



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

SBTi Corporate Manual

TVT-INF-002 | Version 2.0

December 2021



Contents

About the Science Based Targets initiative	5
SBTi team structure	5
Why join the Science Based Targets initiative?	7
Who can join the Science Based Targets initiative?	7
Overview of the Science Based Target initiative process	8
Step 1: Commit to set a science-based target	9
How to commit	9
Small and medium-sized enterprises	9
Step 2: Develop a science-based target	11
Review the latest target-setting resources	11
SBTi criteria and recommendations	11
Set a science-based target: Key considerations for all emission scopes	12
Choose a base year	12
Choose a target year	12
Ensure the target boundary is aligned with the GHG inventory boundary	13
Determine how to treat subsidiaries	14
Exclude the use of offsets	14
Exclude avoided emissions	14
Determine how to treat optional scope 3 emissions	14
Sector-specific considerations	15
Selecting the most ambitious target	15
Set a science-based target: Scope 1 and 2 emissions	16
Set target boundaries	16
Account for scope 2 emissions	16
Using renewable energy to meet SBTs	16
Accounting for purchased heat and steam	16
Available scope 1 and 2 target-setting methods	17
Absolute Contraction Approach	18
Sectoral Decarbonization Approach (SDA)	18
Set a science-based target: scope 3 sources	20
Conduct a scope 3 inventory	22

Scope 3 data quality	22
Identify which scope 3 categories should be included in the target boundary	23
Available scope 3 target-setting methods	23
Absolute Contraction and SDA	24
Physical intensity reduction	24
Economic intensity contraction	24
Supplier or customer engagement targets	26
Determine whether to set a single target or multiple targets	27
Combining multiple target-setting approaches	30
Unsuitable targets	30
Benefits and drawbacks of different types of targets	30
Comparing absolute targets and intensity targets	30
Comparing physical intensity targets and economic intensity targets	31
Step 3: Submit your target for validation	36
Submit the target for validation	36
Target submission form	36
How company information is treated	36
The target validation service	36
3.1 SME validation option	38
3.2 Financial sector options	39
3.3 Corporate validation process	39
Process overview	39
Initial screening	40
Target validation team assignment	43
What is considered a conflict of interest?	44
Desk review	44
Appointed approver review	46
TVT and TWG discussion	46
Final approval	46
Communicating decisions and feedback	46
Step 4: Announce the target	46
Step 5: Disclose your progress	47



Decide where to disclose	47
Follow guiding reporting principles	48
Describe the target	48
Technical information on the SBT	48
Scope 3 targets	49
Qualitative and contextual information	49
Describe progress toward the target	50
Step 6: Target recalculation protocol	52
6.1 Updating and editing old targets	53
Mandatory recalculation	53
Submitting new targets	54
Glossary	55
Document history	57

About the Science Based Targets initiative

The Science Based Targets initiative (SBTi) is a global body enabling companies and financial institutions to set ambitious emissions reductions targets in line with the latest climate science. It is focused on accelerating corporate climate action in line with halving global emissions before 2030 and achieving 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 one of the We Mean Business Coalition commitments. The SBTi defines and promotes best practice in science-based target (SBT) setting, offers resources and guidance to reduce barriers to adoption, and independently assesses and approves organizations targets. www.sciencebasedtargets.org @sciencetargets

What is a science-based target?

Greenhouse gas (GHG) emissions reduction targets are considered “science-based” if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement - to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

The SBTi and its target validation process

The following section is intended for near-term target validations and further corporate manuals for net-zero and financial institution targets will take precedent for specific organizations.

