only SBTi, Race to Zero, SMECH, HLEG and the Climate Bonds Initiative meet the criterion, although SMECH is more ambiguous with short- and medium-term “goals” to be set within 6 months of pledge

3.18 Does the resource recommend first targets are set for 2025? (Yes/No/Not specified)

Only HLEG and IIGC recommend that first targets be set by 2025.

3.18 Overview

HLEG and IIGC are the only resources to meet the criterion. CA100 is also coded as a ‘yes’ for stating “The company has set a short-term target for reducing its GHG emissions in the period between 2023 and 2026.”

With just under 50% of resources (12/35) recommending interim targets be set every 5-10 years (question 3.10), and 2025 around the corner, we suggest that the next most robust target an organisation could set would be in 2030.

3. TARGET

3.19 Does the resource recommend that targets cover all business activities and subsidiaries of an organisation? (Yes/No/Not specified)

40% of relevant resources recommend that targets cover all business activities, including subsidiaries.

3.19 Overview

Fourteen resources (40%) provide guidance on targets covering business activities and subsidiaries. Seven resources specify that targets should cover all activities and subsidiaries of an organisation. Three resources (SBTi, CBI, HLEG) require targets at the parent- or group-level. ISO Net Zero Guidelines recommend targets cover the full inventory on territorial, sectoral, organisational, portfolio and asset levels.

Where resources do not write about targets, but rather accounting or disclosure, these are also coded as 'yes', as it is the emphasis on subsidiaries that is important in this context e.g., ERI, GGPC, TPT and NCI.

3.20 Does the resource recommend that targets cover serviced emissions? (Yes/No/Not specified)

Only Race to Zero and Transition to Net Zero specify that targets should cover serviced emissions.

3.20 Overview

Although both HLEG and ERI make statements on aligning advisory services with net zero, they are not required to be covered in targets. RtZ is the only resource to recommend the inclusion of serviced emissions in targets. TNZ qualifies as 'Yes' by referring to RtZ on target setting. This presents a significant gap in the landscape.

3. TARGET

3.21 Does the resource recommend striving for negative emissions upon achieving net zero? (Yes/No/Not specified)

One-fifth of relevant resources recommend striving for negative emissions upon reaching net zero.

3.21 Overview

7/35 resources (Carbone 4, ERI, ISO Net Zero Guidelines, Race to Zero, Transform to Net Zero, NCI and VCMi) recommend striving for negative emissions.

Amongst the resources, wording is soft. Some examples include:

ISO Net Zero Guidelines state *“On achieving net zero, actions are taken towards reaching negative GHG emissions.”*

Race to Zero includes negative emissions as an option rather than an explicit recommendation, but its inclusion of net-negative as a Leadership principle warrants a Yes. The specific text stipulates *“Leadership principles: Going beyond net zero, entities should set targets for absolute zero or climate positive / net negative outcomes.”*

VCMi states that its Carbon Integrity Platinum, the highest level that organisations can achieve within the VCMi Claims Code of Practice, encourages striving for negative emissions.

Carbone 4 is the most ambitious resource, encouraging organisations to reduce their own and others' emissions and developing carbon sinks simultaneously.

4. PLAN

Organisations agree transition plans should describe actions needed to decarbonize business and how their portfolio of products and services will shift toward climate solutions or low-carbon products and services, and climate strategies should disclose climate risk analysis.

About this section

This section maps guidance on emissions reduction actions outlined in transition plans across organisations' operations and the supply chains.

Number of relevant resources for this section: 29 (see p.10 for 'relevance' criteria).

Areas of alignment:

- Transition plans should describe actions organisations need to take to decarbonise their business operations
- Organisations should describe how their portfolio of products and services will shift towards climate solutions or low-carbon products and services
- Disclosure of climate risk analysis is needed when crafting climate strategies
- Using and disclosing an internal carbon price is recommended by over half of resources
- Companies are generally required to disclose on their contributions to a just transition

Areas for Improvement/Gaps:

- Compatibility of business models with a net-zero world is not widely recommended
- Need for describing key assumptions and external factors is not widespread
- The frequency for transition plans to be updated is not a focus of resources
- Renewable energy targets do not make their way into many resources' recommendations for transition plans
- Articulation of external policies and regulations is recommended by a minority of resources
- Many resources avoid recommending strategies that could materially reduce carbon emissions like shifting to renewable energy procurement ($\frac{1}{3}$) (4.11) , or phasing out of fossil fuels ($\frac{1}{3}$)
- Fewer than half of resources recommend disclosing on internal policies and conditions to support organisations to meet their decarbonisation strategies (4.5)
- Reflecting the impact of transition plans on financial position and performance is not widely required.

4. PLAN

Key Findings

Nearly 80% of relevant resources recommend transition plans should describe the actions organisations will take to decarbonise their business operations. Resources also present some guidelines of how these transition plans should be approached, with two-thirds recommending that transition plans should include changing the portfolio of products or services towards low-carbon or climate solutions. Within this, organisations are also asked to consider their impacts on a just transition (>50%). The recommendation to disclose climate risk analysis within climate strategies is also prominent, with two-thirds of resources mentioning this. Within this, there are varying levels of detail for how organisations should calculate and disclose risk, and the scenarios under which climate strategies should be tested.

Although disclosure of climate risk on organisations' strategies is prominent, only a third of resources ask for disclosure of the impact of transition plans on organisations' financial positions. **Many resources avoid recommending strategies that could materially reduce carbon emissions like shifting to renewable energy procurement (⅓) or phasing out of fossil fuels (⅓).**

Similarly, less than 50% of resources ask business models to be compatible with a net-zero world. This may partially be due to the difficulty of defining what a net-zero world looks like. Lastly, there is a significant gap in that two-thirds of resources provide no guidance for how often transition plans should be updated, providing a weakness in ensuring that any transition plans remain relevant and viable.

Summary

Although resources as a whole ask organisations to describe the steps they will take to decarbonise their business operations, and consider the influence of climate risk and also impacts on communities of any transition plans, resources fail to make bolder recommendations to encourage organisations to make deep decarbonisation decisions such as moving away from fossil fuels or investing in renewable energy procurement.

4. PLAN

	Net Zero-compatible Business Models?	Key Assumptions and External Factors?	Actions within Business Operations?	Shift products and services towards climate solutions?	Disclose internal policies and conditions?
CISL	Yes	Not Specified	Yes	Yes	Yes
CAR4	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
CERES	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
CHAO	Not Specified	Yes	Yes	Yes	Yes
CA100	Not Specified	Yes	Yes	Yes	Not Specified
ERI	Yes	Yes	Not Specified	Yes	Yes
GOLDS	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
GGPC	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
GGPS3	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
IIGC	Not Specified	Yes	Yes	Yes	Not Specified
ISO14064	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
IWA42	Yes	Not Specified	Yes	Yes	Yes
IGCC	Yes	Yes	Not Specified	Not Specified	Not Specified
OECD	Not Specified	Not Specified	Yes	Yes	Yes
RTZ3	Yes	Not Specified	Yes	Yes	Yes
SBTIC	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
TNZ	Not Specified	Yes	Yes	Yes	Yes
HLEG	Not Specified	Not Specified	Yes	Not Specified	Not Specified
WMBC	Not Specified	Not Specified	Yes	Yes	Not Specified
WBCSD	Yes	Not Specified	Yes	Yes	Not Specified
WEF	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
CDPGQ	Not Specified	Yes	Yes	Yes	Not Specified
ESRS	Yes	Yes	Yes	Yes	Yes
GFANZ	Yes	Yes	Yes	Yes	Yes
GRI	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
GRI CED	Not Specified	Yes	Yes	Yes	Yes
IFRS	Not Specified	Yes	Yes	Yes	Not Specified
SMECH	Yes	Not Specified	Yes	Not Specified	Not Specified
TPT	Not Specified	Yes	Yes	Yes	Yes
ACT	Yes	Yes	Yes	Yes	Not Specified
BCORP	Yes	Not Specified	Yes	Not Specified	Not Specified
CBI	Yes	Yes	Yes	Not Specified	Yes
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
NCI	Not Specified	Not Specified	Yes	Not Specified	Not Specified
TPI	Not Specified	Not Specified	Yes	Not Specified	Not Specified
VCMI	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified

Resources categorised as 'not relevant' (8/37): Carbone 4, Greenhouse Gas Protocol (Corporate Standard), Greenhouse Gas Protocol (Scope 3 Standard), ISO 14064, Oxford Offsetting Principles, GRI 305, ICVCM, VCMI

NB: all data must be read in conjunction with detail in our [dataset](#)

4. PLAN

	Effects of Transition Plans on Financial Performance?	Align Transition Plans with a Just Transition?	Transition Plan Update Frequency	Use climate risk analysis transition planning?
CISL	Not Specified	Yes	Not specified	Yes
CAR4	Not Specified	Not Specified	Not Specified	Not Specified
CERES	Not Specified	Yes	Not specified	Yes
CHA0	Yes	Not Specified	Not specified	Yes
CA100	Yes	Yes	Not specified	Yes
ERI	Not Specified	Not Specified	Yes, every 5 years	Yes
GOLDS	Not Specified	Not Specified	Not specified	Not Specified
GGPC	Not Specified	Not Specified	Not specified	Not Specified
GGPS3	Not Specified	Not Specified	Not specified	Not Specified
IIGC	Yes	Yes	Not specified	Yes
ISO14064	Not Specified	Not Specified	Not specified	Not Specified
IWA42	Not Specified	Yes	Not specified	Yes
IGCC	Not Specified	Yes	Not specified	Not Specified
OECD	Not Specified	Yes	Not specified	Yes
RTZ3	Not Specified	Yes	Yes, every 5 years	Not Specified
SBTIC	Not Specified	Not Specified	Yes, every 5 years	Not Specified
OOP	Not Specified	Not Specified	Not specified	Not Specified
TNZ	Not Specified	Yes	Not specified	Not Specified
HLEG	Not Specified	Yes	Yes, every 5 years	Yes
WMBC	Not Specified	Yes	Yes, every year	Yes
WBCSD	Not Specified	Not Specified	Not specified	Yes
WEF	Not Specified	Not Specified	Not specified	Yes
CDPGQ	Yes	Not Specified	Not Specified	Yes
ESRS	Yes	Yes	Not specified	Yes
GFANZ	Yes	Yes	Not specified	Not Specified
GRI	Not Specified	Not Specified	Not specified	Not Specified
GRI CED	Yes	Yes	Not specified	Yes
IFRS	Not Specified	Not Specified	Not Specified	Yes
SMECH	Not Specified	Not Specified	Not specified	Not Specified
TPT	Yes	Yes	Yes, other	Yes
ACT	Yes	Not Specified	Yes, every 5 years	Yes
BCORP	Not Specified	Yes	Yes, every 5 years	Yes
CBI	Yes	Yes	Yes, every 5 years	Not Specified
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified
NCI	Not Specified	Not Specified	Yes, every 5 years	Not Specified
TPI	Not Specified	Not Specified	Not specified	Yes
VCMI	Not Specified	Not Specified	Not Specified	Not Specified

Resources categorised as 'not relevant' (8/37): Carbone 4, Greenhouse Gas Protocol (Corporate Standard), Greenhouse Gas Protocol (Scope 3 Standard), ISO 14064, Oxford Offsetting Principles, GRI 305, ICVCM, VCMI

NB: all data must be read in conjunction with detail in our [dataset](#)

4. PLAN

	Phase Out Fossil Fuels from operations and/or investment portfolio?	Renewable energy procurement targets?	Use of an (internal) price on carbon?	Outline external policies and regulations needed to enact transition plans?
CISL	Not specified	Not Specified	Yes	Not Specified
CAR4	Not Specified	Not Specified	Not Specified	Not Specified
CERES	Not specified	Yes	Not Specified	Not Specified
CHA0	Not specified	Not Specified	Yes	Not Specified
CA100	Yes, unabated fossil fuels only	Not Specified	Not Specified	Not Specified
ERI	Yes, all fossil fuels, no specified timeline	Yes	Yes	Yes
GOLDS	Not specified	Not Specified	Yes	Not Specified
GGPC	Not specified	Not Specified	Not Specified	Not Specified
GGPS3	Not specified	Not Specified	Not Specified	Not Specified
IIGC	Yes, all fossil fuels, no specified timeline	Not Specified	Not Specified	Not Specified
ISO14064	Not specified	Not Specified	Not Specified	Not Specified
IWA42	Yes, all fossil fuels, by a specified year	Yes	Yes	Not Specified
IGCC	Not specified	Yes	Not Specified	Not Specified
OECD	Not specified	Not Specified	Not Specified	Not Specified
RTZ3	Yes, unabated fossil fuels only	Not Specified	Not Specified	Not Specified
SBTIC	Not specified	Yes	Not Specified	Not Specified
OOP	Not specified	Not Specified	Not Specified	Not Specified
TNZ	Not specified	Not Specified	Not Specified	Not Specified
HLEG	Yes, all fossil fuels, by a specified year	Yes	Yes	Yes
WMBC	Not specified	Yes	Not Specified	Yes
WBCSD	Not specified	Not Specified	Yes	Not Specified
WEF	Not specified	Not Specified	Not Specified	Not Specified
CDPGQ	Not specified	Yes	Yes	Yes
ESRS	Not specified	Yes	Yes	Not Specified
GFANZ	Not specified	Yes	Yes	Not Specified
GRI	Not specified	Not Specified	Not Specified	Not Specified
GRI CED	Yes, all fossil fuels, no specified timeline	Not Specified	Yes	Not Specified
IFRS	Not specified	Not Specified	Yes	Not Specified
SMECH	Not specified	Yes	Not Specified	Not Specified
TPT	Not specified	Not Specified	Yes	Not Specified
ACT	Not specified	Yes	Yes	Yes
BCORP	Not specified	Not Specified	Not Specified	Yes
CBI	Not specified	Not Specified	Not Specified	Not Specified
ICVCM	Not Specified	Not Specified	Not Specified	Not Specified
NCI	Yes, all fossil fuels, no specified timeline	Yes	Yes	Not Specified
TPI	Yes, all fossil fuels, no specified timeline	Not Specified	Yes	Not Specified
VCMI	Not Specified	Not Specified	Not Specified	Not Specified

Resources categorised as 'not relevant' (8/37): Carbone 4, Greenhouse Gas Protocol (Corporate Standard), Greenhouse Gas Protocol (Scope 3 Standard), ISO 14064, Oxford Offsetting Principles, GRI 305, ICVCM, VCMI

NB: all data must be read in conjunction with detail in our [dataset](#)

4. PLAN

4.1 Does the resource call for business models to be compatible with a net zero world? (Yes/No/Not specified)

Less than half of relevant resources call for business models to be compatible with a net zero world.

4.1 Overview

This criteria reviewed guidance for clear articulation between business strategy and a net-zero world. Calls to align business models with emissions reduction targets was not considered sufficient to fulfil this criteria, as targets may not be net-zero aligned.

4.1 Details of Guidance

12 out of 29 (41%) resources recommended that business models be compatible with a net-zero world.

