

CATALYZING VALUE CHAIN DECARBONIZATION

Corporate Survey Results

February 2023

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About the Science Based Targets initiative

The Science Based Targets initiative is a global body enabling businesses to set ambitious emissions reductions targets in line with the latest climate science. It is focused on accelerating the progress of companies across the world to halve emissions before 2030 and achieve net-zero emissions before 2050. The initiative is a collaboration between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF) and is one of the We Mean Business Coalition commitments.

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EXECUTIVE SUMMARY

About this report and survey

- Value chain decarbonization represents one of the most significant opportunities to catalyze system-scale transformation towards a net-zero economy.
- On average, value chain emissions (scope 3 emissions) represent >70% of corporate greenhouse gas (GHG) inventories and are part of 96% of validated science-based targets.
- Given the scale and importance of scope 3 target-setting, and an increasing urgency for action, SBTi has launched a process to review and update scope 3 target-setting guidance, methods, and criteria with the aim of ensuring that the SBTi framework effectively catalyzes value chain decarbonization while being cognisant of the barriers that corporates face.
- As a first step in this process, a stakeholder engagement survey was conducted to understand the challenges companies face when baselining, setting and delivering scope 3 targets.
- This report presents the results of the stakeholder survey – it does not seek to provide clarifications on existing guidance or criteria or set new precedents. The findings from this paper will be used to inform development of scope 3 foundational principles and target-setting criteria.

Results

- This survey aimed to reveal common challenges organizations face when baselining, setting and delivering on scope 3 targets.

Challenges with baselining scope 3 emissions

- 83% of respondents include scope 3 emissions in their GHG inventory, with 78% indicating that a desire to set a science-based target was a motivator for baselining.
- Regulatory disclosure was not a motivator for development of a scope 3 inventory, however, 60% of respondents believe compliance scope 3 reporting will be required in the future.
- 85% of respondents believe data access is a barrier to developing a robust baseline, primarily due to a lack of supplier data; only 6% of respondents use supplier specific emissions factors.
- Other challenges companies experience when baselining include limited time and resources, interpretation of GHG accounting standards and low comparability of baselines between peers.
- 70% of organizations have re-baselined their emissions in the last 5 years, 50% of which have been due to methodological changes e.g., changing emissions factor databases or methods.

Challenges with setting scope 3 targets

- Despite 96% of validated science-based targets including a commitment on scope 3, 90% of respondents believe the process for setting a scope 3 science-based target is challenging.
- 67% of respondents consider low confidence in ability to deliver scope 3 decarbonization as a barrier to target setting, due to perceived consequences of failure and maturity of delivery roadmaps.
- In addition, 60% of respondents consider a lack of target-setting methods tailored to company circumstances to be a barrier e.g., sector specificity or accounting for growth.
- Additional challenges for target setting include unclear or ambiguous SBTi requirements, weak or unknown business cases and a lack of understanding amongst company decision makers.

Challenges with delivering scope 3 decarbonization

- 50% of respondents' self-report to be "off track" for delivering their scope 3 target despite 40% of all respondents indicating that executives are directly accountable for decarbonization.
- Respondents find emissions in scope 3 cat. 1, purchased goods and services and scope 3, cat. 11, use of sold products the hardest to decarbonize; combined these categories represent >70% of CDP reported scope 3 emissions.
- The top three challenges for target delivery include 1.) ability to influence upstream suppliers (81%), 2.) cost of decarbonization (61%) and 3.) ability to track progress towards a target due to insufficient access to primary data (59%).
- Company growth, ability to influence end users, availability of decarbonization technologies and an understanding of which levers are suitable for demonstrating progress towards a science-based target were also considered barriers to target delivery.

Discussion

- An understanding of the barriers to baselining, target setting, and delivery will inform and support the upcoming review of the SBTi scope 3 target-setting methodologies and criteria.
- Addressing the challenges identified in this survey will require action from stakeholders across the climate ecosystem. 6 high level solutions have been identified:
 1. Improving data collection and supply chain traceability.
 2. Enhancing accounting frameworks.
 3. Target-setting guidance and methods.
 4. Collective value chain action.
 5. Continued engagement of financiers and regulators.
 6. Increased internal efforts.

- Addressing structural challenges companies face when setting and delivering science-based targets is critical to accelerating and unlocking action.
- To that end, some of these solutions (amongst others) will be explored during the SBTi scope 3 guidance review process.
- However, to address remaining challenges, this paper serves as a call to action for all stakeholders in the climate ecosystem.

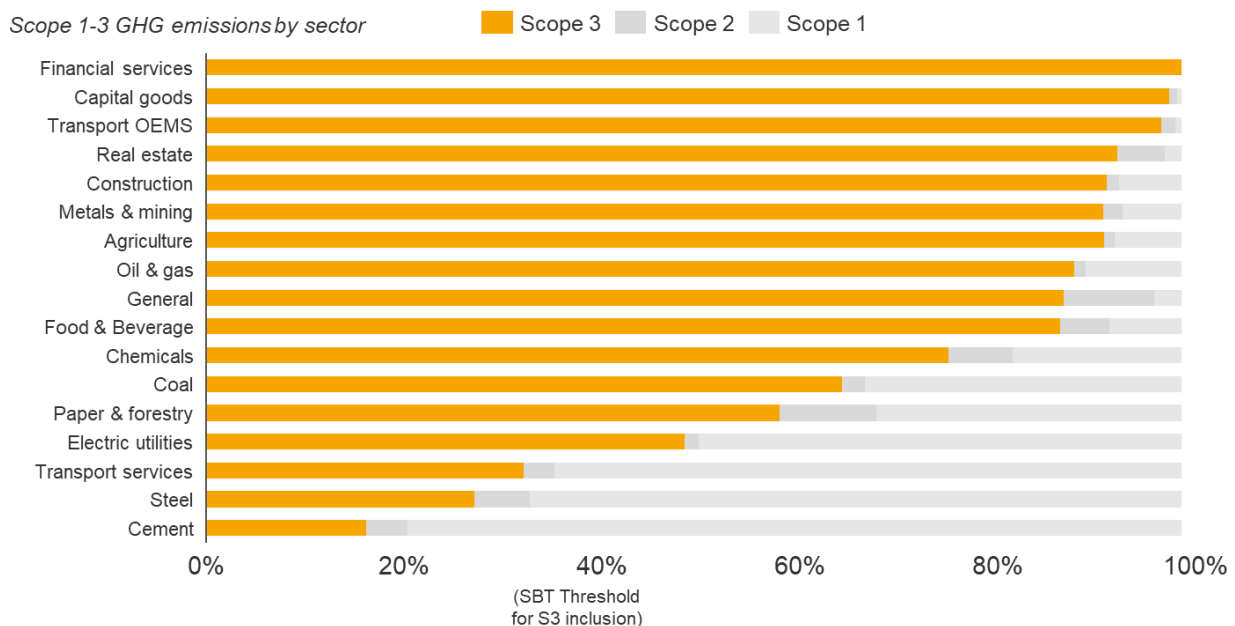
INTRODUCTION

In 2015, governments adopted the Paris Agreement, committing to limit global temperature rise to well below 2°C and to avoid the worst impacts of climate change with efforts to limit warming to 1.5°C. Achieving this ambition requires the global community to embark on bold measures immediately. Systemic and widespread change is necessary from all actors.