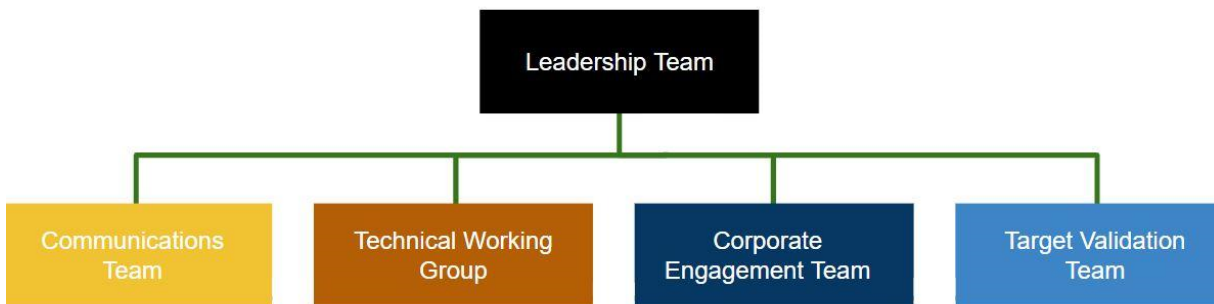
SBTi team structure

The initiative is a global team composed of employees from all founding organizations – CDP, the UN Global Compact, WWF and WRI. Figure 1 below illustrates the structure of the SBTi. Each team contributes to the overall mission of making SBT setting standard business practice.

- **Executive Leadership Team (ELT):** The highest management-level body in the SBTi. In the context of the target validation process, unique target-setting questions or situations are brought to the ELT for feedback. If the target validation team and technical working group are unable to reach consensus on a target validation decision, the target validation is escalated to one or more members of the ELT as the body with final authority for decision-making within the SBTi.
- **Corporate Engagement Team (CE):** A team composed of externally facing engagement managers who support organizations in various regions as they consider setting SBTs. The CE team works with companies before, during and after their commitments.

- **Target Validation Team (TVT):** A team of technical experts whose function is to conduct target validations. It consists of an SBTi administrative team that processes submissions, conducts the initial screenings of all target submissions and assigns a validation team for each submission. The validation team consists of a lead reviewer (LR) and an appointed approver (AA). The LR performs the desk review of the submission, prepares the deliverables (target validation report and certificate, if approved), organizes a feedback call if necessary, and acts as the point of contact between the company and the SBTi throughout the validation process. The AA acts as a peer reviewer on the completed desk review. For all target submissions, the LR and AA assigned are employed by two different partner organizations per the conflict-of-interest policy outlined in [section 3](#).
- **Technical Working Group (TWG):** A team that consists of technical experts involved in the development of sector-specific methodologies, tools and guidance. The TWG conducts technical foundation research on SBT methods and tracks the latest development in climate science. The team also assists where necessary with target validations.
- **Communications Team:** A team whose main function in the validation process is to coordinate the public announcement of targets. The team also manages the public target database.

Figure 1. The SBTi team structure



Why join the Science Based Targets initiative?

How business help prevent dangerous climate change

The Paris Agreement in 2015 saw nearly 200 of the world's governments commit to prevent dangerous climate change by limiting global warming to 1.5°C. This signaled an acceleration in the transition to a net-zero economy. Many companies are already demonstrating they have the skills, expertise and ingenuity to make this a reality - but need ambitious emissions reduction targets that ensure the action they take is transformational and aligned with current climate science.

The SBTi enables companies to demonstrate leadership on climate action by publicly committing to science-based GHG reduction targets. An increasing number of companies joining the initiative will create a critical mass that will drive SBT setting throughout the private sector. The overall aim of the initiative is for SBT setting to become standard business practice and for corporations to play a major role in ensuring global warming is kept to a 1.5°C increase.

Who can join the Science Based Targets initiative?

The SBTi promotes corporate climate action and encourages organizations from all sectors to demonstrate leadership by setting science-based emissions reduction targets. This includes financial institutions, joint ventures, cooperatives and state-owned enterprises. The SBTi is especially keen to welcome organizations in the highest-emitting sectors, who play a crucial role in ensuring the transition to a net-zero economy. The exception is oil and gas companies as their targets cannot be officially validated yet.

The SBTi does not currently assess targets for cities, local governments, public sector institutions (over 500 employees), educational institutions or non-profit organizations. However, we encourage these stakeholders to consider SBT setting methods when developing targets independently. Cities can register their interest in setting targets through the [Science Based Targets Network \(SBTN\)](#). Public sector institutions with under 500 employees can submit targets through the [small and medium-sized enterprises \(SME\) route](#).

Overview of the Science Based Target initiative process

Figure 2 outlines the different steps in the SBTi process, from initial commitment to announcing approved SBTs.¹

Figure 2. Steps in the SBTi process



¹ Please note that figure 2 does not apply to the target validation route specifically for SMEs. For more information, see the relevant information in the [SME section](#) of this document.