Several resources provide strongly clarity on this, including CISL: *“Align the organisational strategy and business models with net zero”*, and ERI *“Determine the business models, products and services for your sector that will be compatible with a net zero world. [...] If your company manufactures and/or sells products, start transforming your business model to one which is service-based and circular.”* Other resources speak about a net-zero world less directly, including WBCSD, which states *“Evolve your competitive advantage based on climate ambition. Companies should identify whether their current competitive advantage is still viable in a low carbon world.”*

Some resources recommend companies to pursue sustainable business models, but we did not view this as being compatible with a net-zero world. For instance, CERES states: *“Companies avoid adverse impacts to people that occur as a result of internally and externally driven business model disruption (e.g. clean energy transition, automation/AI, resource scarcity, etc.) and embrace sustainable business models that engender greater social equity”*, whilst ESRS frames shifting business models in the context of avoiding risks from climate change. These were both assigned as ‘not specified’.

< 50%
of relevant
resources call for
business models
to be compatible
with a net zero
world

Focus on alignment of business strategy to global net zero

Guidance that focused only on embracing sustainable business models and/or on aligning business strategy to internal net zero commitments were insufficient

Best Practice: CISL, ERI, ISO Net Zero Guidelines

ISO Net Zero Guidelines mention business models in the context of innovative and circular business models, and consideration of the ‘necessity’ of products and services.

4. PLAN

4.2 Does the resource recommend that transition plans describe key assumptions and external factors? (Yes/No/Not specified)

Half of all relevant resources recommend that transition plans describe key assumptions and external factors.

4.2 Overview

14 out of 29 relevant resources (50%) require description or disclosure of key assumptions and external factors.

4.2 Details of Guidance

In recommending description or disclosure of key assumptions, resources emphasise different aspects, including:

- Modelling and sensitivity analyses (CA100 & IIGC), with CDP and ESRS asking for additional information regarding parameters and analytical choices
- Risk analysis (CHA0) and mitigation of risks (ERI)
- Contingency plans against external factors (TNZ)
- Assessment of impact on transition plan if assumptions are incorrect (GFANZ)

4. PLAN

4.3 Does the resource recommend that transition plans outline actions that organisations plan to take in their business operations? (Yes/No/Not specified)

Nearly 80% of resources recommend transition plans should describe actions that organisations will take to decarbonise their business operations.

4.3 Overview

This criteria sought to identify descriptions of actions to execute transition plans, including decarbonising business operations. 23 out of 29 (79%) resources recommended this.

4.3 Details of Guidance

Actions are often framed as ‘decarbonisation levers’.

Amongst guidance documents, some resources provide high-level guidance, such as CISL “*Implement the action plan to decarbonise own operations (Scope 1 and 2 emissions)*”, whilst others like Chapter Zero provide detail as to where actions should apply - products, processes, technologies and people and behaviours, outlining the role the Board should take in understanding how the action plan affects business-wide operations.

Amongst disclosure frameworks, specific actions are reported on e.g., energy efficiency measurement and implementation, low carbon energy generation and consumption and company policy and behaviour change (CDP). ESRS requires disclosure of how actions meet disclosed transition plans, and how material impacts, risks and opportunities are accounted for in this process. Amongst Assessment Frameworks, there is the addition of “*relevant and realistic*” actions (ACT) and detailing of the scale of actions to set high industry expectations (NCI).

80%

of relevant resources recommend transition plan describe actions that organisations will take to decarbonise their business operations

4. PLAN

4.4 Does the resource recommend that transition plans describe how organisations plan to change their portfolio of products and services e.g. climate solutions and low-carbon products? (Yes/No/Not specified)

Three-fifths of relevant resources recommend that transition plans describe how organisations plan to change their portfolio of products and services towards climate solutions or low-carbon products and services.

4.4 Overview

18/29 (62%) of resources recommend that organisations' transition plans include shifting portfolios towards climate solutions or low-carbon products and services. Only one assessment framework (ACT) makes this recommendation.

4.4 Details of Guidance

Guidance and recommendations vary between outlining the proportion of revenue from climate solutions / low-carbon products and services, to provision of guidance to how this can be achieved through changes in business operations.

Amongst guidance documents, recommendations include...:

- Setting targets for climate solutions (Chapter Zero)
- Identifying new opportunities and value creation in a low-carbon economy (WBCSD)
- Working within business operations to identify and deploy low-carbon/zero carbon solutions (WMBC)
- Evolving business models to pivot towards lower carbon areas (TNZ)
- No obligation as not all companies are able to invest in climate solutions (IIGC)
- Not counting towards reported emissions reductions because of issues with quantification (IIGC)

Amongst disclosure frameworks, recommendations include disclosing... :

- Changes in product and service portfolio (ESRS)
- Share of revenue from low-carbon products and services (ACT)
- Plans to provide low-carbon products and services (GFANZ)
- Reduction of high-carbon products and services and increasing the portfolio of low-carbon products and services (GRI CED)
- Details of products considered 'low-carbon' (CDP)

4. PLAN

4.5 Does the resource recommend disclosing about internal policies and conditions that organisations use? (Yes/No/Not specified)

Just over 40% of the resources recommend disclosing about internal policies and conditions that organisations use to meet their decarbonisation strategies.

4.5 Overview

To qualify as a 'yes', the resource should recommend organisations adopt conditions and policies such as carbon pricing or policies around energy procurement. 12/29 resources contained this provisioning. Assessment frameworks were weak on requiring disclosure of internal policies and conditions.

4.5 Details of Guidance

Guidance ranges from high level (e.g., OECD: *“the introduction and implementation of science-based policies, strategies and transition plans on climate change mitigation”*) to more detailed (e.g., ISO Net Zero Guidelines *“The organization’s plans for transition to net zero should include how the organization will: ... implement policies and requirements (e.g. carbon pricing) to meet net zero”* and *Race to Zero, which gives examples of sectoral policies like deforestation and coal*). The ESRS asks disclosing organisations to describe policies in place to manage material impacts, risks and opportunities related to climate change mitigation and adaptation.

4. PLAN

4.6 Does the resource recommend that organisations should disclose the effects of their transition plan on their financial position, financial performance and cash flows? (Yes/No/Not specified)

Only one-third of relevant resources recommend disclosure about the effects of organisations' transition plans on their financial position/performance.

4.6 Overview

10/29 resources make this recommendation, most consistently across disclosure frameworks. Two of the relevant disclosure framework resources hold no mention of disclosure of transition plans' impact on financial performance (SME Climate Hub, IFRS).

Where resources were categorised as 'not specified', this was because resources required organisations to disclose on the financial risks of climate change to their organisations, rather than the financial risks to their organisations generated by their transition plans (e.g., IFRS, TPI); or because reference was to alignment of finance with targets (e.g., HLEG, WMBC).

4.6 Additional Guidance

Across resources, recommendations include:

- Declaration that the Board understands the financial impacts of the transition plan (Chapter Zero)
- Definition of impact on business (CDP)
- Referring to the TCFD for financial disclosures (Chapter Zero, Climate Action 100+)
- Disclosure of anticipated financial effects from material transition risks (ESRS)
- Specific costs that may impact businesses, e.g., site remediation, contract penalties and regulatory costs (ACT)

4. PLAN

4.7 Does the resource recommend organisations disclose about the contribution of their transition plan to a just transition? (Yes/No/Not specified)

Over half of relevant resources recommend companies disclose about the contribution of their transition plan to a just transition.

4.7 Overview

17 out of 29 (59%) of resources recommend disclosure from companies about contributions to a just transition. This was strongest amongst relevant guidance documents (11/17), and weakest amongst relevant assessment frameworks (2/5).

4.7 Detail of guidance

Resources recommend organisations consider the impacts of transition plans on employees and communities across value chains. Resources address equity and justice in different ways, with different organisational and geographic scales at play.

ESRS is the clearest as to what the boundaries of addressing impacts for different groups are, and requires disclosure for an organisation's own workforce, workers in the value chain, affected communities, consumers and end-users.



4. PLAN

4.7 Details of Guidance continued

Aspects of guidance around justice and transition plans include...:

- **Planning** and **monitoring** for a just transition (CA100) at scale (CISL)
- Considering and addressing the broader **social consequences** and impacts of mitigation actions, including on **race, gender** and **intergenerational equity** (HLEG)
- Considering the **wellbeing of workers and their communities** (i.e., immediate impact of transition on employees) (CERES, CA100, IIGC, OECD, WMBC, GRI CED), including the need to “*retain, retrain, redeploy and/or compensate workers affected by its decarbonisation efforts*” (CA100)
- Embracing sustainable business models that engender greater social equity (CERES)
- Building new business models with potentially affected communities by seeking **consent** (CA100, WMBC) and including opportunities for **co-creation** with affected communities that counter injustices and **build resilience** (TNZ)
- Considering a just transition in the context of **historical emissions** of the organisation, its **sector** and the **territories** it operates in; the resources and **technologies** available to it; and the socio-economic situation of territories it operates in (ISO Net Zero Guidelines)
- Explain how support will be given to communities affected by both climate impacts and the climate transition, and how their **participation will be strengthened**, seeking to address injustices and build towards a more equitable future (Race to Zero)
- Address the disproportionate distribution of climate impacts and climate transition costs on **under-resourced communities** (TNZ).

4. PLAN

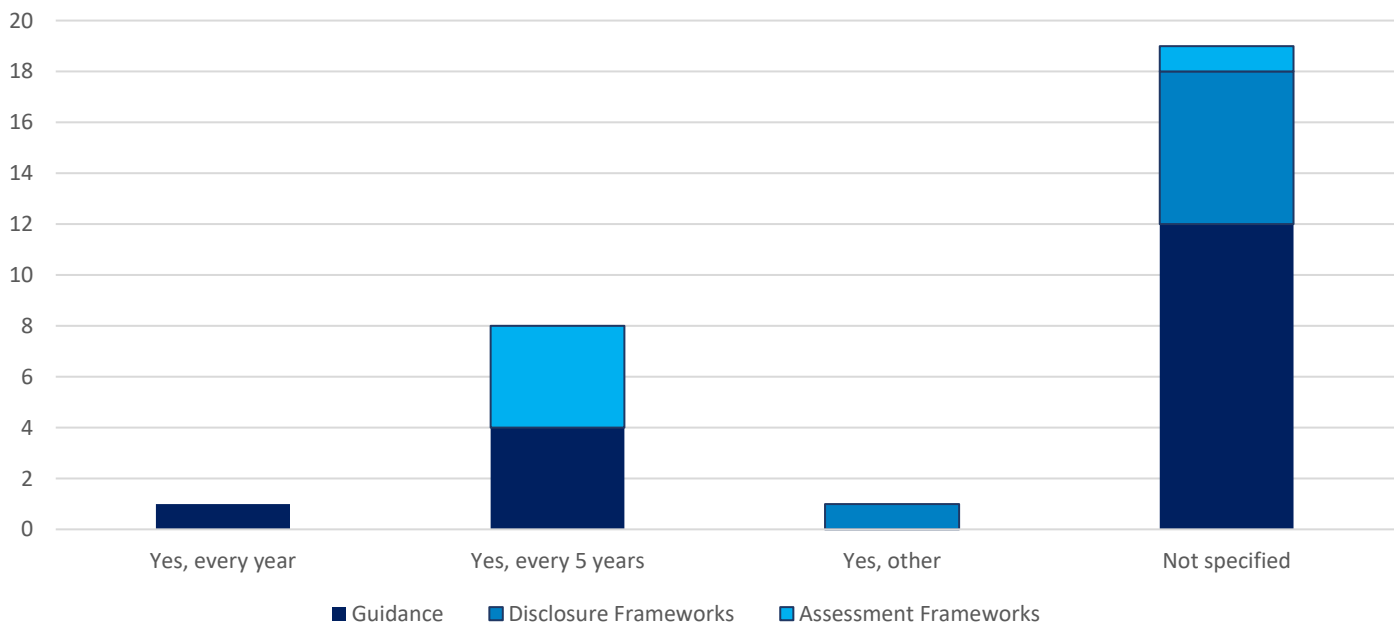
4.8 Does the resource specify an updating frequency of transition plans? (Yes, every year / Yes, every 5 years / Yes, other / Not specified)

Only one-third of relevant resources specify the frequency at which transition plans should be updated.

4.8 Overview

Only 10/29 (34%) of relevant resources provide guidance as to the frequency that transition plans should be updated. Assessment frameworks give the most consistent guidance, with 5/6 relevant frameworks requiring updates every five years. The TPT is the only disclosure framework to provide guidance on transition plan updates. Where 'periodically reviewed and updated' and no numerical guidance is given (e.g., TNZ, OECD, GFANZ) these were classed by the researchers as 'not specified'.

Recommended Frequency of Transition Plan Update



Only 1/3rd
of relevant resources specify
the frequency with which
transition plans should be
updated

4. PLAN

4.8 Details of Guidance

Only WMBC recommends companies to update transition plans **every year**: “CTAPs (Climate Transition Action Plans) should be publicly shared and annually updated”.

ERI’s document contains recommendations to update transition plans every year (“Evaluate results, take corrective actions and update your plan on a yearly basis.”) and every five years (“Publish your transition plan for achieving your climate targets. Include information about [...] when the plan will be up-dated (at least once every five years).” Thus, in this case we took the recommendation as 5-yearly updates.

Some resources recommend companies to update their targets **every 5 years**, which can be viewed as a recommendation to update transition plans as well, as changing a target requires a change in a plan to reach it. For instance, SBTIC states: “C32 – Mandatory target recalculation: To ensure consistency with the most recent climate science and best practices, targets must be reviewed, and if necessary, recalculated and revalidated, at a minimum every 5 years.”

The TPT recommends that “entities update their standalone transition plan periodically, either when there are significant changes to the plan or, at the latest, **every three years**”.

4. PLAN

4.9 Does the resource recommend the use of climate risk analysis in drafting organisations' climate strategies? (Yes/Not specified)

Nearly 70% of resources recommend the use or disclosure of climate risk analysis in drafting climate strategies.

4.9 Overview

20 out of 29 (69%) of relevant resources recommended disclosure of climate risk analysis in drafting climate strategies. This included 12/17 relevant guidance documents, 5/7 relevant disclosure documents and 3/5 relevant assessment frameworks.