More than seven years since the Paris Agreement, there has been a surge in voluntary corporate climate ambition. For many companies, scope 3 represents the largest source of emissions in a GHG inventory. Scope 3 emissions refer to all indirect upstream and downstream emissions that occur in the value chain of the reporting company, excluding indirect emissions associated with power generation (scope 2). Data from CDP has shown that the emissions in a company’s supply chain are on average 11 times higher than operational scope 1 emissions (CDP; Transparency to Transformation, 2020) and reflect >70% of total emissions ([Figure 1](#)).

Companies with validated science-based targets are taking responsibility for emissions in their value chain, thereby influencing suppliers and customers. The SBTi analysis shows that setting value chain targets (also known as scope 3 targets) is now standard practice; 96% of companies with targets approved by the SBTi include scope 3 (SBTi Progress Report, 2021).

Figure 1: On average 75% of corporate GHG emissions originate in scope 3



Source: CDP Supply Chain Report: Changing the Chain, 2019; CDP Climate Change Questionnaire April 2022

Scope 3 targets themselves are critical to support economy wide transformation – creating the necessary incentives to stimulate full value chain decarbonization. However, as companies continue to seek clarity on science-alignment and best practices in scope 3 mitigation, the SBTi has recognized the need for refreshed scope 3 guidance.

The SBTi has launched a process to review current scope 3 target-setting criteria and methods, including:

- A review of key challenges and limitations with existing scope 3 guidance.
- An assessment of the latest climate science and technical foundations for scope 3 target setting aligned with a 1.5°C outcome.
- Proposed updates to the SBTi scope 3 criteria and methodologies.

To inform this review, a survey was launched in September 2022 to better understand the barriers and limitations companies face both when setting and delivering a scope 3 science-based target.

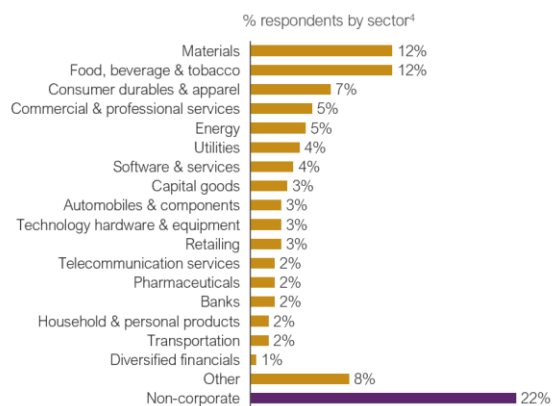
~230 organizations were consulted, covering major industries and geographies. However, due to the inherent sampling bias of SBTi's outreach, 85% of companies surveyed either had a validated science-based target or were committed to setting a target with the SBTi.

The objective of this paper is to summarize feedback and insights related to the challenges of scope 3 target setting and delivery. This paper does not seek to provide clarifications on existing guidance or criteria or set new precedents. The findings from this paper will be used to inform future development of scope 3 foundational principles and target-setting criteria.

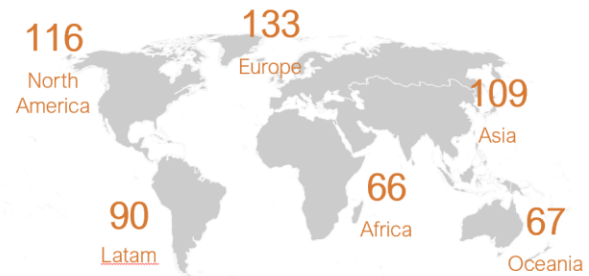
ABOUT THE SURVEY

The SBTi Scope 3 Stakeholder Engagement Survey was released in September 2022. 230 organizations responded to the survey on scope 3 target setting and delivery challenges over the course of four weeks, representing a diverse range of sectors and geographies.

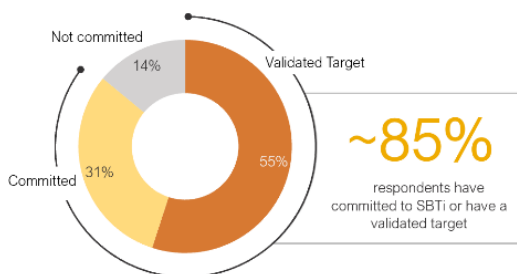
Respondents represent a range of sectors...



...and geographies¹



1. Companies can cover multiple geographies; N=180; 3. N=178; 4. N=192, ex. 31 respondents who did not complete this question; Source: SBTi corporate survey September 2022



Due to an inherent sampling bias, most respondents had commitments with, or targets validated by the SBTi. As a result, conclusions in this report are likely weighted towards the perspectives of companies already engaged with the initiative.

Survey questions were subdivided into three sections; challenges with baselining scope 3 emissions, challenges with setting scope 3 science-based targets and challenges with delivering scope 3 decarbonization. Within each section, profiling questions were used to better understand respondents current circumstances and context. The remainder of questions were closed multiple choice format, allowing respondents to indicate the degree to which they agreed with statements summarizing potential challenges with baselining, target setting or delivery. If a respondent agreed with a challenge statement they were asked a follow-up closed multiple choice question with further responses targeted at understanding why the respondent believed the statement was a challenge.

In addition to the stakeholder engagement survey, 15 organizations were invited for 1:1 bilateral interview to provide additional detail on survey responses. Anonymized quotations from these interviews are included within this report.

Data from the stakeholder engagement survey and subsequent interviews have been complemented with academic and corporate research to help further illustrate and detail the identified challenges. The resulting perspectives shared in this report are intended to provide broad context on the challenges with scope 3 target setting delivery and should not be considered as official SBTi guidance or precedents.