Step 1: Commit to set a science-based target

How to commit

Companies that wish to commit to set a SBT should register online and submit our [standard commitment letter](#). By signing the letter, companies commit to setting a science-based emission reduction target within 24 months. If the company already has an emissions reduction target, the letter confirms its interest in having its existing targets verified against a set of criteria developed by the SBTi or developing new targets that will align with these criteria. Companies are urged to aim for the highest level of ambition in their target setting. We encourage companies to commit to net-zero and automatically join the Business Ambition for 1.5°C and the UNFCCC Race to Zero. Oil and gas companies, airports and companies with >50% coal or at risk of non-parent approach are not able to join the Race to Zero at this point in time. The SBTi strongly encourages companies to commit before submitting targets to the initiative for validation. However, companies may choose to move straight to developing and submitting targets for validation.

The list of committed companies is updated on the SBTi website every week. Companies that have committed will receive guidance on how to communicate their commitment. The SBTi reserves the right to perform due diligence before accepting new commitments.

The SBTi encourages companies to start the target development process and submit targets for validation as early as possible. Companies that fail to have their SBTs validated and published within a 24-month period after commitment will be removed from the SBTi and its partner websites. Under special circumstances, the SBTi may grant companies additional time to publish their targets. Refer to the [Expired Commitments Protocol](#) for more information.

Small and medium-sized enterprises

In recognition of the important role SMEs must play in global climate action as well as the limited resources available to companies of this size, the SBTi has established a separate expedited route for these companies.

An SME, as defined by the SBTi, is a non-subsidiary, independent company or public sector institution that employs fewer than 500 employees. SMEs are not required to sign the standard commitment letter, they should use the [SME science-based target setting form](#) specifically designed and solely designated for SMEs.

This pathway enables SMEs to bypass the initial SBT commitment stages and the standard target validation process. SMEs can immediately set a SBT for their scope 1 and 2 emissions by choosing from one of two predefined target options. Unlike larger companies, the SBTi does not require SMEs to set targets for their scope 3 emissions. But, SMEs must commit to measure and reduce their scope 3 emissions.

The SBTi introduced this expedited option for SMEs because smaller companies often lack the resources and capabilities needed to set and monitor scope 3 targets. This simplified approach

for SMEs balances the need for them to take account of emissions across their value chains without imposing too great a burden.

Like larger companies using our standard target validation route, SMEs are required to complete a recent, comprehensive GHG emissions inventory following the [Greenhouse Gas Protocol Corporate Accounting and Reporting Standard](#) and [Scope 2 Guidance](#). SMEs are required to publicly report company-wide scope 1 and 2 GHG emissions inventory and progress against published targets annually.

In order to join the SBTi, SMEs must complete the following steps:

1. Complete the company information details in the [SME science-based target setting form](#)
 - a. Select one of the target options in the form.
 - b. Fill-out the emissions profile section.
 - c. Complete the contact details and submit the form.
2. Sign the Terms and Conditions that are sent to you after passing the due diligence, and pay the USD 1,000 fee.
3. Send your payment confirmation to targets@sciencebasedtargets.org

After submitting your [SME science-based target setting form](#) and paying the fee, your company will be recognized as having approved SBTs on the SBTi website and the We Mean Business website. Companies who are engaging in the UN Global Compact will also be recognized on their [website](#). Approved SMEs will be sent a communications welcome pack and will be able to use the SBTi logo on their website and in company communications.

Step 2: Develop a science-based target

Once a company has signed the commitment letter, it will have up to **24 months** to: (i) develop an SBT aligned with the SBTi criteria, (ii) submit the target to the SBTi for validation, and (iii) after approval, have the SBTi publish the targets publicly.

The targets must be in line with the [criteria](#) that the SBTi considers critical for qualifying a target as “science-based”. The SBTi has developed a suite of [tools and guidance](#) to help companies understand how to meet these criteria.