4.9 Details of guidance

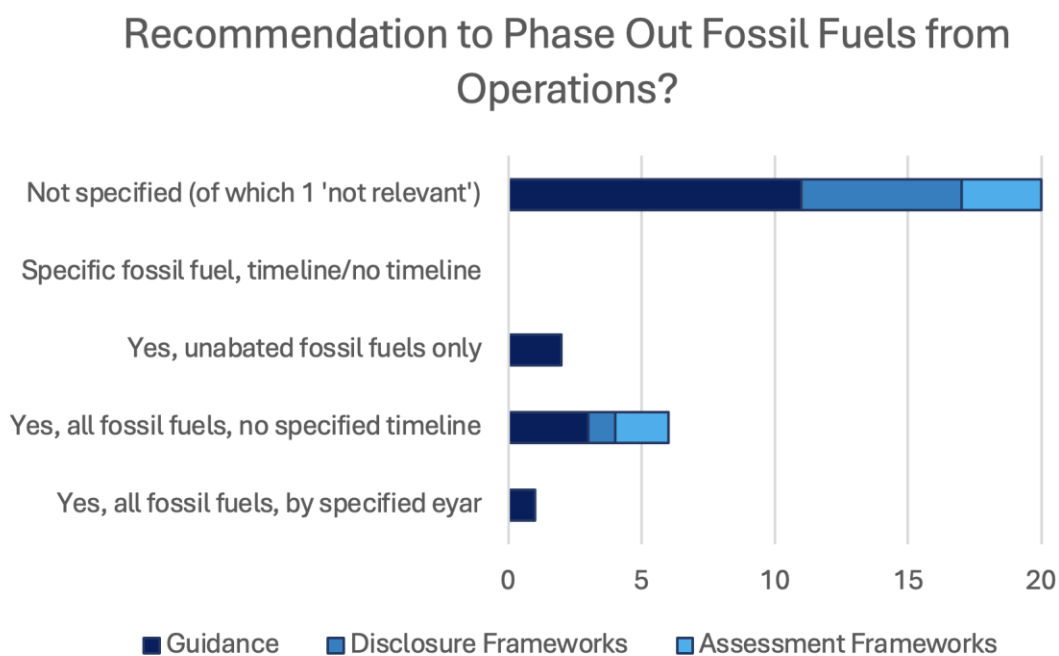
Resources focused on varying aspects of risk analysis in their guidance, including around scenario development, uncertainty, risk management, responsibilities of the Board, risk to economy and society:

- Conduct **scenario** and **risk analysis** across all aspects of the business model (CISL, ERI), including **different climate-related scenarios** of futures (CHAO, WBCSD), with associated ranges of **uncertainty and implications** of those scenarios (CISL, WBCSD)
- Develop and implement a process to **manage risks** (CISL), and outline where and how risks have **influenced business strategies** (CDP) with detail of **mitigation, new products, R&D**, etc. (TPT).
- **Align with TCFD guidance** (BCORP, ERI, IIGC, WBCSD) which requires disclosure of **expenditure or capital investment towards risks and opportunities**, and impact of those risks on financial position. Transition plans are required to mitigate those risks, per TCFD.
- **Incorporate climate risk into organisational risk management systems** (OECD)
- The materiality of climate-related risks should be **understood by the Board** and integrated into actions and responses to climate change (WEF) and consider organisational strategy in the context of **resilience in a 1.5C scenario** (CA100)
- Make climate risks to the company and its strategy **easily understandable** for those using financial reports (IFRS).
- Consider the **risk to societies and economies** of not meeting net-zero by 2050 (CISL)

4. PLAN

4.10 Does the resource recommend the phasing out of fossil fuels from an organisation's operations (use/production) and/or investment portfolio? (Yes, all fossil fuels, by a specified year / Yes, all fossil fuels, no specified timeline / Yes, unabated fossil fuels only / Specific fossil fuel, timeline/no timeline / Not specified)

Just under one-third of resources recommend organisations phase out the use of unabated or abated fossil fuels from their operations and/or investment portfolio



4.10 Overview

10 resources make some form of recommendation on fossil fuel phase out (i.e., 31%). Only HLEG and the ISO Net Zero Guidelines (following HLEG) require companies to phase out all fossil fuels, providing a specific timeline for phasing out coal by 2030 in OECD countries and 2040 in the rest of the world. Six resources (ERI, NCI, TPI, GRI CED, CBIG, IIGC) recommend companies to phase out all fossil fuels without a timeline. And two resources (RTZ3, CA100) recommend phasing out only unabated fossil fuels. A disclosure requirement exists for TPT and ESRS around the retirement or phase-out of GHG-intensive assets, but these have been counted as 'not specified'.

4. PLAN

4.10 Details of Guidance

The following resources were classified as 'not specified':

- SBTiC does not contain any comment on fossil fuel use by firms
- CBI only requires companies to commit to no expansion of fossil fuel use: *“Requires commitment to no expansion (but not a phase-out)”*
- IGCC provides recommendation for fossil fuels producers, asking them to submit diversification plans for fossil fuels: *“If the company is a fossil fuel producer, the expected peak and decline in fossil fuel production and price forecasts should be disclosed alongside the company’s diversification plans (i.e., the growth pathway for renewables or alternative fuels products)”*.
- A disclosure requirement exists for TPT and ESRS around the retirement or phase-out of GHG-intensive assets, but these have been counted as ‘not specified’ as language is insufficiently tight to require that companies should pursue phase-out of fossil fuels as a specific decarbonisation lever.

Other sources do mention fossil fuel phase out, but the wording is not strong enough to count it as recommendation to phase out fossil fuels. For instance, WMBC states *“The following are typical emissions reduction strategies that companies should plan for and invest in to meet their targets. Please check all that are relevant to your company and sector that you have considered. This is not an exhaustive list and sector-specific guidance should be consulted. ... Have you set fuel switching and electrification targets and strategies?”*



Only 1/3rd
recommend
Phase out of use of fossil fuels
from operations and/or
investment portfolio

4. PLAN

4.11 Does the resource recommend renewable energy procurement targets? (Yes/No/Not specified)

45% of resources recommend organisations set renewable energy procurement targets as part of their transition plans.

4.11 Overview

13/29 (45%) of relevant resources recommend renewable energy procurement targets. Seven sources suggest a numerical target.

4.11 Details of Guidance

7 resources recommend setting separate targets for renewable energy:

- CERES, IGCC, the ISO Net Zero Guidelines recommend organisations' global operations run on 100% renewable electricity; whilst SBTi suggests 80% renewable procurement by 2025, and 100% by 2030
- ERI recommends renewable energy targets are “*low-hanging fruit*” but recognises that this may be sector-dependent
- HLEG adds that transitioning away from fossil fuels must be matched by a fully funded transition to renewable energy, with procurement targets embedded in transition plans
- Both SBTi and WMBC suggest organisations follow RE100 recommendations.

4 disclosure resources and 2 assessment frameworks ask for disclosure of targets to increase low-carbon energy consumption or production (CDPGQ, ESRS, GFANZ, SMECH; ACT, NCI)

4 resources (all guidance documents) mention renewable energy as a decarbonisation lever, but the surrounding language doesn't require a target to be set (OECD, GOLDS, CHAO, CISL). These are therefore counted as 'not specified'.

4. PLAN

4.12 Does the resource recommend the use of an (internal) price on carbon? (Yes/No/Not specified)

Over half of relevant resources recommend the use of, or disclosure of, an internal price on carbon.

4.12 Overview

16/29 relevant resources recommend the use of an internal carbon market. This included 7 guidance documents (CISL, CHA0, ERI, GOLDS, IWA42, HLEG, WBCSD), 6 disclosure frameworks (CDP, ESRS, GFANZ, GRI, IFRS, TPT) and 3 assessment frameworks (ACT, NCI, TPI).

4.12 Details of Guidance

- An example of a proactive approach to internal carbon pricing comes from CISL, which asks companies to *"Set and use an internal carbon price to mitigate transition risks and improve decision-making around investments."*
- Other resources, like TNZ and WMBC, list carbon pricing as a possible policy a company could consider, but the wording is not strong enough to be considered a recommendation. This is evident in WMBC's statement: *"As one example, a company could consider the effects of additional or deeper incentives for clean technology or a price on carbon at multiple price points."*
- SMECH was the only disclosure document not to recommend an internal carbon price, which may reflect the size of organisation the guidance is aimed at.

Here, researchers decided that "could consider" implies an option, not a recommendation.

4. PLAN

4.13 Does the resource recommend organisations should outline specific external policies and regulations, including carbon pricing, needed to facilitate transition plans? (Yes/No/Not specified)

Only six resources recommend entities outline specific external policies and regulations organisations would need to facilitate transition plans.

4.13 Overview

6/29 (20%) of relevant resources recommend organisations outline specific external conditions needed to facilitate transition plans. This included 3 guidance documents (ERI, WMBC, HLEG), 1 disclosure framework (CDPGQ) and 2 assessment frameworks (BCORP, ACT).

4.13 Additional Guidance

Here we were looking for resources to ask entities to specify the external policy conditions and regulations that organisations would need to facilitate transition plans.

- Only 4 resources (HLEG, WMBC, CDPGQ and ERI) *explicitly* made this recommendation. An example from HLEG: *“As part of their transition plan and annual disclosures, non-state actors should outline the specific policies and regulations, including carbon pricing, that they would need to cut emissions in line with a 1.5°C scenario. This disclosure should specify the emissions reductions possible if the listed policies and regulation by authorities and jurisdictions were in place.”*
- With others it is inferred, eg., ACT: *“Publicly supports significant climate policies...A monitoring and review process to ensure that the company’s policy positions are consistent with the goals of the Paris Agreement”.*

Other resources take a different approach that were categorised as ‘not specified’. For instance, CBI requires companies to disclose assumptions around external policy and regulation, but not to outline specific policy settings that would facilitate/impede the company's transition. Similarly, GFANZ specifies describing assumptions regarding external policies only, not outlining a ‘wish list’ of policies or regulation.

5. COUNTERBALANCE

Organisations should only use offsets to neutralise residual emissions

About the Section:

This section maps guidance on the use of carbon credits, offsets, and removals, and any explanation of their use in achieving short- and long-term targets, their application to residual emissions, their permanence and additionality, and quality.

Number of relevant resources for this section: 35 (see p.10 for 'relevance' criteria).

Areas of alignment:

- Organisations should prioritise reducing and eliminating emissions, to avoid the need to counterbalance them
- Organisations should only use offsets to neutralise residual emissions (hardest to abate, usually around 5-10% as a principle)
- Offsets and credits must be accounted for separately from reductions in organisations' inventories
- Organisations should invest early into net-zero aligned offsets and removals

Areas for Improvement/Gaps:

- 'Residual emissions' are insufficiently defined by some guidance. Though many resources cap the definition at 5-10% of baseline year emissions, equally as many provide no definition
- Stronger, more specific and consistent guidance on the definitions of additionality and permanence are needed. Permanence is defined by some guidance as 100+ years, while others emphasize the risk of reversal

Offsets: need for stronger guardrails and guidance on conditions of use

80%
of relevant resources (28/35) recognise the option to counterbalance some emissions through credits, offsets or removals (each with different conditions)

Of which...

Residual emissions thresholds

35% (10/28) restrict offset use to <10% of remaining emissions at 2050

Invest early

50% (14/28) encourage early investments into net-zero aligned offsets and removals

Additionality

50% (14/28) specify criteria for additionality in the use of offsets, credits or sinks

Permanence

60% (17/28) recommend permanent removals as a key criteria

5. COUNTERBALANCE

Organisations should only use offsets to neutralise residual emissions

Key Findings

Whilst 80% (28/35) of relevant resources permit the (limited) use of carbon offsets and removals in the achievement of net-zero targets, across the board, any offsets/credits must be accounted for separately from reductions within an organisation's inventory.

Guidance varies as to the context within which offsets, removals, projects or carbon credits can be used. Of those 28 permitting limited use of offsets and removals, 35% explicitly restrict use to residual emissions, 50% recommend early investment in net-zero aligned offsets and removals, 50% recommend ensuring additionality, and 60% recommend permanence as a key criteria.

There is convergence among leading guidance most relevant for defining net zero, regarding the need to only use removals with permanent storage for residual emissions of around 5-10 percent of emissions (e.g., SBTi, ISO Net Zero Guidelines, Race to Zero and Oxford Offsetting Principles).

It should be noted that much of the guidance that does not specify conditions on the use of offsets or credits does signpost to other guidance with conditions, or are disclosure or disclosure-type frameworks which do not prescribe specific actions (e.g., IFRS/ISSB and Transition Plan Taskforce). Lack of guidance therefore should not be read simply as an endorsement of unrestricted offsetting / use of removals or credits. Climate Action 100, for example, makes this clear: *"This metric does not endorse or promote the use of offsets and negative emissions technologies in corporate decarbonisation strategies. Rather, it evaluates whether company disclosures on these matters are comprehensive and robust enough to support investor engagement."*

5. COUNTERBALANCE

	Permission to use offsetting, carbon credits or sinks in interim or long-term targets?	Restriction on residual emissions?	Early investment into quality offsets and removals	Additionality criteria for the use of offsets?	Criteria around permanence of offsets and removals?
CISL	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Not Specified	Not Specified	Not Specified
CAR4	No	No use of offsets allowed	Yes, high-quality	Yes	Yes
CERES	Not specified	Not specified	Not specified	Not Specified	Not Specified
CHA0	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Not specified	Not Specified	Yes
CA100	No restrictions	Not specified	Not specified	Not Specified	Not Specified
ERI	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, no requirements for quality	Not Specified	Yes
GOLDS	Not specified	Not specified	Not specified	Not Specified	Not Specified
GGPC	No restrictions	Not specified	Not specified	Yes	Not Specified
GGPS3	No restrictions	No, unrestricted use is allowed	Not specified	Not Specified	Not Specified
IIGC	Long-term climate targets for residual emissions only	Yes, >10%	Not Specified	Not Specified	Not Specified
ISO14064	Not specified	Not specified	Not specified	Not Specified	Not Specified
IWA42	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, high-quality	Yes	Yes
IGCC	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Not Specified	Not Specified	Not Specified
OECD	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Not specified	Not Specified	Not Specified
RTZ3	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, high-quality	Yes	Yes
SBTIC	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, no requirements for quality	Not Specified	Yes
OOP	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Yes, high-quality	Yes	Yes
TNZ	Long-term climate targets for residual emissions only	Not specified	Not specified	Not Specified	Not Specified
HLEG	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Yes, high-quality	Yes	Yes
WMBC	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Yes, high-quality	Not Specified	Not Specified
WBCSD	Not specified	Not specified	Not specified	Not Specified	Not Specified
WEF	Not specified	Not specified	Not specified	Not Specified	Not Specified

Resources categorised as 'not relevant' (2/37): WEF and ACT (other 'not specifieds' have guidance around removals/offsets but don't meet our criteria to be 'yeses')

NB: all data must be read in conjunction with detail in our [dataset](#)

5. COUNTERBALANCE

	Permission to use offsetting, carbon credits or sinks in interim or long-term targets?	Restriction on residual emissions?	Early investment into quality offsets and removals	Additionality criteria for the use of offsets?	Criteria around permanence of offsets and removals?
CDPGQ	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Not specified	Yes	Yes
ESRS	Long-term climate targets for residual emissions only	Yes, 5-10%	Not specified	Yes	Yes
GFANZ	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, high-quality	Yes	Yes
GRI	No restrictions	No, unrestricted use is allowed	Not specified	Not Specified	Not Specified
GRI CED	Long-term climate targets for residual emissions only	Yes, no numerical threshold specified	Not Specified	Yes	Yes
IFRS	No restrictions	Not specified	Not specified	Not Specified	Not Specified
SMECH	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, no requirements for quality	Not Specified	Yes
TPT	No restrictions	Not specified	Not specified	Not Specified	Not Specified
ACT	Not specified	Not specified	Not Specified	Not Specified	Not Specified
BCORP	Long-term climate targets for residual emissions only	Yes, 5-10%	Yes, high-quality	Yes	Yes
CBI	Long-term climate targets for residual emissions only	Yes, 5-10%	Not specified	Not Specified	Not Specified
ICVCM	Not specified	Not specified	Yes, no requirements for quality	Yes	Yes
NCI	No	Yes, 5-10%	Yes, no requirements for quality	Yes	Yes
TPI	No restrictions	Not specified	Not specified	Not Specified	Not Specified
VCMI	Interim targets for remaining emissions	Not specified	Yes, high-quality	Yes	Yes

Resources categorised as 'not relevant' (2/37): WEF and ACT (other 'not specifieds' have guidance around removals/offsets but don't meet our criteria to be 'yeses')

NB: all data must be read in conjunction with detail in our [dataset](#)

5. COUNTERBALANCE

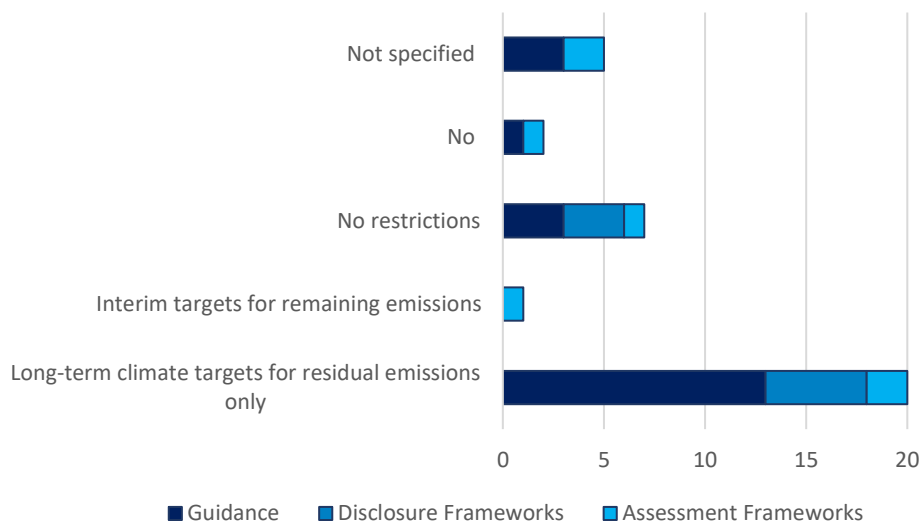
5.1 Does the resource permit the use of offsets/removals in the achievement of interim and/or long-term climate targets? (Long-term climate targets for residual emissions only / No restrictions / Not specified)

80% (28/35) of relevant resources permit the (limited) use of carbon offsets / credits / removals.