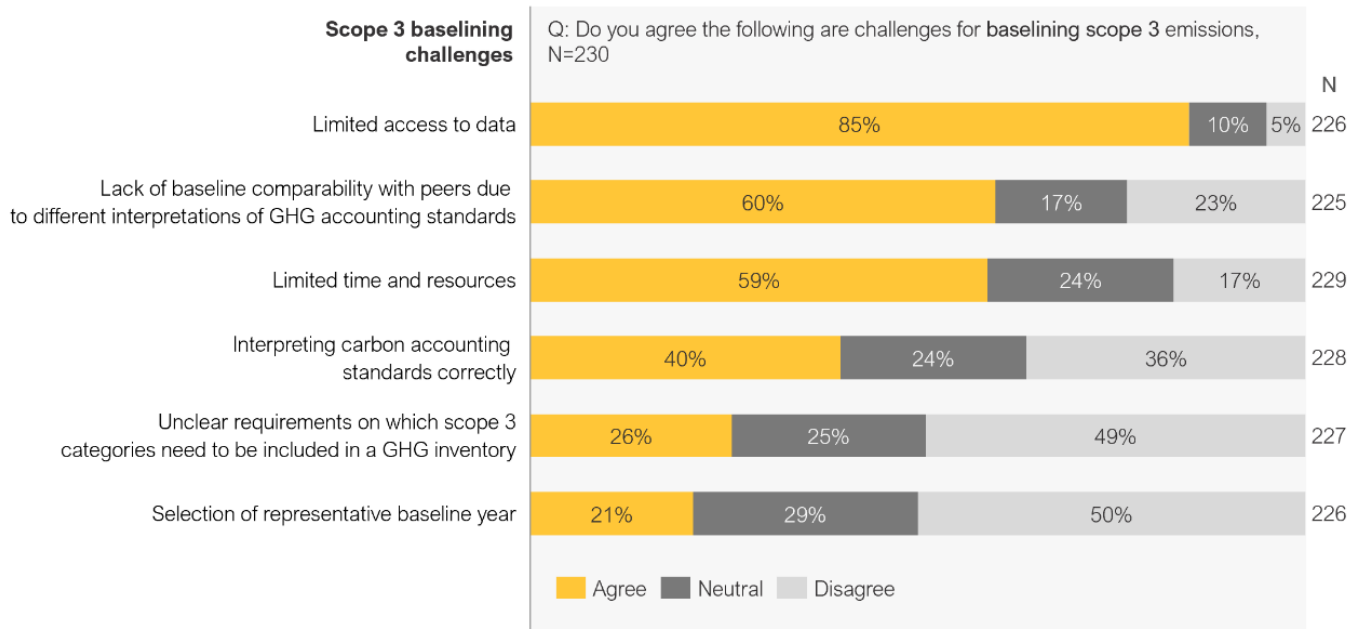
RESULTS

Corporate climate commitments typically follow a three-step process: baselining, target setting and delivery. However, many organizations experience challenges throughout this process.

Challenges with baselining scope 3 emissions

- **Most organizations include scope 3 in their baselines:** 83% of respondents include scope 3 emissions in their GHG inventory and 11% plan to do so in the future. The remainder, 6%, do not plan to develop a scope 3 baseline at all due to concerns that existing accounting methodologies are not high enough accuracy to yield actionable metrics.
- **Desire to set a science-based target can be a motivator for baselining scope 3 emissions:** 78% of respondents who have a scope 3 baseline were motivated to develop one to set a science-based target. In addition, companies were motivated to baseline their scope 3 emissions to better understand their GHG footprint (84%) and to identify decarbonization levers (79%).
 - The majority (66%) of respondents develop their own scope 3 baselines, while 28% use the services of external tools, platforms, or consultants.
 - Regulatory disclosure requirements were not seen as a primary motivator for developing scope 3 baselines. While today only 10% of respondents are exposed to some form of regulatory scope 3 disclosure, more than 60% believe that compliance reporting will be required in the future.

Figure 2: Challenges associated with baselining scope 3 emissions



Source: SBTi Stakeholder Engagement Survey, September 2022

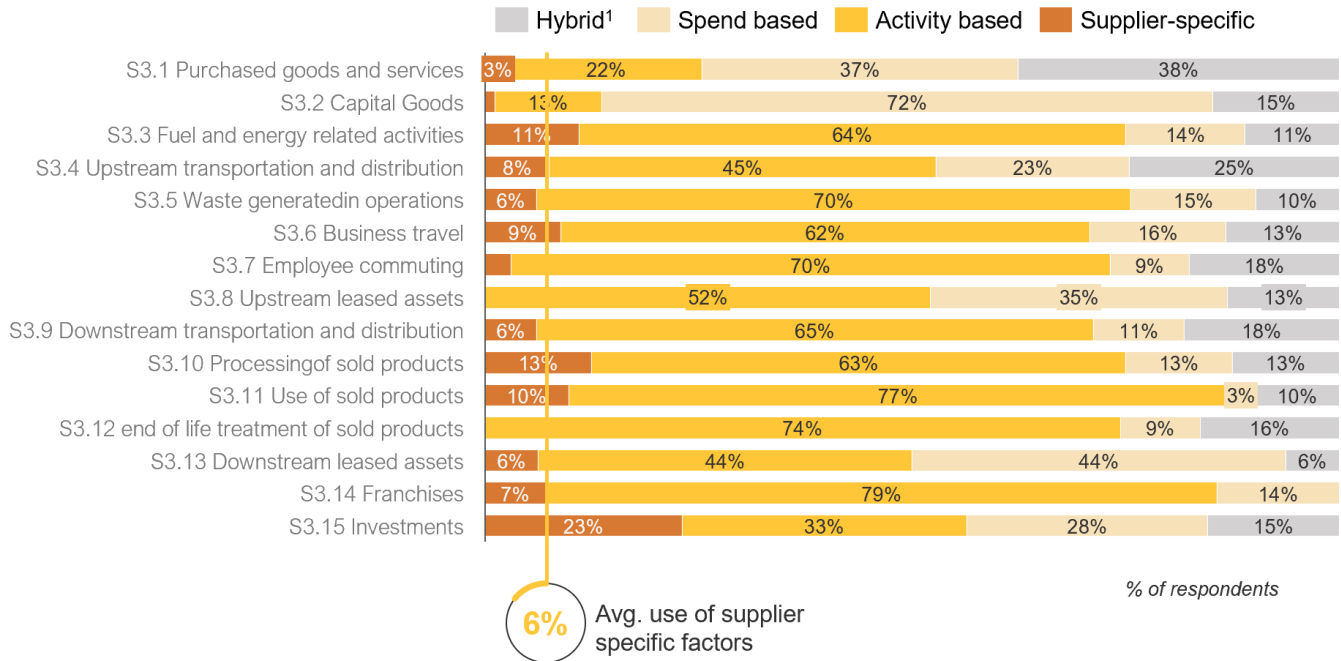
- Access to measured emissions data is a primary barrier to baselining scope 3 emissions:**

Of respondents with an established scope 3 inventory, 85% felt data access was a barrier to developing a robust baseline. Data was considered a challenge due to a limited access to supplier information; both supplier specific emissions factors (76%) and detailed procurement data (64%) e.g., location of production or visibility into upstream suppliers.

 - Today only 6% of emissions factors are based on supplier specific data (factors provided by suppliers which typically combine measured emissions from supplier operations and estimated emissions from a suppliers' upstream value chain), with the majority using activity-based methods, spend-based methods, or a combination of both.
 - Most respondents source their emissions factors from publicly available databases (63%); however, many organizations also use privately held emissions factor data (50%).

Figure 3: Type of emissions factor used for baseline calculations

Q: Of the scope 3 categories you consider material to your business, what type of scope 3 GHG accounting did you use or plan to use for each category?²



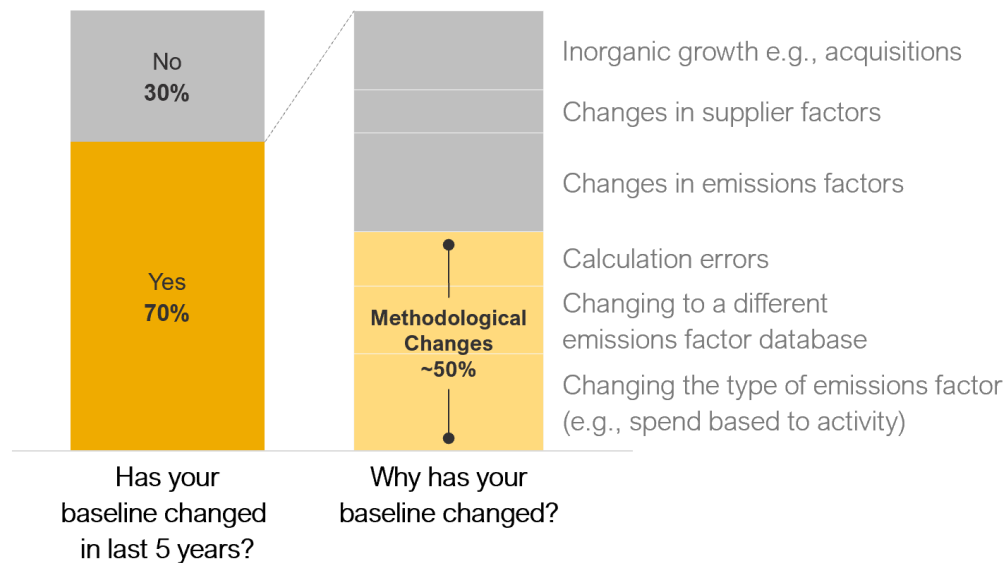
1. A mix of spend, activity and supplier specific factors; 2: N=175; Source: SBTi corporate survey September 2022

- GHG accounting standards can be difficult to interpret:** Interpretation of GHG accounting standards is considered a challenge for developing scope 3 baselines by 45% of respondents; 40% of which find the guidelines difficult to interpret correctly and 60% believe differing interpretations of standards limits comparability between peers.
 - For example, scope 3 inventories include up to 15 distinct categories of emissions, however, 26% of respondents believe identifying which categories are material to include is a barrier to baselining. 75% of companies assess materiality of an emissions category based on share of emissions represented; companies may also consider materiality based on GHG accounting requirements (46%), categories where data is available (25%) and categories required by disclosure frameworks (12%).
- Time and resource are barriers to baselining:** Finally, limited time and resource is considered a barrier to developing a scope 3 baseline by 59% of respondents, driven by a lack of automated systems for scope 3 baselining (40%), length of the baselining process (35%) and a lack of internal expertise (30%).

- **Re-baselining of scope 3 emissions over time is common:** 70% of respondents changed their baseline in the last 5 years, of which 50% have done so because of methodological changes, e.g., changing the type of method used (activity vs. spend), changing source of emissions factors or including/excluding additional scope 3 categories.

Figure 4: Type of emissions factor used for baseline calculations

Q: Has your baseline changed in the last 5 years, and if so, why has it changed?
% respondents, N=198

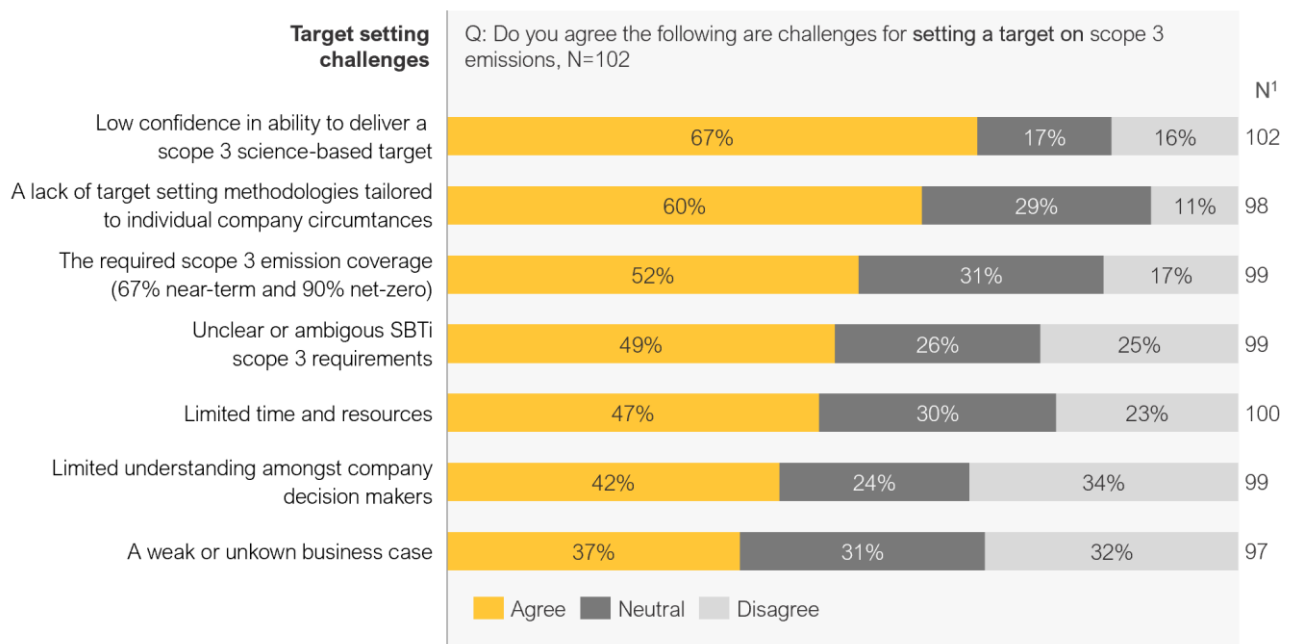


Source: SBTi Scope 3 Stakeholder Engagement Survey, September 2022

Challenges with setting scope 3 science-based targets

- 96% of organizations with validated science-based targets have made a commitment on scope 3, however, 90% of respondents believe the process of setting a target can be challenging.
- Seven challenges associated with setting a scope 3 target were assessed as part of this stakeholder engagement survey.