71% (20/28) of those resources (including the guidance most relevant to the definition of net zero) stipulate that offsets and removals should only be used to meet long-term targets and remove residual emissions.

There is broad agreement across guidance that offsets / credits / removals should be accounted for separately from internal reductions.

Are Offsets/Removals Permitted to Achieve Climate Targets?



5.1 Overview

Of the 28 resources that permit offsets/credits to counterbalance emissions, 20 of these resources allow these only for residual emissions of long-term climate targets. Many refer to the mitigation hierarchy, encouraging front-loaded and ambitious action as the first-order priority before offsetting or removing residual emissions.

5. COUNTERBALANCE

5.1 Details of Guidance

57% (20/35) of resources stipulate that offsets and removals should only be used to meet long-term targets and compensate for residual emissions. Amongst these, Chapter Zero states *“The primary focus of the company is on eliminating emissions not offsetting. Ensure that offsetting is only used to compensate for residual/‘tail end’ emissions, which it can be clearly evidenced are not feasible to eliminate from the company’s operations or value chain”*. ERI specifically refers to beyond value chain mitigation, stating that this should only be a complement, rather than a substitute, to reduction of value chain emissions (SMECH has similar language). The Race to Zero allows for permanent removals (like-for-like) to reach end-state targets, with no offsets allowed for interim targets.

20% of resources that recognise the use of offsets (7/35) place no restriction on how offsets and removals are used. These are mostly disclosure-oriented resources, which require reporting on the use of offsets, their type, quantity and certification, without any stipulation as to when these should be used and towards what claims.

Only VCMi permits the use of offsets and removals for the use of meeting interim targets and remaining emissions*. VCMi does not provide guidance on offsetting. VCMi’s Carbon Integrity Claims are intended for companies that purchase and retire carbon credits above and beyond their decarbonisation effort, known as beyond value chain mitigation.

Amongst these, the ISSB asks questions about companies’ use of offsets or carbon removals, offering no guidance on their appropriate use, but asking companies about their conditions and plans to use offsets / removals, alongside disclosure of how their use has affected quantification of gross and net greenhouse gas emissions. The GHGP Corporate and Scope 3 Standards place no restrictions on the use of offsets or removals to achieve interim or long-term climate targets, but state that emissions should be reduced as a priority, with offsets used additionally for reductions.

Resources were coded as ‘not specified’ where they were lacking clarity on the appropriate conditions for offset or removals use. For example, the ISO Greenhouse Gas Standard states that offsets must be counted separately to emissions reductions, but there is no guidance as to how organisations can use offsets to achieve their emissions reductions targets.

Two resources, Carbone 4 and New Climate Institute, **do not allow the use of offsets** for meeting net-zero targets or compensating for residual emissions under any circumstance. Carbone 4 rejects the notion of offsets and proposes them to be known as *“contributions to global neutrality”*, stating that the funding that organisations provide in offsetting/neutralising their emissions do not actually cancel out any of their own emissions.

*Remaining emissions = “Emissions that remain in a given year as a company progresses towards the delivery of its near- and long-term targets”

5. COUNTERBALANCE

5.2 Does the resource restrict offsets to residual emissions? (Yes, 5-10% / Yes, >10% / Yes, but no numerical threshold is specified / No, unrestricted use is allowed / Not specified)

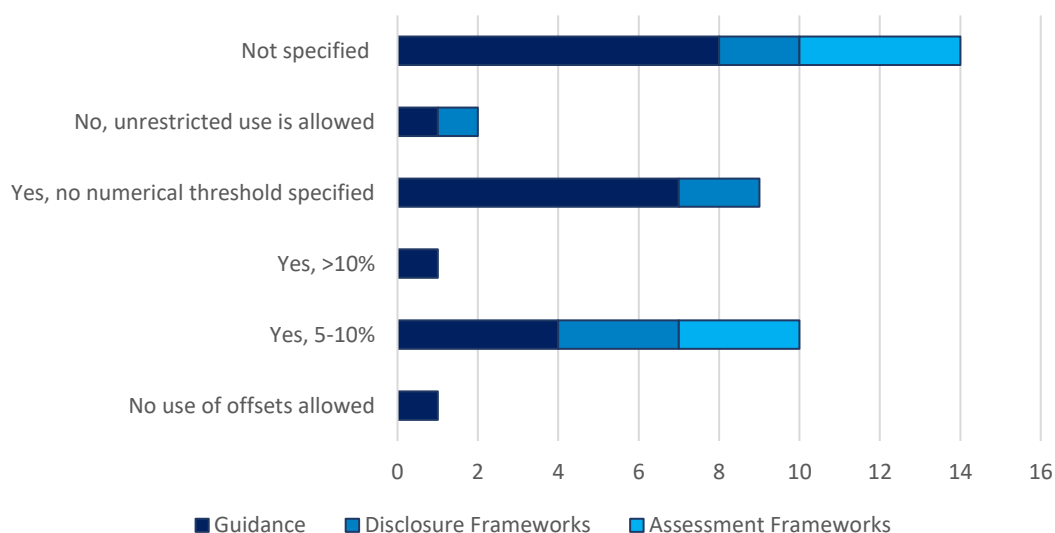
35% (10/28) of resources recognising the option to counterbalance emissions also restrict offset use to residual emissions with a <10% threshold

*35% (10/28) of resources recognising the option to counterbalance emissions do **not** define a threshold for ‘residual emissions’*

5.2 Overview

Of the 20 resources that place restrictions on the use of offsets for residual emissions (see 5.1), 11 of these put a numerical threshold on what may be considered ‘residual’ emissions. 10 of these resources put this threshold at 5-10%. This included five guidance documents, three disclosure and three assessment frameworks. This means that 10 out of 35 (31%) of relevant resources restrict offset use to residual emissions with a <10% threshold.

Are Offsets Restricted to Residual Emissions?



5. COUNTERBALANCE

5.2 Details of Guidance

10 resources specifically reference a 5-10% threshold for residual emissions. Certain resources, e.g., RTZ, note that while ~10% is best practice guidance, the definition of a residual emissions threshold is an area of ongoing work.

10/28 resources recognizing the option to counterbalance emissions do not define any numeric threshold for 'residual emissions'. This means that less than a third of all resources we assessed place restrictions on the volume of emissions reductions that offsets can account for. Several of these are disclosure-type documents and do not prescribe specific actions for organisations to take. Therefore, absence of a threshold should not be read as endorsement to counterbalance unlimited proportions of targeted emissions.

The IIGC allows for 'neutralising measures' to address up to 50% of a net zero target. Neutralising measures should address residual emissions only and account for <50% of any target.

5.2 Comparison to 2022 Mapping

Our last mapping was less precise in its question, asking “**What criteria has been suggested by the resource in terms of the use of offsetting, credits or sinks in an organisation's climate strategy? (Explanation/NA)**”. Then, just over half of relevant resources recommended restrictions on the use of offsets for residual emissions (15/27), showing a marginal increase since the last time we did this mapping report.

5. COUNTERBALANCE

5.3 Does the resource encourage organisations to make investments into (high quality) offsets and removals now? (Yes/Yes now, but no requirements for quality /No /Not specified)

50% (14/28) of resources recognising the option to counterbalance emissions also encourage early investments into net-zero aligned offsets and removals.

5.3 Overview

50% (14/28) relevant resources that recognise the option to counterbalance emissions to meet net zero also recommend early investment into net-zero aligned offsets and removals. 9 of these stipulate the need for 'high-quality'. This included 6 guidance documents, 1 disclosure and 2 assessment frameworks.

5.3 Conditions of Guidance

Here, we were looking for detail around the timing of when credits for offsets/removals are recommended to be bought, recognising that although offsets and removals should be used for residual emissions only, financing is a crucial part of ensuring the viability and scaling of some offset and removal projects.

Companies are encouraged to invest in mitigation beyond their own value chain by some resources, implying early investment. The main reasons for early investment are:

- supply growth/scaling up of removals and offsets (OOP, ICVCM, VCMI, ISO Net Zero Guidelines, WMBC)
- beyond-value chain mitigation, for example by offsetting unabated/remaining emissions (CAR4, SBTi, NCI, RtZ, BCORP, VCMI, GFANZ (by citing RtZ) and HLEG)
- development and/or maturing of emerging technologies (NCI, OOP, ICVCM, ISO Net Zero Guidelines, BCORP)
- financing under-funded nature protection (NCI, ERI, OOP, SMECH, ICVCM, WMBC) and
- anticipating the time necessary to achieve maximum removal (ISO Net Zero Guidelines).

Carbone 4 acknowledges a hierarchy between categories of avoided emissions/removals and encourages organisations to aim for the highest level of robustness. TPT simply requires that organisations disclose investment and stipulate *“the extent to which, and how, the entity relies on the use of carbon credits to achieve the Strategic Ambition of its transition plan”*.

5 resources recommend investment without any requirements for quality, e.g., allowing investment in natural climate solutions, without acknowledging the potential issues in permanence or additionality (e.g., ERI).

Several resources permit the use of temporary/reversible carbon storage to deliver co-benefits of biodiversity conservation, provide finance for decarbonising developing economies, provide finance for underfunded nature restoration, etc.

5. COUNTERBALANCE

5.4 Does the resource recommend any criteria on additionality in the use of offsets, credits or sinks? (Yes/ No /Not specified)

50% (14/28) of resources recognizing the option to counterbalance emissions also recommend criteria on additionality in the use of offsets, credits or sinks.

5.4 Overview

Despite additionality being a key criteria for robust carbon credits, only 50% (14/28) relevant resources that recognize the option to counterbalance emissions to meet net zero also recommend criteria for additionality.

5.4 Conditions of Guidance

Alongside requiring additionality some resources specifically recommend that additionality be verified: e.g., Carbone 4 acknowledges that the most reliable case for avoided emissions is from a company's commercialised solution that has been certified by a recognised national or international standard.

ICVCM outlines methodologies for ensuring additionality.

Some guidance speaks about the importance of criteria to ensure integrity, but falls short of defining what these are. ERI stipulates that organisations should use certified carbon credits, but this is not an adequate guarantee for additionality. Gold Standard refers to “*eligibility criteria for environmental integrity and social value*” and OECD to “*high environmental integrity*”, without specification of what these would entail.

Resources were coded as ‘not specified’ when they only required disclosure of the criteria that an organisation would use to assess credibility of offsets, without specifically mentioning additionality, or where the issue of additionality was mentioned as hampering quality, without recommending that organisations pursue projects with verifiable additionality (e.g., WBCSD).

5.4 Comparison to 2022 mapping

There has been a marked increase in the number of resources requiring additionality. In our 2022 mapping, only 7 resources recommended any criteria for additionality.

5. COUNTERBALANCE

5.5 Does the resource recommend any criteria on permanence and/or storage in the use of removals, offsets, credits or sinks? (Yes/ No /Not specified)

60% (17/28) of resources recognising the option to counterbalance emissions also recommend permanence as a key criterion in the use of removals, offsets, credits or sinks

5.5 Overview

60% 17/28 of that recognise the option to counterbalance emissions to meet net zero also stipulate the need for permanence in the use of removals, offsets, credits and sinks. This includes 8 guidance documents, 5 disclosure documents and 4 assessment frameworks.

5.5 Conditions of Guidance

Guidance within the net-zero governance landscape for what the ‘permanent’ storage of removed carbon actually means, in temporal and qualitative terms, includes:

- *Move towards permanence:* organisations will need to move towards permanent carbon removals, away from offsetting, alongside emissions reductions from their inventories. This is noted by Oxford Offsetting Principles, ISO Net Zero Guidelines, SBTi, HLEG, CDP, Race to Zero and GFANZ, SME Climate Hub, BCORP and VCMI.
- *Type-based approach:* Different levels of permanence associated with different offset and removal types are outlined by New Climate Institute, Carbone4 and Oxford Offsetting Principles.
- *Blanket-temporal approach:* >100 years as ‘permanent’ storage, or whatever the equivalent lifespan of an emission is, as detailed by the ISO Net Zero Guidelines and GRI CED. ICVCM notes in its 2024 update (not assessed here) that work this year will involve defining different meanings of ‘permanence’, and including 100- rather than 40-year monitoring periods as is currently done.
- *Risk-based approach:* ESRS & GRI CED require organisations to disclose how they manage the risks around non-permanence, and VCMI and ICVCM require confidence that storage and removals won’t be reversed by a future event.
- *Permanence necessary, no definition provided:* Remaining guidance stipulates a need for permanence, without defining its meaning or describing the relative effectiveness of different removal types (e.g., nature-based solutions vs. DAC) - see SBTi, Race to Zero, B Corp, GFANZ, CDP, SME Climate Hub, ERI, HLEG and Chapter Zero as examples of this.

Entities were coded as ‘not specified’ when, similar to additionality, they mentioned environmental integrity criteria for removals, offsets, credits or sinks without stipulating exactly what that meant.

6. IMPACT

The need for a just transition is relatively widely recognized, and guidance often extends to include beyond-value-chain stakeholders

About this section

This section maps guidance for engaging with stakeholders when setting net-zero targets, including consideration of equity impacts, lobbying and policy advocacy.

Number of relevant resources for this section: 30 (see p.10 for 'relevance' criteria).

Areas of alignment:

- The need for a just transition is relatively widely recognized, and guidance often extends to include beyond-value-chain stakeholders

Areas for Improvement/Gaps:

- The need to align lobbying (and disclosures of such activity) with the Paris Agreement is not universally recognised; stronger, more specific requirements are needed
- References to climate adaptation are few and generally cursory: guidance is severely lacking
- Only a quarter of relevant resources recommend aligning advisory services with net-zero best practice
- Biodiversity and nature impacts are largely ignored: guidance on environmental safeguards and biodiversity targets should be developed

Key Findings

Although over half of relevant resources recommend transition plans align with the principles of just transition (see 4.7), just over a third of relevant resources encourage maximising positive impacts, or minimising negative impacts with respect to social and economic justice beyond their value chains. Even less (1/3) encourage organisations to ensure that no significant foreseeable negative impacts result from their climate action plans for nature and the environment. The same number of resources recommend organisations take action on climate adaptation.

We explored two new questions around lobbying and advisory services, and found that three-quarters of relevant resources recommend aligning lobbying, advocacy and association affiliations with their net-zero pledges or a Paris-aligned climate future, and a quarter of relevant resources encourage organisations to provide net-zero-aligned advisory and customer services.

Since the 2022 mapping, the number of 'relevant' resources has grown, with over 80% of resources providing guidance around managing and disclosing impacts in 2024, compared with 63% in 2022.

6. IMPACT

	Promote positive social impacts beyond the value chain?	Align lobbying, membership associations, and advocacy with a Paris-aligned climate future?	Publicly disclose trade association affiliations?	Publicly disclose lobbying and policy engagement policies and activities?
CISL	Not Specified	Yes	Yes	Not Specified
CAR4	Not Specified	Not Specified	Not Specified	Not Specified
CERES	Yes	Yes	Not Specified	Not Specified
CHA0	Not Specified	Yes	Not Specified	Not Specified
CA100	Yes	Yes	Yes	Yes
ERI	Not Specified	Yes	Yes	Yes
GOLDS	Not Specified	Yes	Not Specified	Not Specified
GGPC	Not Specified	Not Specified	Not Specified	Not Specified
GGPS3	Not Specified	Not Specified	Not Specified	Not Specified
IIGC	Not Specified	Yes	Not Specified	Not Specified
ISO14064	Not Specified	Not Specified	Not Specified	Not Specified
IWA42	Yes	Yes	Yes	Yes
IGCC	Not Specified	Not Specified	Not Specified	Yes
OECD	Yes	Yes	Not Specified	Not Specified
RTZ3	Yes	Yes	Yes	Yes
SBTIC	Not Specified	Not Specified	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified	Not Specified
TNZ	Yes	Yes	Not Specified	Not Specified
HLEG	Yes	Yes	Yes	Yes
WMBC	Yes	Yes	Yes	Yes
WBCSD	Not Specified	Not Specified	Not Specified	Yes
WEF	Not Specified	Not Specified	Not Specified	Yes
CDPGQ	Not Specified	Yes	Yes	Yes
ESRS	Yes	Yes	Yes	Yes
GFANZ	Not Specified	Yes	Yes	Yes
GRI	Not Specified	Not Specified	Not Specified	Not Specified
GRI CED	Not Specified	Yes	Yes	Yes
IFRS	Not Specified	Not Specified	Not Specified	Not Specified
SMECH	Not Specified	Yes	Not Specified	Not Specified
TPT	Not Specified	Yes	Yes	Yes
ACT	Not Specified	Yes	Yes	Yes
BCORP	Yes	Yes	Not Specified	Not Specified
CBI	Yes	Not Specified	Not Specified	Not Specified
ICVCM	Yes	Not Specified	Not Specified	Not Specified
NCI	Not Specified	Not Specified	Not Specified	Not Specified
TPI	Not Specified	Yes	Yes	Yes
VCMI	Yes	Yes	Yes	Yes

Resources categorised as 'not relevant' (7/37): NCI, GRI 305, SBTi, ISO 14064, GGPC, GGPCS3, CAR4. (other 'not specifieds' – OOP - have guidance around impacts but don't meet our criteria to be 'yeses')

NB: all data must be read in conjunction with detail in our [dataset](#)

6. IMPACT

	Provide advisory services (engaging with clients) aligned with net zero?	Set a separate biodiversity or nature target?	Ensure no significant foreseeable negative impact on environmental factors as a result of the transition?	Take action on climate adaptation?
CISL	Yes	Not Specified	Yes	Yes
CAR4	Not Specified	Not Specified	Not Specified	Not Specified
CERES	Not Specified	Yes	Not Specified	Not Specified
CHA0	Yes	Not Specified	Yes	Not Specified
CA100	Not Specified	Not Specified	Not Specified	Not Specified
ERI	Yes	Not Specified	Not Specified	Not Specified
GOLDS	Not Specified	Not Specified	Not Specified	Yes
GGPC	Not Specified	Not Specified	Not Specified	Not Specified
GGPS3	Not Specified	Not Specified	Not Specified	Not Specified
IIGC	Not Specified	Not Specified	Not Specified	Not Specified
ISO14064	Not Specified	Not Specified	Not Specified	Not Specified
IWA42	Yes	Yes	Yes	Yes
IGCC	Not Specified	Not Specified	Not Specified	Not Specified
OECD	Not Specified	Yes	Yes	Yes
RTZ3	Yes	Yes	Yes	Yes
SBTIC	Not Specified	Not Specified	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified	Not Specified
TNZ	Not Specified	Not Specified	Not Specified	Not Specified
HLEG	Yes	Not Specified	Not Specified	Not Specified
WMBC	Not Specified	Yes	Not Specified	Yes
WBCSD	Not Specified	Not Specified	Not Specified	Not Specified
WEF	Not Specified	Not Specified	Not Specified	Not Specified
CDPGQ	Not Specified	Not Specified	Not Specified	Yes
ESRS	Not Specified	Not Specified	Not Specified	Yes
GFANZ	Not Specified	Not Specified	Not Specified	Not Specified
GRI	Not Specified	Not Specified	Not Specified	Not Specified
GRI CED	Not Specified	Not Specified	Not Specified	Yes
IFRS	Not Specified	Not Specified	Not Specified	Yes
SMECH	Not Specified	Not Specified	Not Specified	Not Specified
TPT	Yes	Not Specified	Yes	Yes
ACT	Yes	Not Specified	Not Specified	Not Specified
BCORP	Not Specified	Yes	Yes	Yes
CBI	Not Specified	Yes	Yes	Yes
ICVCM	Not Specified	Not Specified	Yes	Not Specified
NCI	Not Specified	Not Specified	Not Specified	Not Specified
TPI	Not Specified	Not Specified	Not Specified	Not Specified
VCMI	Not Specified	Not Specified	Yes	Not Specified

Resources categorised as 'not relevant' (7/37): NCI, GRI 305, SBTi, ISO 14064, GGPC, GGPCS3, CAR4 (other 'not specifieds' – OOP - have guidance around impacts but don't meet our criteria to be 'yeses')

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6. IMPACT

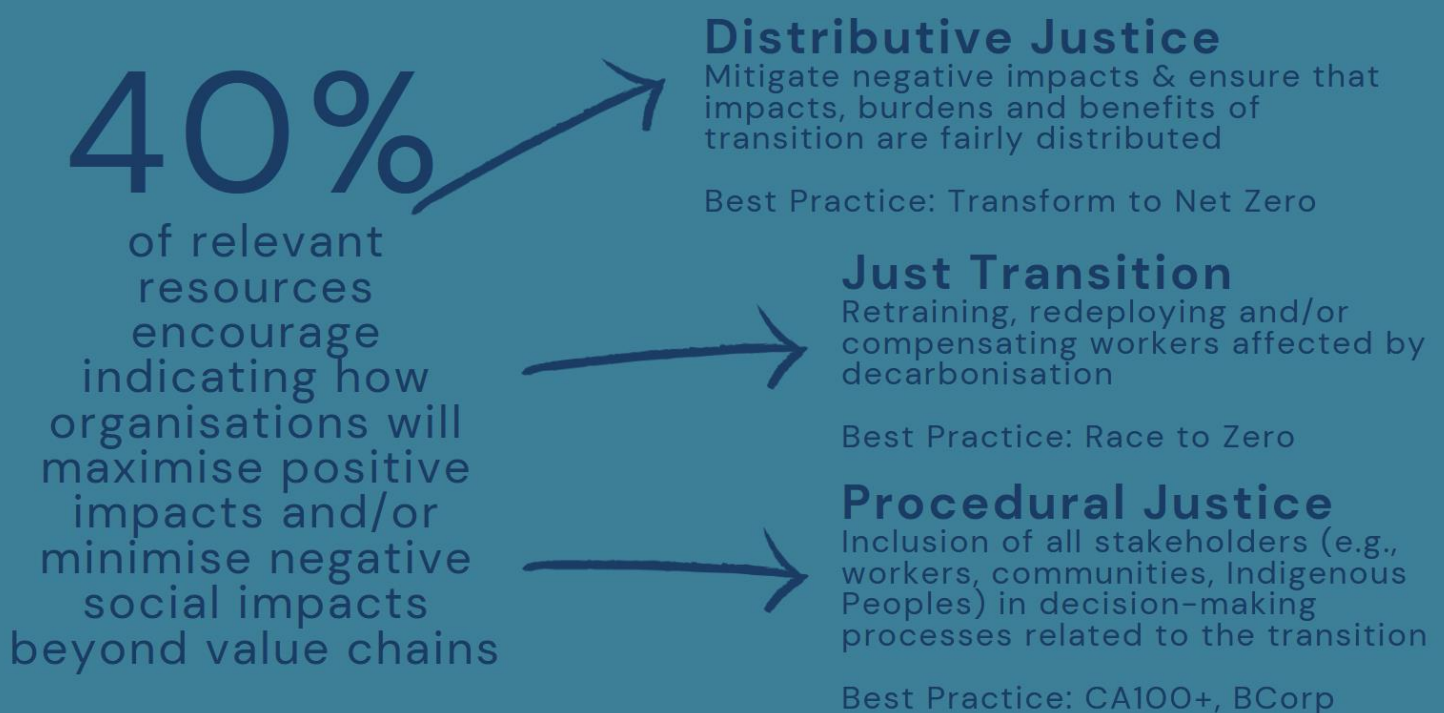
6.1 Does the resource recommend that organisations promote positive social impacts beyond their value chain? (Yes/No/Not specified)

Just over 40% of relevant resources (13/30, 36%) encourage indicating how organisations will maximise positive impacts and/or minimise negative social impacts beyond their value chains.

6.1 Overview

Most guidance revolves around distributive justice – seeking to mitigate negative impacts and ensuring that impacts, burdens and benefits of the transition are fairly distributed. A smaller number of resources (e.g. CA100+, RTZ3, BCORP, etc.) also describe principles of procedural justice in their recommendations – that is, the inclusion of all stakeholders (e.g. workers, local communities, indigenous peoples) in decision-making processes related to the transition.

Particular emphasis is often placed on ensuring social justice with respect to carbon credit procurement, worker transition and engagement with Indigenous Peoples.



6. IMPACT

6.1 Details of Guidance

The concept of a 'just transition' is also frequently referenced (e.g., by Race to Zero), particularly as it relates to retraining, retaining, redeploying and/or compensating workers affected by decarbonisation efforts as well as communities affected by climate impacts.

Some guidance documents signpost directly to other guidance documents like the UN Guiding Principles for Business and Human Rights (CA 100+) or the Sustainable Development Goals (ISO Net Zero Guidelines).

Comprehensive guidance is offered by BCORP, which recommends fully incorporating climate justice into transition planning, engaging workers in planning, identifying and mitigating impacts beyond the company value chain, engaging and compensating Indigenous peoples, and so on. The ISO Net Zero Guidelines also invite the organisation to consider how its net-zero strategy aligns with the UN SDGs and how it impacts workforce, Indigenous peoples, society and cultures and poverty.

HLEG also offers a unique recommendation that non-state actors *“should invest in projects or jurisdictional programmes that prioritise the people and sectors most in need of support”*.

Resources providing guidance on the use of carbon credits state that “companies must provide information related to how the credit promotes equity and generates co-benefits to ecosystems and local economies” (VCMII) and “mitigation activities are required to ensure free, prior and informed consent (FPIC) processes with Indigenous Peoples & Local Communities, protect and improve livelihoods, protect and restore biodiversity and ecosystem services, enhance climate resilience and adaptation, reduce pollution, and be transparent about the sharing of benefits from the mitigation” (ICVCM).

Resources were coded as 'not specified' where only passing mentions to a fair and inclusive transition were made (CISL), where justice is only considered in relation to natural climate solutions (ERI), or where the resource does not refer to beyond-value-chain impacts.

6. IMPACT

6.2 Does the resource encourage organisations to align lobbying, membership associations, and advocacy with a Paris-aligned climate future? (Yes/No/Not specified)

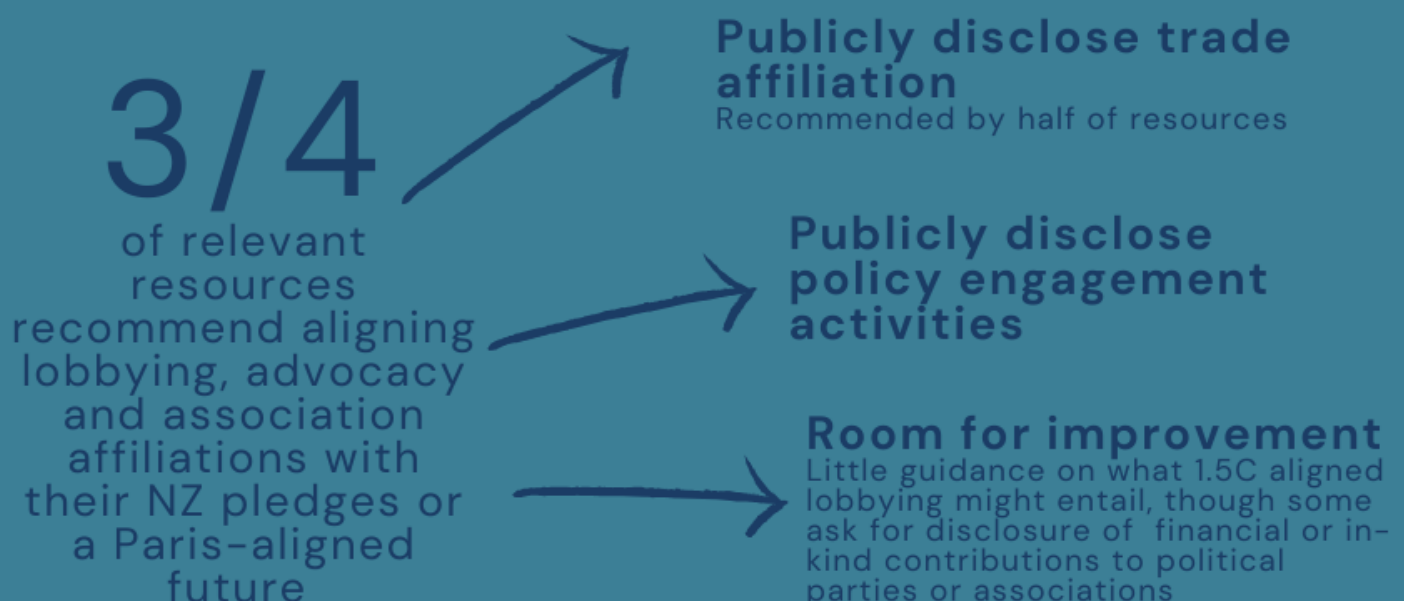
6.3 Does the resource encourage organisations to publicly disclose trade association affiliations? (Yes/No/Not specified)

6.4 Does the resource encourage organisations to publicly disclose lobbying and policy engagement policies and activities? (Yes/No/Not specified)

76% of relevant resources (23/30) recommend aligning lobbying, advocacy and association affiliations with their net zero pledges or a Paris-aligned climate future

6.2, 6.3, 6.4 Overview

The impact of lobbying and the importance of aligning such activities with an ambitious transition is widely recognised by resources. Half of relevant resources (15/30) recommend publicly disclosing trade association affiliations, and more than half of relevant resources (17/30) recommend publicly disclosing lobbying and engagement activities.