Figure 5: Challenges experienced when setting a scope 3 target



1. Excludes companies with validated targets. Source: SBTi Stakeholder Engagement Survey, September 2022

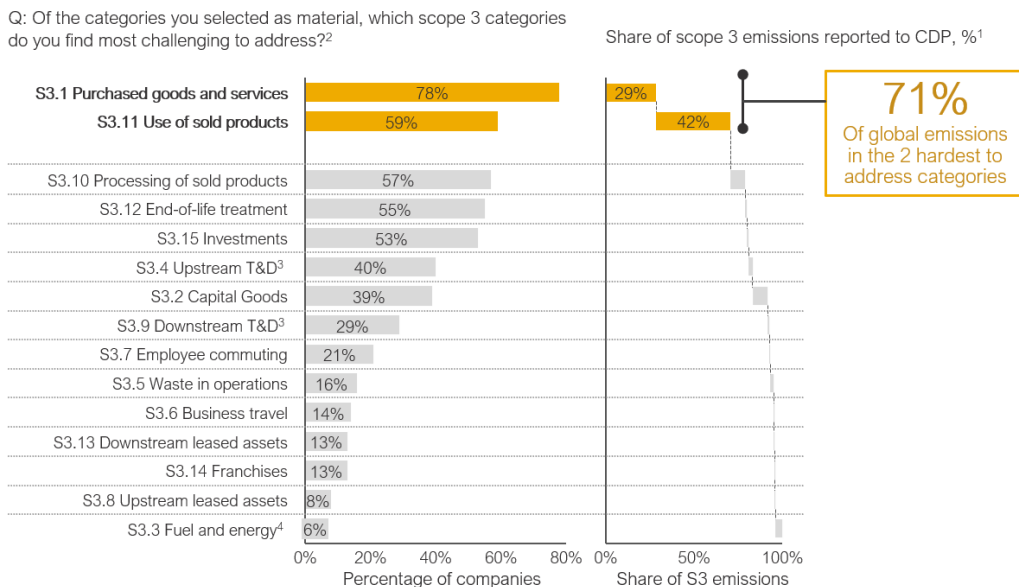
- **Confidence in ability to deliver is important for companies looking to set targets:** 67% of respondents consider lack of confidence in an organization's ability to deliver scope 3 decarbonization as a barrier for setting a scope 3 science-based target.
 - Delivery is a concern for respondents partly due to the consequences of failure: 43% indicated that failing to meet a target has greater implications than not setting one.
 - Concern of failure is exacerbated when companies have low visibility into their delivery roadmaps; 50% of respondents require a clear delivery plan before committing.
 - In addition, 65% of respondents believe company growth aspirations are an additional factor limiting confidence in an organizations ability to deliver a scope 3 target.

- **Availability of tailored target-setting methodologies is important for scope 3 target setting:** 60% of respondents consider a lack of methodologies tailored to individual company circumstances a barrier to setting a scope 3 science-based target.
 - 84% of respondents currently use absolute contraction or physical/economic intensity target-setting methodologies, which are based on global average emissions trajectories, while only 6% of respondents utilize the sectoral decarbonization approach.
 - Respondents believe target-setting methodologies are not suitably tailored to their circumstances because they are not always sector specific (56%), do not allow for company growth (36%), do not support investment in longer-term transition investments (25%) and do not reflect differences in base year carbon intensity (15%).
- Respondents identified two barriers to scope 3 target setting which are driven by the SBTi Criteria, including the required scope 3 emissions coverage threshold (52%) and unclear or ambiguous SBTi requirements (49%).
 - In particular, unclear or ambiguous SBTi requirements were considered a challenge for interpreting sector specific guidance and supplier engagement methodologies.
- **Weak or unknown business case for scope 3 action can limit target setting:** Finally, companies believe that a weak or unknown business case (37%) coupled with limited understanding of scope 3 amongst company decision makers (42%) are additional barriers to setting a target.

Challenges with delivering scope 3 science-based targets

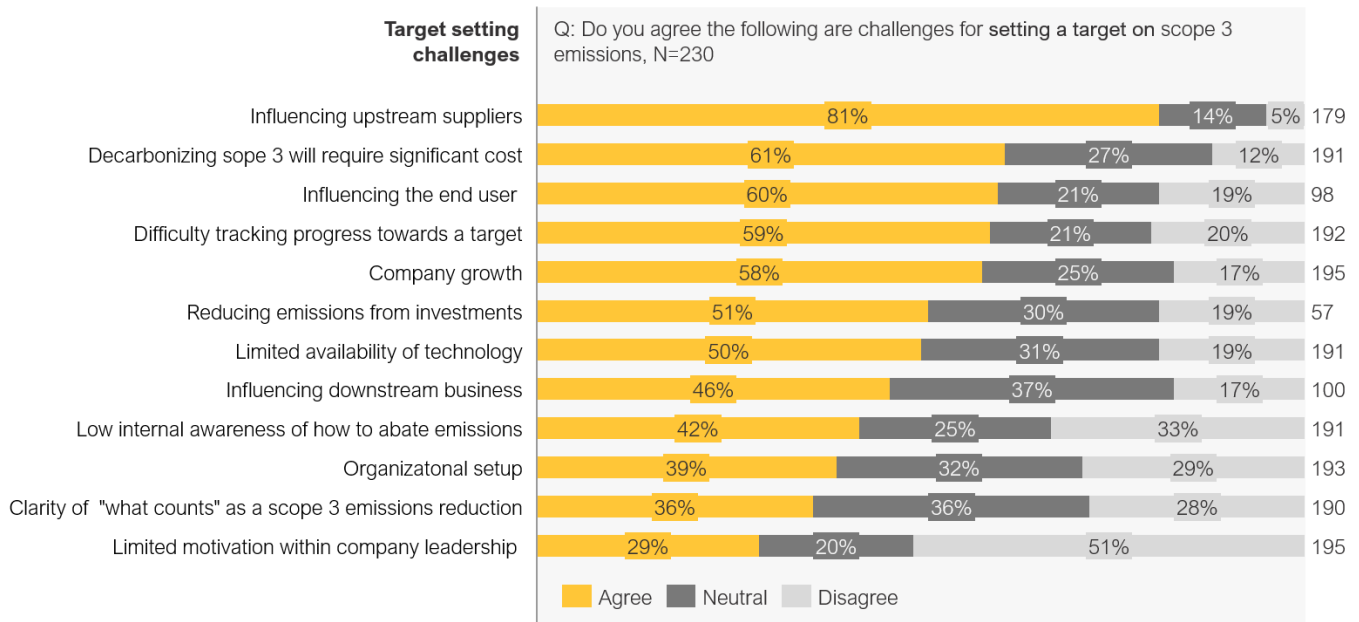
- Ambitious target setting must be followed by equally ambitious delivery. Despite most companies demonstrating some progress towards their science-based target, >50% of respondents' self-report to be "off track" for delivering their scope 3 target.
- Respondents report that delivery of scope 3 targets are often the responsibility of sustainability, procurement and operations functions, or a combination of all three.
 - For 65% of respondents, action is coordinated by sustainability teams, but business units are responsible for delivering decarbonization; in contrast, 25% of respondents have a dedicated sustainability team that is responsible for both co-ordination and delivery.
 - For 50% of respondents the board is actively engaged in tracking progress towards a target and for 40% executives are directly accountable for delivery.
- To accelerate scope 3 decarbonization companies are beginning to embed sustainability into existing business processes; 45% of respondents' sub-divide targets across the organization, 36% integrate decarbonization into procurement policies, 28% include carbon intensity considerations in product design and 25% use some form of internal carbon pricing.
- 71% of emissions reported to CDP are concentrated in two scope 3 emissions categories, which are also considered the hardest to decarbonize by respondents; scope 3.1, purchased goods and services and scope 3.11, use of sold products.