6. IMPACT

6.2, 6.3, 6.4 Details of Guidance

Few resources articulate exactly what 1.5°C-aligned lobbying might entail (e.g. in terms of policy demands). One exception to this is ERI, which calls on organisations to advocate for “*a stop for all fossil fuel subsidies*”.

Besides just recommending Paris-aligned advocacy, some resources (e.g. ACT, CA100) recommend organisations publish policies on how they intend to manage situations in which industry groups or alliances of which they are members engage in anti-climate-friendly lobbying. Some resources (e.g. ERI, WMBC), explicitly recommend leaving trade associations whose lobbying is not 1.5°C-aligned (after exhausting other options to realign the association’s stance).

Ceres recommends that organisations trying to reach net-zero activate their spheres of influence, specifically underlining the importance of engaging investors on sustainable business strategies.

Several resources (e.g. CDPGQ, BCORP, ESRS, WMBC) specifically ask organisations to disclose their financial or in-kind contributions to political parties, associations or other entities with political influence.

WMBC guidance could be considered exemplary for its clarity, specificity and comprehensiveness. The TPT also is one of the only resources that mentions positive lobbying efforts, stipulating that the “*entity prioritises engagement and collaborative activities in order to maximise their contribution towards achieving the Strategic Ambition of the entity’s transition plan (...)*”

6.2, 6.3, 6.4 Comparison to 2022 Mapping

Our previous mapping asked only whether the resource encouraged organisations to align lobbying and advocacy with climate goals, where we found 16 out of 21 relevant resources stipulating this (76%). Though the percentage coverage remains the same, we see more detail and more coverage overall (from 16 resources in 2022 to 23 resources in 2024). We also note the increase from 21 relevant resources to 30.

6. IMPACT

6.5 Does the resource encourage organisations to provide advisory services (engaging with clients) aligned with net zero and best practice for meeting net zero? (Yes/No/Not specified)

A quarter (8/30) of relevant resources encourage organisations to provide net zero-aligned advisory and customer services.

6.5 Overview

Despite this, there appears to be little consensus on how companies should provide net zero-aligned services. Recommendations cover various actions, including shifting customer demand (e.g. ACT), shifting portfolios to low-carbon products (e.g. TPT), and provision of climate solutions (e.g. ISO Net Zero Guidelines). Guidance is generally relatively vague and brief.

6.5 Details of Guidance

Several resources (e.g. CDPGQ, IFRS) require disclosure of climate-related client engagement without explicitly recommending the provision of net zero-aligned services. Six of the eight resources that recommend the provision of net zero-aligned services and customer engagement are guidance documents (i.e. not disclosure or assessment frameworks).

6. IMPACT

6.6 Does the resource encourage organisations to set a separate biodiversity or nature target in addition to their climate targets?
(Yes/No/Not specified)

23% (7/30) of relevant resources encourage setting separate biodiversity or nature targets

6.6 Overview

While impacts on nature are referenced in many standards, recommendations to actually set nature- or biodiversity-related targets are uncommon. Recommendations are generally rather vague and, with the exception of RTZ's reference to the Accountability Framework Initiative, do not refer companies to any biodiversity or nature target-setting guidance, frameworks or standards.

6.6 Details of Guidance

Few resources specify the nature or format of biodiversity-related targets in their recommendations. Exceptions to this include recommendations to “halt deforestation” or similar (from RTZ and Ceres), and to pursue biodiversity net gain (from IWA42). Interestingly, despite the biodiversity net gain framework's recent growth in popularity, it is only mentioned in one resource (IWA42): “In addition to net zero targets, the organization should set additional, separate targets to have a neutral or positive impact on nature (e.g. a biodiversity net gain target, enhanced land regeneration).”

Resources were coded as “not specified” where they referred only to making public commitments or endorsing nature-related initiatives (CDP) or where they invited entities to disclose whether or not they had a separate biodiversity target without necessarily recommending or mandating one (ESRS, GFANZ).

6. IMPACT

6.7 Does the resource encourage organisations to ensure that no significant foreseeable negative impact on environmental factors occur as a result of the transition? (Yes/No/Not specified)

10/30 of relevant resources encourage organisations to ensure that no significant foreseeable negative impacts on nature or the environment result from implementing their climate plans.

6.7 Overview

Several resources stipulate that entities should map the spread of potential risks as a result of interventions (e.g., through design process reviews and feasibility studies, as per CISL) and work to mitigate negative impacts (e.g., per Chapter Zero).

6.7 Details of Guidance

Several resources call for disclosure of environmental impacts resulting from companies' transitions, without explicitly recommending the minimisation or avoidance of such impacts (e.g. see ESRS, GRI CED, etc.).

Development of nature-based climate solutions, through afforestation for example, is known to be associated with significant risks to nature and biodiversity if implemented poorly (e.g. planting monocultures, changing soil hydrology, planting non-native species, etc.). Despite this, key resources related to carbon credit integrity fail to provide effective guidance on preventing negative environmental impacts. OOP and VCMI contain limited guidance on safeguarding against nature risks. ICVCM does provide stronger guidance, but it also contains loopholes for companies to generate environmental harms if they are deemed unavoidable – “The carbon-crediting program shall require mitigation activity proponents to ensure that the mitigation activity: 1) avoids, or where this is not feasible, minimises negative impacts on terrestrial and marine biodiversity and ecosystems”. Some other resources refer specifically to avoiding negative impacts as a result of implementing these solutions, rather than the transition as a whole (ERI).

6. IMPACT

6.8 Does the resource encourage organisations to take action on climate adaptation? (Yes/No/Not specified)

10/30 of relevant resources recommend that organisations take action on climate adaptation

6.8 Overview

Guidance on how adaptation should be integrated into net-zero plans is scant, with vague and differing approaches and expectations on companies on how to approach adaptation.

6.8 Details of Guidance

Much of the guidance that does exist is cursory and/or vague, often with adaptation mentioned as one of several auxiliary matters that companies should consider. For example, BCORP lists investment in adaptation as an example of a climate justice action that companies could take: “Few examples of climate justice actions: [...] Investing in climate change mitigation/adaptation/resiliency measures and projects for frontline communities”. Additionally, some other guidance suggests considering risks across the entire value chain and against a range of temperature scenarios, briefly speaking to adaptation without stipulating that organisations take any form of action (e.g., Chapter Zero).

Moreover, some adaptation recommendations focus on adaptation within the company’s value chain, whereas others focus on beyond-value-chain adaptation as an example of external impact. Examples of the former include CHAO, IFRS, and CBI. Examples of the latter include GOLDS, IWA42, WMBC, and BCORP. There is, therefore, little consensus on the framing of climate adaptation in corporate transition plans, and no clear expectations of companies on how to approach adaptation.

The UN has established an adaptation and resilience campaign Race to Resilience, but virtually zero resources refer to it, with the exception of RTZ.

Guidance on adaptation is offered by CBI in its sectoral guidance documents, which probably represents the most detailed guidance in the landscape.

7. REPORT

Organisations should align their reporting and disclosures with TCFD/IFRS guidance

About this section

This section maps guidance on disclosure of climate-related information, including reporting frequency, emissions, and progress on targets.

Number of relevant resources for this section: 31 (see p.10 for 'relevance' criteria).

Areas of alignment:

- Organisations should align their reporting and disclosures with TCFD/IFRS guidance

Areas for Improvement/Gaps:

- Despite a significant increase in 2023/24, many resources still do not require organisations to report on the limitations, unknowns and uncertainties in their data
- Need to tighten auditing requirements to encourage companies to have their all of their materials audited, including emissions data, targets, transition plans and subsequent reporting

Key Findings

TCFD and IFRS were recommended by over half (54%) of relevant resources as guidance for reporting frameworks. Just under half (42%) of relevant resources recommend organisations report on data limitations when disclosing progress against their net-zero targets, and one third (35%) of relevant resources recommend independent auditing, verification or assurance of reporting.

Summary

The net-zero governance system must be underpinned by transparency. There is not yet widespread agreement on reporting on limitations or unknowns in the data, though this has increased since our 2022 mapping. The TCFD continues to be an important resource in the landscape, with many other initiatives cross-referencing this in their own description of reporting on climate risks. Finally, there is a need for much larger adoption of independent auditing, verification or assurance of reporting, despite many resources containing a partial recommendation to this effect.

7. REPORT

	Report limitations of data, unknowns, or known errors or discrepancies?	Report risks and mitigation actions related to climate aligned with existing frameworks such as the TCFD or IFRS?	Reporting be independently audited?
CISL	Not Specified	Yes	Not Specified
CAR4	Not Specified	Not Specified	Not Specified
CERES	Not Specified	Not Specified	Yes
CHA0	Not Specified	Yes	Not Specified
CA100	Not Specified	Yes	Yes
ERI	Not Specified	Yes	Not Specified
GOLDS	Not Specified	Not Specified	Not Specified
GGPC	Yes	Not Specified	Yes
GGPS3	Yes	Not Specified	Yes
IIGC	Not Specified	Yes	Not Specified
ISO14064	Yes	Not Specified	Not Specified
IWA42	Yes	Not Specified	Yes
IGCC	Not Specified	Yes	Yes
OECD	Not Specified	Not Specified	Yes
RTZ3	Yes	Yes	Not Specified
SBTIC	Yes	Not Specified	Not Specified
OOP	Not Specified	Not Specified	Not Specified
TNZ	Yes	Not Specified	Not Specified
HLEG	Yes	Not Specified	Yes
WMBC	Not Specified	Yes	Not Specified
WBCSD	Not Specified	Yes	Not Specified
WEF	Not Specified	Yes	Not Specified
CDPGQ	Yes	Yes	Not Specified
ESRS	Yes	Yes	Not Specified
GFANZ	Not Specified	Yes	Not Specified
GRI	Not Specified	Not Specified	Not Specified
GRI CED	Yes	Not Specified	Not Specified
IFRS	Not Specified	Yes	Not Specified
SMECH	Not Specified	Not Specified	Not Specified
TPT	Not Specified	Not Specified	Not Specified
ACT	Not Specified	Not Specified	Not Specified
BCORP	Not Specified	Yes	Not Specified
CBI	Yes	Yes	Yes
ICVCM	Yes	Not Specified	Yes
NCI	Not Specified	Not Specified	Not Specified
TPI	Not Specified	Not Specified	Not Specified
VCMi	Not Specified	Yes	Yes

Resources categorised as 'not relevant' (6/37): CAR4, GOLDS, OOP, GRI, SMECH, ACT. (other 'not specified' – TPT, NCI, TPI - have guidance around impacts but don't meet our criteria to be 'yeses')

NB: all data must be read in conjunction with detail in our [dataset](#)

7. REPORT

7.1 Does the resource recommend reporting on the limitations of data, unknowns or known errors or discrepancies? (Yes/No/Not specified)

Just over 2/3rds of relevant resources recommend reporting on data limitations, known errors or discrepancies. This represents an increase from our 2022 mapping.

7.1 Overview

Just over 40% of relevant resources (13/31) recommend reporting on the limitations, unknowns and errors of the data. Coverage appears relatively uniform across the three types of documents (guidance, disclosure frameworks and assessment frameworks).

7.1 Details of Guidance

GHGP Scope 3 Guidance underscores the importance of transparency as it relates to the GHG inventory, stipulating that processes, procedures, assumptions and limitations informing the inventory are disclosed in a “*clear, factual, neutral and understandable manner*”, including, e.g., an auditable trail for the data. SBTi Corporate Standard also specifies that levels of uncertainty should be included through estimates or averages. Some resources, such as CDPGQ, encourage reporting of data uncertainties in specific instances (e.g., base year emission calculations), but do not require or recommend systematic, comprehensive reporting of limitations.

Resources were coded as ‘not specified’ when they did not fully meet the conditions of the question, e.g., stating that organisations should qualitatively list categories of any missing data, particularly Scope 3 categories that are not yet quantified (e.g., ERI), but not requiring reporting on all data limitations. Some resources (e.g., TPT) require disclosure of key assumptions involved in transition plan creation, but not reporting on data limitations and unknowns, per se. Others recommend that companies publish information on the methodologies and assumptions involved in calculating emissions, without any specific recommendation to report on limitations or unknowns (e.g., NCI).

7. REPORT

7.1 Details of Guidance continued

An example of relatively watertight and comprehensive guidance is offered by ISO Net Zero Guidelines:

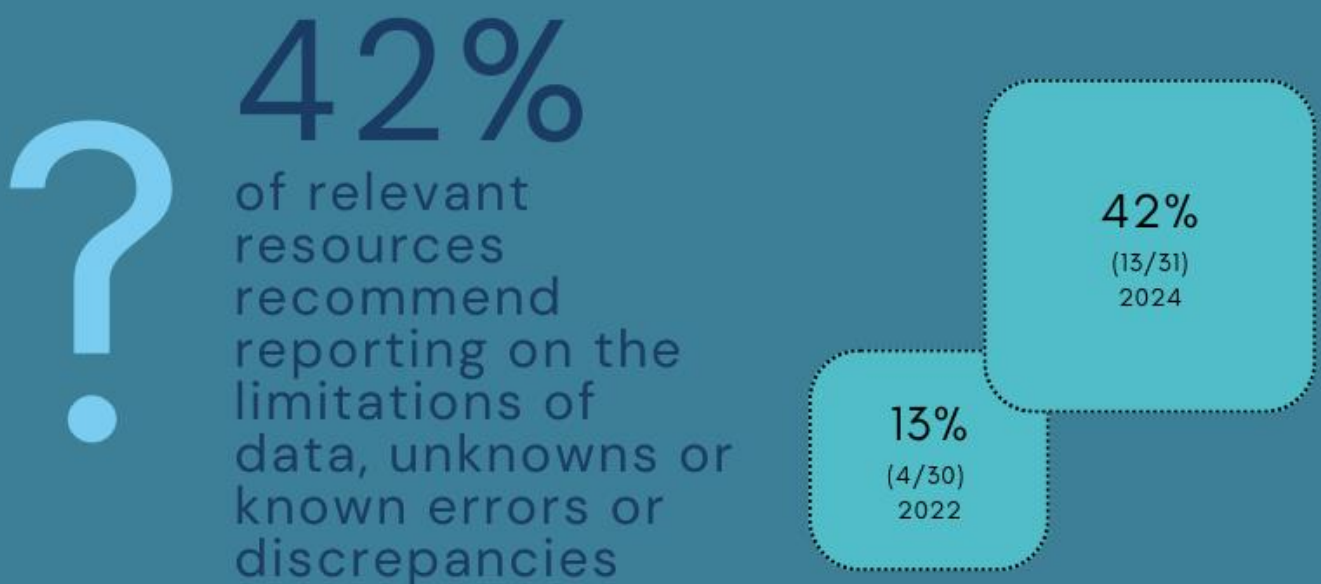
“The organization should include the following when reporting progress towards meeting net zero targets: i) data limitations, including confidence intervals for indicators; j) reporting limitations.

The organization should communicate the limitations of reports, including:

- a) any sources of GHG emissions which are excluded and quantify their significance;*
- b) use of GHG emissions proxies, averages, or gaps in knowledge within value chains;*
- c) methods used to estimate, and proportion of total disclosed data estimated when proxies are used to cover lack of data;*
- d) limitations of an achievement claim about a product or service being climate or carbon neutral.”*

7.1 Comparison to 2022 Mapping

In 2022, only 4/30 relevant initiatives called for reporting on limitations of the data. This demonstrates a significant shift in the importance of data transparency in the net zero governance landscape.



7. REPORT

7.2 Does the resource recommend organisations should report risk and mitigation actions related to climate aligned with existing frameworks such as the TCFD or IFRS? (Yes/No/Not specified)

Just over half of relevant resources (54%, 17/31) recommend reporting in line with TCFD or IFRS.

7.2 Overview

This represents a relatively widespread consensus that International Financial Reporting Standards/Task Force on Climate-related Financial Disclosures (IFRS/TCFD) offers authoritative and industry-accepted guidance on risk reporting.

7.2 Details of Guidance

Many resources make direct reference to TCFD, directly sign-posting organisations to the TCFD's disclosures guidance. Others recommend reporting on the TCFD recommended areas of Governance, Strategy and Risk Management. Only GFANZ and the VCMI reference the ISSB/IFRS, the former citing an appendix with a comparison of key components of a real-economy transition plan against the guidance developed by the ISSB and the later highlighting that companies draw upon guidance both from TCFD and the ISSB.

Some resources reference “globally accepted disclosure standards and frameworks” (Ceres) without directly naming TCFD or IFRS.

Just over half of relevant resources recommend reporting in line with TCFD or IFRS

Widely accepted as authoritative and industry-accepted guidance on risk reporting



TCFD

Disclosure guidance, governance, strategy and risk management

IFRS

Referenced by only GFANZ and VCMI

7. REPORT

7.2 Details of Guidance continued

Others, (e.g., GRI CED, TPT) make peripheral mention of TCFD/IFRS without explicitly recommending that companies report in line with these initiatives. For instance, TPT claims to be consistent with IFRS/TCFD recommendations but does not specifically require or recommend companies adopt them. The OECD makes several recommendations on risks and mitigation actions but does not reference existing frameworks (TCFD/IFRS).

HLEG's Integrity Matters report specifically underlines the anticipated final guidance of the TNFD (Task Force on Nature-related Financial Disclosures) but does not reference TCFD or IFRS.

7.2 Comparison to 2022 Mapping

The 2022 mapping report asked if resources recommend climate risk analysis and reporting, without the specific caveat of referring to TCFD or IFRS. Even though our questions are more specific, we still see an increase in climate risk analysis and reporting, from 14/30 (46%) in 2022 to 54% now.

7.3 Does the resource recommend reporting be independently audited? (Yes/No/Not specified)

Just over one-third (35%, 11/31) of relevant resources recommend independent auditing, verification or assurance of reporting

7.3 Overview

Recommending resources specifically reference that credibility and comparability of reports are augmented by audit, verification and/or assurance.

Whilst one-third may seem like a relatively modest proportion, indicating that external auditing requirements are not particularly prevalent in the governance landscape, this figure does underrepresent the true level of coverage, as many resources contain partial recommendations related to assurance, auditing and verification.

7.3 Details of Guidance

These resources specifically reference that credibility and comparability of reports are augmented by audit, verification and/or assurance.

Whilst one-third may seem like a relatively modest proportion, indicating that external auditing requirements are not particularly prevalent in the governance landscape, this figure does underrepresent the true level of coverage, as many resources contain partial recommendations related to assurance, auditing and verification.

7. REPORT

7.3 Details of Guidance

Several resources require companies to disclose whether or not they have had their reporting audited, without specifically recommending that they do so (e.g. ISO14064, ESRS, GRI CED, TPT).

Furthermore, several resources require or recommend obtaining assurance or verification of emissions data only, without extending that requirement to companies' entire reporting materials (e.g., CISL, CDPGQ, TNZ, BCORP, TPI).

The governance landscape therefore does frequently refer to auditing and assurance, but the strength and comprehensiveness of guidance varies. This may point to an opportunity for harmonisation across the landscape via the tightening and upgrading of auditing requirements to encourage all companies to have their emissions data, targets, transition plans and subsequent reporting all audited.

7.3 Comparison to 2022 Mapping

There is a marginal increase from our last mapping report (9/33, 27%), when we asked if the resource recommends that GHG measurements be quality assured. Therefore, in broadening the definition to audit, verification or assurance, we may have captured more resources.

1/3
of relevant
resources
recommend
independent
auditing, verification
or assurance



Many resources contain partial recommendations e.g., asking for disclosure of auditing when it has been done (without recommending this be done)

APPENDIX A: Glossary

Absolute and intensity targets An absolute target is usually expressed in terms of a reduction over time in a specified quantity of GHG emissions to the atmosphere, the unit typically being tonnes of CO₂-e. An intensity target is usually expressed as a reduction in the ratio of GHG emissions relative to another business metric. To facilitate transparency, companies using an intensity target should also report the absolute emissions from sources covered by the target. (Source: GHG Protocol Guidance: A Corporate Accounting and Reporting Standard)

Accountability mechanism A mechanism to hold organisations accountable for meeting targets and/or performance requirements.

Advisory services - see Serviced Emissions

Advocacy vs Lobbying

Lobbying and advocacy can apply across a wide range of domains :

- (1) upstream and downstream of the value chain
- (2) key stakeholders in climate policy (e.g., governments, town councils etc.)
- (3) customers
- (4) fund managers, finance sector
- (5) communities and civil society

e.g., BCORP: In this standard advocacy is used interchangeably with lobbying, which entails any direct or indirect communication with public officials, political decision-makers or representatives for the purposes of influencing public decision making and carried out by or on behalf of an organized group. Lobbying can also include direct or indirect attempts to influence public opinion, outside of normal advertising and marketing activity, with a view to impacting public decision making. (Source: Corporate Political Engagement Index , 2018, Transparency International)

Base year emissions A base year is a reference point in the past with which current emissions can be compared (Source: GHG Protocol Guidance: A Corporate Accounting and Reporting Standard)

Business model An entity's system of transforming inputs through its activities into outputs and outcomes that aims to fulfil the entity's strategic purposes and create value for the entity and hence generate cash flows over the short-, medium- and long-term. (Source: IFRS S1 Appendix A)

APPENDIX A: Glossary

Business operations Activities that an entity performs in order to produce, market, and distribute goods and services, and remain open for business. (Source: Transition Plan Taskforce Disclosure framework 2023). Examples of this include:

Business Operations may include:

1. information about any current and anticipated actions, including timelines, relating to matters such as:
 - i. its production processes or equipment
 - ii. workforce adjustments
 - iii. supply chain and procurement
- b. information about any current and anticipated changes relating to the entity's facilities and other physical assets, such as:
 - i. the location of offices and operations
 - ii. the responsible retirement or phase-out of GHG-intensive assets
 - iii. the management of assets that are exposed to risks arising from the changing climate
 - iv. the management of long-lived assets that may be impacted as a result of the transition to a low-GHG emissions, climate-resilient economy

Capacity building To assess, maintain, and build the appropriate skills, competencies, and knowledge across the organisation.

Carbon credit An emissions unit that is issued by a carbon crediting programme and represents an emissions reduction or removal of greenhouse gases. Carbon credits are uniquely serialised, issued, tracked, and cancelled by means of an electronic registry. (Source: IFRS S2 Appendix A)

Climate resilience At the entity-level: the capacity of an entity to adjust to climate-related changes, developments, or uncertainties. Climate resilience involves the capacity to manage climate-related risks and benefit from climate-related opportunities, including the ability to respond and adapt to climate-related transition risks and climate-related physical risks. An entity's climate resilience includes both its strategic resilience and its operational resilience to climate-related changes, developments, and uncertainties. (Source: IFRS S2 Appendix A)

At the systems-level: the capacity of interconnected social, economic, and ecological systems to cope with a hazardous event, trend, or disturbance, responding or reorganising in ways that maintain their essential function, identity, and structure. Resilience is a positive attribute when it maintains capacity for adaptation, learning, and/or transformation. (Source: IPCC Sixth Assessment Report, Impacts, Adaptation Vulnerability. Annex II)

Climate-related risks and opportunities Climate-related risks refers to the potential negative effects of climate change on an entity. These risks are categorised as climate-related physical risks and climate-related transition risks. Climate-related opportunities refers to the potential positive effects arising from climate change for an entity. Efforts to mitigate and adapt to climate change can produce climate-related opportunities for an entity. (Source: IFRS S2 Appendix A)

APPENDIX A: Glossary

Greenhouse gases GHGs are the six gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆) (Source: Greenhouse Gas Protocol, Glossary)

GHG- or energy-intensive assets

Includes fossil fuels

Historical emissions Pre-baseline GHG emissions accumulated over a specified period of time. (Source: ISO Net Zero Guidelines)

Internal carbon price Price used by an entity to assess the financial implications of changes to investment, production and consumption patterns, and of potential technological progress and future emissions-abatement costs. An entity can use internal carbon prices for a range of business applications. Two types of internal carbon prices that an entity commonly uses are: (a) a shadow price, which is a theoretical cost or notional amount that the entity does not charge but that can be used to understand the economic implications or trade-offs for such things as risk impacts, new investments, the net present value of projects, and the cost and benefit of various initiatives; and (b) an internal tax or fee, which is a carbon price charged to a business activity, product line, or other business unit based on its greenhouse gas emissions (these internal taxes or fees are similar to intra-company transfer pricing). (Source: IFRS S2 Appendix A)

Just transition The just transition involves anticipating, assessing, and addressing the social risks and opportunities of the transition to a low-GHG emissions and climate-resilient development, as well as ensuring meaningful dialogue and participation for impacted groups (including workers, communities, supply chains, and consumers) in transition planning. (Source: Transition Plan Taskforce Disclosure framework 2023)

Natural environment (a) Plants, wild animals and other living organisms; (b) their habitats; and (c) land (except buildings or other structures), air, and water, and the natural systems, cycles, and processes through which they interact. (Source: Transition Plan Taskforce Disclosure framework 2023)

Net zero At a global level, net zero is the condition in which human-caused greenhouse gas emissions are balanced by like-for-like human-led greenhouse gas removals over a specified period (Source: Allen et al., 2022). Net zero itself is explicitly not an absolute zero target.

Net zero commitment A declaration made by an organisation or a non-state actor to contribute to a state of net zero by a specific date. (Source: McGivern et al., 2022)

APPENDIX A: Glossary

Offsetting Purchased credits representing a certified unit of emission reduction or carbon removal carried out by another actor (Source: Axelsson et al., 2024, p. 7)

Policies and conditions Internal guidelines developed by an organisation to govern its actions. (Source: Transition Plan Taskforce Disclosure framework 2023)

Remaining emissions Emissions that remain in a given year as a company progresses towards the delivery of its near- and long-term targets (SBTi, 2023).

Removals Withdrawal of a greenhouse gas from the atmosphere as a result of deliberate human activities. Types of removals include afforestation, building with biomass (plant-based material used in construction), direct air carbon capture and storage, habitat restoration, soil carbon capture, enhanced weathering (mixing soil with crushed rock), bioenergy with carbon capture and storage. (Source: ISO Net Zero Guidelines)

Residual emissions Greenhouse gas emission that remains after taking all possible actions to implement emissions reductions. Residual emissions are estimated for each year from the net zero target date (e.g. 2050), not for interim target dates, using a 1.5 °C aligned science-based pathway. All possible actions refer to what is technically and scientifically feasible. (Source: ISO Net Zero Guidelines)

Scenario analysis A process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. (Source: ESRS E1, 2023)

Science-based target An emissions reduction target that is aligned with a science-based pathway trajectory to achieve global net zero greenhouse gas emissions based on scientific evidence. Scientific evidence refers to evidence that has been confirmed through peer review. In this standard, applicable science-based pathways are independent 1.5 °C aligned pathways. (Source: ISO Net Zero Guidelines)

Scope 1 emissions Direct greenhouse gas emissions that occur from sources that are owned or controlled by an entity. (Source: IFRS S2 Appendix A)

Scope 2 emissions Indirect greenhouse gas emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by an entity. Purchased and acquired electricity is electricity that is purchased or otherwise brought into an entity's boundary. Scope 2 greenhouse gas emissions physically occur at the facility where electricity is generated. (Source: IFRS S2 Appendix A)

Scope 3 emissions Indirect greenhouse gas emissions (not included in Scope 2 greenhouse gas emissions) that occur in the value chain of an entity, including both upstream and downstream emissions. Scope 3 greenhouse gas emissions include the Scope 3 categories in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and reporting Standard (2011). (Source: IFRS S2 Appendix A)

APPENDIX A: Glossary

Scope 3 categories Scope 3 greenhouse gas emissions are categorised into these 15 categories—as described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011):

- (1) purchased goods and services;
- (2) capital goods;
- (3) fuel- and energy-related activities not included in Scope 1 greenhouse gas emissions or Scope 2 greenhouse gas emissions;
- (4) upstream transportation and distribution;
- (5) waste generated in operations;
- (6) business travel;
- (7) employee commuting;
- (8) upstream leased assets;
- (9) downstream transportation and distribution;
- (10) processing of sold products;
- (11) use of sold products;
- (12) end-of-life treatment of sold products;
- (13) downstream leased assets;
- (14) franchises; and
- (15) investments.

Serviced emissions Emissions associated with and, in some cases, resulting from their provision of services (e.g., Advisory Services) across projects and client work, particularly through working in high emitting sectors.