Figure 6: Share of emissions by scope 3 category and perceived abatement difficulty



. Note: N=168; 1. Excluding Financial Services; 2. N=168; 3. Transportation and distribution; 4. Fuel and energy related activities; Source: Categories - CDP Climate Change Questionnaire 2021, SBTi Stakeholder Engagement Survey, September 2022

Figure 7: Challenges experienced when delivering on a scope 3 target



Source: SBTi Stakeholder Engagement Survey, September 2022

- Supplier influence is the largest barrier to scope 3 decarbonization:** 81% of respondents consider ability to influence upstream suppliers as a barrier to delivering on a scope 3 science-based target, driven predominantly by five factors:
 - Fragmentation: 71% of respondents believe they have too many suppliers to engage. *"Our scope 3 footprint comes from many suppliers (500 for 70% of our footprint)"*.
 - Negotiating power: 63% of respondents believe they do not have sufficient influence over supplier behaviour e.g., due to small share of spend or weak negotiating position. *"We are not a major customer for many suppliers, so we have limited negotiating power"*.
 - Collaboration: 44% of respondents believe insufficient sector collaboration is a barrier to influencing suppliers; collaboration may address both fragmentation and influence concerns.
 - Readiness to act: 41% of respondents struggle to influence suppliers because they believe decarbonization is not a priority for them. *"Our suppliers are unwilling to disclose progress and are too powerful for us to influence"*.
 - Disintermediation: 39% of respondents struggle to influence upstream action because a share of their emissions originates in tier 2+ suppliers over which they have less control.
 - In addition, many respondents cited low return on invested time, lack of data infrastructure and long engagement periods as further delivery challenges. *"Engaging suppliers is high effort and low reward – we are much better off directly taking action ourselves. All the guidance is about getting the numbers better and not action"*.

- **Perceived or real cost of scope 3 decarbonization can limit action:** 61% of respondents consider cost of decarbonization to be a challenge for delivering a scope 3 science-based target, driven predominately (74%) by a concern that purchase of low carbon products and services will incur a significant green premium. In addition, some respondents are concerned that decarbonization will lead to increased CAPEX spend e.g., to support R&D, innovation, or re-design of products.
- **Data access challenges prevent value chain traceability and hence tracking of scope 3 impact:** 59% of respondents consider lack of reliable data to support progress tracking as a barrier to delivering a scope 3 science-based target, driven by poor data availability (lack of access to supplier specific emissions factors) and poor data quality (supplier emissions factors not reliable).
 - Without high quality primary data companies are concerned about their ability to track progress; for example, 58% of respondents believe average emissions factors do not allow them to recognize the impact of decarbonization actions taken upstream, and 57% of respondents believe the only way to decarbonize when using a spend based methodology is to reduce the size of procurement budgets.
- **Some consider company growth to be a challenging for meeting scope 3 targets:** 58% of respondents view company growth ambitions as a challenge for delivering on a scope 3 target, a factor which also limits confidence in target setting.
 - Some SBTi scope 3 methods partially decouple emissions from growth e.g., intensity, however, 57% of respondents utilize an absolute contract methodology.
 - Some respondents also indicated that this challenge may be exacerbated for fast growing companies – *“Smaller companies plan to take market share, so they don’t feel they are growing the pie, but are taking slices from other companies and doing it more efficiently”*.
- Lesser, but still material challenges for delivery of scope 3 targets include a limited influence on end users (60%), limited availability of decarbonization technologies (50%), low internal awareness of how to abate emissions (42%), organizational setup (39%) and lack of clarity on “what counts” as a valid reduction towards a science-based target (36%).
 - For companies unclear of “what counts” as a valid reduction, 88% are unsure whether FLAG interventions are suitable to deliver scope 3 reductions and 84% are unsure whether non-FLAG interventions are suitable. In addition, some respondents are unclear if changes to average emissions factors, or supplier switching are mechanisms considered suitable to deliver scope 3 reductions.

DISCUSSION

Scope 3 emissions represent a large and important component of most corporate science-based targets. The SBTi Scope 3 Stakeholder Engagement Survey revealed key challenges companies experience when baselining, setting, and delivering on scope 3 targets. An understanding of these barriers will inform and support an upcoming review of the SBTi scope 3 target-setting methodologies and criteria.

Although some of the identified challenges may not be directly addressable by the SBTi, this research has revealed a significant interdependency between science-based targets and the entire GHG accounting, measurement, and disclosure ecosystem as well as broader society. For example, without confidence in delivery roadmaps, companies are hesitant to set targets, however, building confidence is partially dependent on accurate and measurable value chain data, which today is challenging to obtain.

Addressing challenges identified in this survey will require action from many stakeholders across the climate ecosystem. Six high level categories of solution have been proposed to address the most material challenges identified in the survey. Some of these solutions (amongst others) will be explored during the SBTi scope 3 guidance review process, however, these solutions are also a call-to-action for the entire ecosystem – addressing structural challenges companies face when setting and delivering science-based targets is critical to accelerating and unlocking action.

Figure 8: Six high level solutions identified to address challenges identified in the survey



1. Barriers that could be addressed by improving data collection and supply chain traceability

- Baselining: Limited access to data.
- Delivery: Influencing upstream suppliers.
- Delivery: Tracking progress towards a target.

Access to sufficient high-quality emissions data is considered a barrier for both scope 3 baselining and target delivery. Primary measured emissions data is hard to obtain, in part because effective and widely used infrastructure for sharing it is not yet available. When primary measured emissions data is not available, it is necessary to turn instead to secondary sources such as activity or spend based average emissions factors.

Use of secondary data is common, representing 94% of respondents. While use of average emissions factors is essential to enable GHG baselining despite poor data availability, secondary data also creates challenges for companies, e.g., limiting the accuracy of baselines, obscuring decarbonization opportunities (e.g., by selecting suppliers based on carbon intensity) and restricting the ability to recognize the impact of decarbonization actions.