Strategic Ambition An entity’s overarching aims for its transition plan. This will comprise the entity’s objectives and priorities for responding and contributing to the transition towards low GHG emissions, climate-resilient economy, and set out whether and how it is pursuing these objectives and priorities in a manner that captures opportunities, avoids adverse impacts for stakeholders and society, and safeguards the natural environment. (Source: Transition Plan Taskforce Disclosure framework 2023)

Transition plan A climate-related transition plan is an aspect of an entity’s overall strategy that lays out the entity’s targets, actions or resources for its transition towards a lower-carbon economy, including actions such as reducing its greenhouse gas emissions. (Source: IFRS S2 Appendix A)

Value chain The full range of interactions, resources, and relationships related to a reporting entity’s business model and the external environment in which it operates. A value chain encompasses the interactions, resources, and relationships an entity uses and depends on to create its products or services from conception to delivery, consumption, and end-of-life, including interactions, resources, and relationships in the entity’s operations, such as human resources; those along its supply, marketing, and distribution channels, such as materials and service sourcing, and product and service sale and delivery; and the financing, geographical, geopolitical, and regulatory environments in which the entity operates. (Source IFRS S1 Appendix A)

APPENDIX A: Glossary

Notes

When dealing with initiatives/standards related to disclosures, a requirement/ recommendation to **disclose whether an organisation does X** is different from the requirement/recommendation to **do X**. The former was coded as a "Not specified", whereas the latter is a "Yes". An exception to this is disclosure-related standards that use some form of scoring/grading to assess organisations' performances (e.g. NCI, CDP), where there is an implicit recommendation based on the assessment methodology. Some examples:

Initiative A: Organisations should **set** GHG emission reduction targets.

-> targets are set

Initiative A: Organisations should **report** GHG emission reduction targets.

-> implies targets are set

Initiative B: Organisations should **report whether** they have set GHG emission reduction targets.

-> does not imply targets are set

Initiative C: Organisation should **report any** GHG emission reduction targets **set**.

-> does not imply targets are set

Initiative D: Organisation should report **how** GHG emission reduction targets **set**.

-> implies targets are set

In this regard, we noted "Disclosure requirement only" in the Comments columns of the Database to illustrate when a resource makes no recommendation about meeting the criterion, only about reporting on it.

APPENDICES

APPENDIX B: List of 2022 Resources not included in 2024

Resource Name	Reason for Exclusion
Ecovadis, <i>EcoVadis Carbon Methodology Overview and Principles, 2022</i>	Dropped because behind a pay wall
Carbon Trust, <i>Introductory Guide - The journey to Net Zero for SMEs, 2022</i>	Dropped because behind a pay wall
Carbon Disclosure Project Supply Chain Module, <i>CDP Climate Change 2023 Questionnaire, v1.5, June 2023</i>	Not mapped separately, as Supply Chain questions are folded into CDPGQ which has been mapped in this research
Future Fit Foundation, <i>Break Even Goals</i> (website)	Dropped because insufficiently addresses the seven net-zero themes
Nature Based Solutions Initiative, <i>Guidelines for Successful, Sustainable, Nature-based Solutions, 2021 & Ensuring Nature-based Solutions support both biodiversity and climate change adaptation</i>	Dropped because outputs take the form more of white papers than standards
Net Zero Tracker, <i>Net Zero Tracker Codebook, 2023</i>	Dropped because it is not really a standard. NZT's criteria is broad and tracks across sovereigns, non-state, corporates etc. which is not specific enough
Task Force on Climate-related Financial Disclosures, <i>Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, 2021</i>	Dropped as this was subsumed under ISSB
WWF, <i>Turning Blue Chips Green: A Review of FTSE100 Net Zero Commitments, 2021</i>	Dropped because the criteria used to review the FTSE100 is too general
Climate Neutral Now, <i>Climate Neutral Now - Guidelines for Participation</i>	Dropped because defunct and Climate Neutral not Net Zero focus.
Net Zero Asset Managers, <i>The Net Zero Asset Managers Commitment</i>	Dropped as sector specific
UN Principles for Responsible Investment, <i>The investor guide to climate collaboration & Inaugural 2025 Target Setting Protocol (Third Edition), Jan 2023</i>	Dropped as sector specific

APPENDICES

APPENDIX C: 2024 Resources

Code	Organisation Name	Resource Name
GUIDANCE		
CISL	Cambridge Institute for Sustainability Leadership	Targeting Net Zero: A strategic framework for business action, 2020
CAR4	Carbone 4	Net Zero Initiative, A Framework for Collective Carbon Neutrality, 2020
CERES*	Ceres	Ceres Roadmap 2030
CHA0	Chapter Zero	[1] Board Toolkit [2] Transition Planning Toolkit Scorecard
CA100	Climate Action 100+	Climate Action 100+ Net Zero Company Benchmark 2.0, March 2023
ERI	Exponential Roadmap Initiative	THE 1.5°C BUSINESS PLAYBOOK V3.0, Sept 2023
GOLDS*	Gold Standard	Corporate Climate Stewardship Guidelines
GGPC	Greenhouse Gas Protocol	The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, 2004
GGPS3	Greenhouse Gas Protocol	Corporate Value Chain (Scope 3) Accounting and Reporting Standard, 2011
IIGC*	Institutional Investors Group on Climate Change	Investor Expectations of Corporate Transition Plans: From A to Zero
ISO14064*	International Organization for Standardization	ISO 14064:2018-1 - Greenhouse Gases
IWA42*	International Organization for Standardization	IWA42 2022: Net Zero Guidelines (aka 'ISO Net Zero Guidelines')
IGCC*	Investors Group on Climate Change	CORPORATE CLIMATE TRANSITION PLANS: A guide to investor expectations
OECD*	OECD	Guidelines for Multinational Enterprises on Responsible Business Conduct
RTZ3	Race to Zero 3.0	Race To Zero Starting Line and Leadership Practices 3.0, 2022
SBTIC	Science Based Target Initiative (Corporate Net Zero Standard Criteria)	SBTi Corporate Net-Zero Standard Criteria, Version 1.1, April 2023
OOP	The University of Oxford	The Oxford Principles for Net Zero Aligned Carbon Offsetting, 2020
TNZ*	Transform to Net Zero	Climate Transition Action Plans
HLEG*	UN High Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities	Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions
WMBC*	We Mean Business Coalition	[1] THE 4 A'S OF CLIMATE LEADERSHIP [2] CLIMATE TRANSITION ACTION PLANS
WBCSD	World Business Council for Sustainable Development	SOS 1.5 The road to a resilient, net-zero carbon future, 2020
WEF*	World Economic Forum	How to Set Up Effective Climate Governance on Corporate Boards Guiding Principles and Questions
DISCLOSURE		
CDPGQ	CDP	[1] CDP Climate Change 2023 Questionnaire, v1.8, Aug 2023 [2] CDP Climate Change 2023 Scoring Methodology
ESRS*	European Commission	[1] ESRS (Cross-Cutting) E1 General Requirements [2] ESRS (Cross-Cutting)E2 General Disclosures [3] ESRS (Topical) E1 Climate Change
GFANZ*	Glasgow Financial Alliance for Net Zero	Expectations for Real economy Transition Plans
GRI	Global Reporting Initiative	GRI 305: Emissions 2016, 2018
GRI CED*	Global Reporting Initiative	GRI Topic Standard Project for Climate Change – Climate Change Exposure draft
IFRS*	IFRS/ISSB	IFRS S2 Climate-Related Disclosures
SMECH	SME Climate Hub	[1] SME Climate Hub Report Page [2] About the SME Climate Commitment [3] Rules for Reporting
TPT*	Transition Plan Taskforce	Disclosure Framework
ASSESSMENT FRAMEWORK		
ACT	Assessing Low-Carbon Transition	Assessing low-Carbon Transition, Version 2.0, 2023
BCORP*	B Lab	DRAFT Climate Action Standard for BCorp Certification, Jan 2024
CBI*	Climate Bonds Initiative	Climate Bonds Standard Version 4.0
ICVCM	Integrity Council for the Voluntary Carbon Market	Core Carbon Principles, Assessment Framework and Assessment Procedure, July 2023
NCI	New Climate Institute	[1] Corporate Climate Responsibility, Guidance and Assessment Criteria for Good Practice [2] Corporate Emission Reduction and Net Zero Targets, Version 3.0, Feb 2023
TPI	Transition Pathway Initiative	TPI's methodology report: Management Quality and Carbon Performance v5.0, 2023,
VCMI	Voluntary Carbon Market Initiative	VCMI Claims Code of Practice, Nov 2023, v.2

APPENDICES

APPENDIX D: 2024 Codebook

	Criterion Description	New?
PREPARE		
1.1	Does the resource call for executive remuneration to be tied to the achievement of climate targets?	no
1.2	Does the resource recommend capacity building to execute its climate transition?	yes
1.3	Does the resource recommend organisations align their actions and/or strategy with their climate transition / net zero pledge?	yes
1.4	Does the resource outline an accountability mechanism for organisations not meeting their targets?	yes

QUANTIFY		
2.1	Does the resource recommend measuring Scope 3 emissions?	
2.2	What portion of Scope 3 emissions does the resource suggest the organisation to measure?	no
2.3	Does the resource encourage the measurement of historical emissions?	no
2.4	Does the resource encourage the separate accounting of offsets and/or avoided emissions in the measurement of an organisation's emissions?	no
2.5	Does the resource recommend measurements be quality assured?	yes
2.6	If yes, how, by whom and in what format does the resource recommend measurements be quality assured?	yes
2.7	Does the resource encourage the measurement of impact on nature, biodiversity and natural ecosystems?	yes

TARGET		
3.1	What type of target does the resource recommend organisations set?	no
3.2	Does the resource recommend setting targets for Scope 3?	no
3.3	If yes, how?	yes
3.4	Does the resource recommend targets are set separately for Scope 1, 2 and 3?	yes
3.5	What portion of Scope 3 emissions does the resource recommend targets to cover?	No
3.6	Does the resource have specific requirements on how to set a credible baseline year for emissions reduction targets?	no
3.7	By what year does the resource recommend organisations target net zero?	no
3.8	Does the resource allow for organisations to transition at different paces in light of different national circumstances (e.g. development status)?	yes
3.9	Does the resource recommend entities to set interim targets?	no
3.10	What is the recommended time interval for interim targets suggested by the resource?	yes
3.11	Does the resource recommend targets be science-based and set with reference to climate scenarios from organisations such as the IEA or IPCC?	modified
3.12	Does the resource recommend organisations to increase ambition over time?	yes
3.13	Does the resource recommend the use of sector-specific or geographically-specific methodologies/pathways to set targets?	yes

APPENDICES

APPENDIX D: 2024 Codebook

	Criterion Description	New?
TARGET (continued)		
3.14	Which GHGs does the resource recommend targets cover?	no
3.15	Does the resource recommend separate targets for material non-CO2 greenhouse gas emissions?	yes
3.16	Does the resource recommend embedded emissions (fossil fuel reserves, sequestration) are accounted for separately?	yes
3.17	Does the resource recommend initial targets are set within a year of making a pledge?	yes
3.18	Does the resource recommend first targets are set for 2025?	yes
3.19	Does the resource recommend that targets cover all business activities and subsidiaries of an organisation?	yes
3.20	Does the resource recommend that targets cover serviced emissions?	yes
3.21	Does the resource recommend striving for negative emissions upon achieving net zero?	Yes
PLAN		
4.1	Does the resource call for business models to be compatible with a net zero world?	yes
4.2	Does the resource recommend that transition plans describe key assumptions and external factors?	yes
4.3	Does the resource recommend that transition plans describe actions organisations plan to take in their business operations?	yes
4.4	Does the resource recommend that transition plans describe actions organisations plan to change their portfolio of products and services e.g. climate solutions?	yes
4.5	Does the resource recommend disclosing about internal policies and conditions that organisations use?	yes
4.6	Does the resource recommend organisations to disclose about the effects of their transition plan on their financial position, financial performance and cash flows?	yes
4.7	Does the resource recommend organisations to disclose about the contribution of their transition plan to a just transition?	yes
4.8	Does the resource specify an updating frequency of transition plans?	yes
4.9	Does the resource recommend the use of climate risk analysis in crafting its climate strategy?	modified
4.10	Does the resource recommend the phasing out of fossil fuels from an organisation's operations (use/production) and/or investment portfolio?	yes
4.11	Does the resource recommend renewable energy procurement targets?	yes
4.12	Does the resource recommend the use of an (internal) price on carbon?	yes
4.13	Does the resource recommend organisations to outline specific external policies and regulations, including carbon pricing, needed to facilitate transition plans?	yes

APPENDICES

APPENDIX D: Codebook

	Criterion Description	New?
COUNTERBALANCE		
5.1	Does the resource permit the use of offsets/removals in the achievement of interim and/or long-term climate targets?	modified
5.2	Does the resource restrict offsets to residual emissions?	no
5.3	Does the resource encourage organisations to make investments into high quality offsets and removals now?	yes
5.4	Does the resource recommend any criteria on additionality in the use of offsets, credits or sinks?	no
5.5	Does the resource recommend any criteria on permanence and/or storage in the use of removals, offsets, credits or sinks?	yes

IMPACT		
6.1	Does the resource encourage organisations to indicate how they will maximise positive economic and social impact and minimise negative impacts, ensuring that processes and outcomes are inclusive and fair?	yes
6.2	Does the resource encourage organisations to align lobbying, membership associations, and advocacy with a Paris-aligned climate future?	no
6.3	Does the resource encourage organisations to publicly disclose trade association affiliations?	yes
6.4	Does the resource encourage organisations to publicly disclose lobbying and policy engagement policies and activities?	yes
6.5	Does the resource encourage organisations to provide advisory services (engaging with clients) based on net zero best practice?	yes
6.6	Does the resource encourage organisations to set a separate biodiversity or nature target in addition to their climate targets?	no
6.7	Does the resource encourage organisations to ensure that no significant foreseeable negative impact on environmental factors occur as a result of the transition?	yes
6.8	Does the resource encourage organisations to take action on climate adaptation?	yes

REPORT		
7.1	Does the resource recommend reporting on limitations of the data, unknowns or known errors or discrepancies?	no
7.2	Does the resource recommend organisations to report risks and mitigation actions related to climate aligned with existing frameworks such as the TCFD or IFRS?	modified
7.3	Does the resource recommend reporting be independently audited?	modified

APPENDIX E: Bibliography

Armstrong and McLaren, 2022, *Which Net Zero? Climate Justice and Net Zero Emissions*, Ethics and International Affairs. <https://philpapers.org/rec/ARMWNZ>

Fankhauser et al, 2022. *The meaning of net zero and how to get it right*. Nature Climate Change. 12, 15-21. <https://www.nature.com/articles/s41558-021-01245-w>

Hale, T., 2022. *The Net-Zero Governance Conveyor Belt*. Kleinman Center for Energy Policy. Available from <https://kleinmanenergy.upenn.edu/research/publications/the-net-zero-governance-conveyor-belt/>

Khosla et al, 2023. *Can 'Net Zero' still be an instrument of climate justice?* Environmental Research Letters, 18 <https://iopscience.iop.org/article/10.1088/1748-9326/acd130/pdf>

McGivern, A., et al., 2022. *Defining Net Zero for organisations: how do climate criteria align across standards and voluntary initiatives?* Available from: <https://netzeroclimate.org/wp-content/uploads/2022/10/SUMMARY-REVIEW-21-OCT-FINAL.pdf>

Net Zero Tracker, 2024. Energy and Climate Intelligence Unit, Data-Driven EnviroLab, NewClimate Institute, Oxford Net Zero. Available from: <https://zerotracker.net/>

United Nations Climate Change, 2024. *Key aspects of the Paris Agreement*. Available from: <https://unfccc.int/most-requested/key-aspects-of-the-paris-agreement>