Improving access to high quality measured data and enabling value chain traceability cannot be achieved by one actor alone. A full ecosystem is needed to enable effective primary data measurement and transmission throughout the value chain. For example, technology platforms could help facilitate exchange of scope 3 data in a systemic way, collective action could encourage suppliers to share their measured emissions data (distinct from supplier upstream estimated emissions data) and regulators could accelerate requirements for emissions measurement and disclosure.

2. Barriers that could be addressed through enhancement of current accounting frameworks

- Baselining: Interpreting carbon accounting standards correctly.
- Baselining: Unclear requirements on which scope 3 categories are material.
- Baselining: Lack of baseline comparability amongst peers.
- Delivery: Tracking progress towards delivery.
- Delivery: Clarity on what counts as an emission reduction.

Accounting frameworks provide the guidelines and principles for developing GHG inventories, a critical first step in any corporate climate journey. Scope 3 accounting and disclosure has grown in response to

increasing adoption of voluntary standards (ISSB, GRI, TCFD, SBTi), and is now also starting to be considered under proposed mandatory regulations (e.g., US SEC, EU CSRD).

Most accounting frameworks are broadly applicable to a wide variety of organizations and contain a degree of flexibility in how they can be applied. Resultantly, organizations are sometimes required to make methodological decisions during development of their inventory. For example, selection of emissions factor methodologies, choice of emissions factor databases or determination of materiality. However, differing methodological choices are seen as a challenge for organizations largely due to a lack of comparability between baselines.

As interest continues to increase in scope 3 GHG reporting, it is likely that enhancements to existing accounting standards will be required. Such enhancements could include increased sector specific guidelines, greater standardization of methodological choices and decisions and development of supply chain traceability infrastructure to facilitate exchange of primary measured emissions data.

Accounting frameworks also underpin how companies can monitor target delivery; for example, a GHG inventory should decrease over time to reflect progress towards a target. Measuring decarbonization as a change in an inventory over time is known as attributional accounting, whereas measuring the impact of a specific action or project is known as consequential accounting.

SBTi's methodologies are based on an attributional model, whereby a target is defined as a change in a company's GHG inventory by a target year. However, reflecting decarbonization in an inventory is challenging when using secondary average data. While in the long-term improved traceability should be prioritized, in the near-term, some frameworks leveraging consequential accounting are emerging which may help recognize the impact of decarbonization actions.

3. Barriers that could be addressed through scope 3 target-setting guidance and methodologies

- Setting: A lack of target-setting methods tailored to individual company circumstances.
- Setting: The required scope 3 emissions coverage threshold.
- Setting: Unclear or ambiguous scope 3 target setting requirements.
- Delivery: Company growth.
- Delivery: Influencing the end user.
- Delivery: Clarity on "what counts" as an emissions reduction.

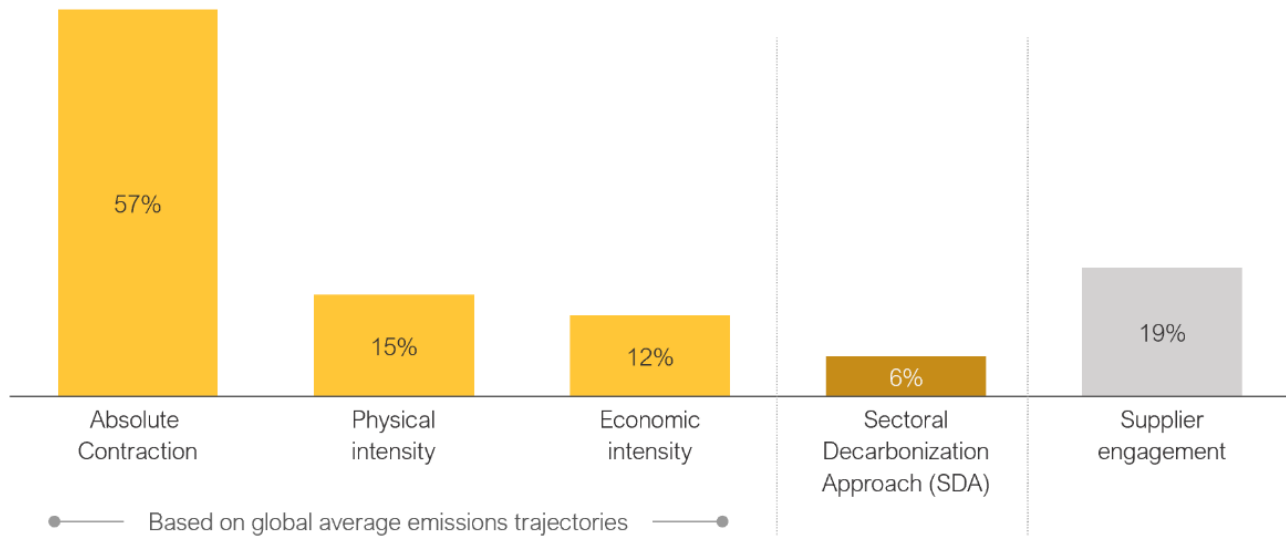
As part of the SBTi scope 3 guidance review process, existing target-setting methodologies, guidance and criteria will be assessed, to both ensure alignment with the latest climate science, as well as

consider implementation practicalities. Feedback from the SBTi stakeholder engagement survey on practical challenges companies face when setting targets is a critical input to this review process.

Scope 3 science-based targets can be developed using a range of methodologies (SBTi Corporate Manual V2.0, 2021). However, absolute targets are the most common, representing >57% of respondents, with many believing this method is the most credible and simplest to understand. In contrast only 6% of respondents use sectoral pathways to set their scope 3 targets.

Figure 9: Absolute contraction is the most common scope 3 target-setting method used by respondents

Methodologies used for scope 3 targets, % respondents, N=180



Source: SBTi Stakeholder Engagement Survey, September 2022

Some respondents highlighted that existing scope 3 target-setting methods are not tailored to their individual company circumstances, citing lack of sector specificity as a key driver. Sectoral emissions pathways (against which sectoral targets are aligned) reflect a sub-division of a global emissions trajectories based on abatement potential and costs across industries. As a result, some heavy emitting sectors with limited near-term abatement potential, e.g., aviation or cement may be modelled to decarbonize slower than other sectors e.g., light duty transport. Sectoral pathways are therefore helpful in target setting to reflect differences in decarbonization potential and costs across industries.

Greater clarity on how existing sectoral methods could be applied to scope 3 target setting, and continued expansion of SDA guidance to additional sectors could help address company challenges that scope 3 target-setting methods are not tailored to individual company circumstances. In addition,

as part of the SBTi scope 3 guidance review process, novel target-setting methods and approaches are also being considered, some of which may hope to address other concerns raised by respondents e.g., decoupling of company growth from emissions targets and reflecting differences in base year GHG intensity.

Beyond target-setting methodologies themselves, companies also cite other common challenges with scope 3 criteria. For example, many respondents highlighted that different scope 3 target boundaries for near vs. long-term targets are complex to operationalize (67% for near-term targets vs. 90% for long-term targets) (SBTi; Corporate Net-Zero Standard, 2021). The SBTi is exploring options to harmonize target boundaries across near- and long-term targets as part of the scope 3 guidance review process. Other clarifications and commonly asked questions related to implementation of the SBTi Criteria will also be addressed within this process.

Ambitious target setting must be followed by equally ambitious delivery. To date, limited guidance exists to support verification of progress towards a target. In addition, some companies remain unclear on what mechanisms are suitable to influence scope 3 emissions and “what counts” as a valid emissions reduction towards a science-based target. To address these challenges the SBTi is in the process of developing a Measurement, Reporting and Verification (MRV) [framework](#). This framework will be developed following a staged and iterative approach and will aim to provide additional clarity on target delivery and tracking.

4. Barriers that could be addressed through collective value chain action

- Baselineing: Limited access to data.
- Setting: Low confidence in ability to deliver a scope 3 science-based target.
- Delivery: Influencing upstream suppliers and end users.
- Delivery: Cost of decarbonization.
- Delivery: Limited availability of technology and awareness of abatement levers.

First movers are critical to enabling the transition. The SBTi recognizes the importance of first movers in its theory of change which is based on the diffusion of innovation concept; a critical mass of early target adopters can encourage others to follow. However, to realize the systemic transformation necessary to reach a net-zero outcome, first movers alone will not be sufficient - collective action is needed.

In many cases individual actors alone will struggle to realize the transformative change necessary within their value chain. For example, an organization representing a small fraction of a supplier’s revenue may have limited negotiating power to incentivize upstream decarbonization. However, through collective and collaborative action, organizations may be able to realize systemic change e.g., through establishing buyer groups and aligned industry ambition. Not only will collective action help

exert greater influence within supply chains, but collective investment in future technology solutions may also help accelerate decreases in green premiums and enable faster uptake of low carbon innovations.

5. Barriers that could be addressed via sustainable finance or regulation

- Setting: Limited understanding or motivation amongst company decision makers.
- Setting: A weak or unknown business case.
- Delivery: Cost of decarbonization.
- Delivery: Limited availability of technology.

Regulators and financiers play a critical role in unlocking scope 3 action. In the first instance increased regulatory focus on scope 3 disclosure is likely to continue building momentum and motivation for scope 3 baselining. In addition, emerging sustainability taxes and incentives, including border adjustment mechanisms are likely to help strengthen business cases for action and innovation.

Beyond regulation, financiers and investors also have a key role to play; creating incentives for corporates to decarbonize and supporting innovation in climate solutions through green financing to bring down green premiums (Breakthrough Energy, 2022). Investor expectations are also changing; some are demanding corporate action to secure their own scope 3 financed emissions targets, others are encouraging decarbonization in anticipation of long-term financial benefits of climate resiliency. For example, in a 2020 annual letter to CEOs, Larry Fink, CEO for BlackRock stated “Climate Risk is Investment Risk” (Larry Fink, 2020). In response to perceived investment risk, investors are increasingly looking at science-based targets to assess the maturity of corporate climate ambition (BlackRock Investment Stewardship, 2022).

6. Barriers that could be addressed through internal efforts

- All: Limited time and resources.
- Setting: Low confidence in ability to deliver a scope 3 science-based target.
- Setting: Limited understanding or motivation amongst company decision makers.
- Setting: A weak or unknown business case.
- Delivery: Limited internal awareness of how to abate emissions.
- Delivery: Organizational setup.

While some barriers are hard to address without collaboration across the ecosystem, others can be managed and overcome internally. A common barrier to baselining, target setting, and delivery is availability of time and resources. Availability of talent is an emerging issue across the sustainability

ecosystem; while the demand for green jobs is growing, supply is not keeping pace (LinkedIn; Global Green Skills Report, 2022). To address this challenge some companies are looking to upskill their existing workforce while others are investing in targeted sustainability talent attraction and retention programs.

To establish leadership commitment for target setting, confidence in delivery roadmaps is critical. In SBTi's experience, it is not uncommon for organizations to spend significant time and resource upfront in development of delivery roadmaps. However, while many companies have confidence in their ability to deliver by the date of target submission, a degree of uncertainty will always remain. Common sources of uncertainty in scope 3 delivery roadmaps include but are not limited to: uncertain timelines for scale up of technological innovations, low visibility or influence over supplier emissions, limited data accuracy, competing priorities, decarbonization cost and planned growth.

In addition, holistic financial business cases supporting a scope 3 commitment are increasingly common. Such business cases often rest on the concepts of cost resilience e.g., to regulatory taxation and scarce green resources, or revenue opportunity e.g., from shifting profit pools, green growth and indirect impacts realized through investors, customers, and employees.

CONCLUSION AND NEXT STEPS

Scope 3 climate commitments are critical to enabling the net-zero transformation. The SBTi's theory of change is based on an alignment of incentives across the value chain, to drive the necessary economy wide transformation required to reach net-zero. As scope 3 emissions reflect an organizations value chain wide impact, their inclusion in corporate science-based targets is critical to ensure alignment of value chain incentives.

Companies experience challenges with baselining, setting targets and delivering scope 3 decarbonization, however, increasingly these are being overcome. >1,800 leading organizations already have validated scope 3 science-based targets, with a further >2,000 committed to do so. In addition, hundreds of initiatives and standards are emerging to support companies with their corporate climate journey, breaking down barriers to action. Finally, increasing momentum and support from regulators is likely to continue driving ambitious corporate climate ambition in line with NDCs and global Paris Agreement objectives.

However, to address remaining challenges, this paper serves as a call to action for all stakeholders in the climate ecosystem. Reducing barriers to action will require collective action across standard setters (including the SBTi), NGOs, corporations, consultants, financiers, consumers, and regulators.

In response to the identification of these challenges, as well as the growing importance of scope 3 targets in corporate and regulatory narratives, the SBTi will begin a review process of existing scope 3 target-setting guidance, methodologies, and criteria. The objectives of this review will include:

- Clarify the role and importance of scope 3 targets in the delivery of 1.5°C pathways.
- Evaluate scope 3 target boundary conditions and materiality thresholds.
- Assess and refine existing scope 3 target-setting methodologies.
- Identify new target-setting methodologies.
- Consider accountability mechanisms for delivery of scope 3 targets.

The guidance review will take place throughout 2023 and will include a consultative process to engage NGOs, industry practitioners, corporates, and other interested stakeholders.

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