Review the latest target-setting resources

This section provides an overview of methods and steps to formulate a SBT, including key considerations for target setting for (i) all scopes, (ii) scope 1 and 2 emissions and (iii) scope 3 emissions. Before developing a target, companies are encouraged to review their scope 1, 2 and 3 GHG inventories and ensure they are aligned with the GHG Protocol and the SBTi GHG emissions inventory requirements (as set out in the [Target Validation Protocol](#)). For example, the SBTi criteria indicates that companies may exclude up to 5% of scope 1 and scope 2 emissions combined in the boundary of the inventory and target. Therefore, if a company has not yet finalized a complete scope 1 and 2 inventory covering all GHG emissions from all relevant sources within its organization's boundary, this will need to be completed ahead of submission, as it is required by the SBTi for target approval.

Companies developing targets should carefully consult relevant SBTi resources to ensure they have the latest information on recommendations and requirements. To stay up to date on our latest resources, events and other developments, companies are also encouraged to [sign up to our newsletter](#), and/or visit our website regularly. The SBTi also encourages companies to explore the [FAQ page](#) for answers to commonly asked questions.

SBTi criteria and recommendations

Targets must meet all the SBTi criteria to be approved. The criteria and recommendations were developed using the GHG accounting and mitigation expertise of the SBTi's partner organizations, with support from the SBTi's Technical Advisory Group. The SBTi criteria are updated on an annual basis, generally with a grace period in which the previous criteria may be used. Organizations may choose to submit targets using SBTi criteria V4.2 or SBTi criteria V5.0 up until 14 July 2022. From 15 July 2022, SBTi criteria V5.0 is mandatory and SBTi criteria V4.2 is no longer eligible. Any substantive changes to criteria will be accompanied by a period for companies to digest changes before the updated criteria become mandatory for target-setting purposes.

Set a science-based target: Key considerations for all emission scopes

Choose a base year

The meaningful and consistent tracking of emissions performance over the target period requires companies to establish a base year.

Three considerations are important for selecting a base year. First, verifiable data on scope 1, 2, and 3 emissions should exist for the base year. It is recommended that companies choose the most recent year for which data are available as the base year.

Second, the base year should be representative of a company's typical GHG profile. Companies can assess representativeness by comparing inventories and business activity levels over time. If it is difficult to identify a single year that is representative, companies should instead average GHG data over multiple consecutive years to form a more representative base period that smooths out unusual fluctuations in emissions. For example, atypical weather conditions might distort the emissions in a given year (say, 2017) for an agricultural producer. In response, the company could average emissions over 2016, 2017 and 2018. Its target would then be phrased as: "Company X commits to reduce absolute scope 1 and 2 GHG emissions 40% by 2025 from a 2016-2018 base period."

Third, the base year should be chosen such that the target has sufficient forward-looking ambition. While companies deserve credit for past progress, the initiative's objective is to promote action that has not yet been accomplished and to push companies that have already achieved progress to go beyond current ambition. The SBTi uses the year the target is submitted to the initiative (or the most recent completed GHG inventory) to assess forward-looking ambition.

Finally, various factors may necessitate recalculations of the base year inventory (and of the SBT itself) to ensure continued relevance and alignment to GHG accounting best practices. See the section entitled "[Describe progress toward the target](#)" for further guidance on this topic.

Choose a target year

Companies must set a target that covers a minimum of five years and a maximum of 10 years from the date the target is submitted for assessment. Near-term targets can be instrumental for identifying inefficiencies and opportunities for emission reductions.

It is also recommended to set long-term targets beyond this interval and set near-term milestones at five-year intervals. Setting [net-zero SBTs](#) (i.e. with target years of 2040 or 2050) encourages planning to manage the long-term risks and opportunities connected with climate change. These may include the creation of new services and markets and the need for large capital investments that offer GHG benefits. All targets must be consistent with the level of decarbonization required to keep global temperature increase to 1.5°C compared to pre-industrial temperatures.

If more than one target is set, companies should use the same base year for all targets within the near-term timeframe.² A common target period will simplify data tracking and communication around the target. However, if value chain data is difficult to obtain, it is acceptable if scope 1 and 2 targets use a different base year from scope 3 targets.

Box 1: Framing and communicating near- and long-term targets

JLL commits to reach net-zero greenhouse emissions across the value chain by 2040. JLL commits to reduce absolute scope 1, 2 and 3 GHG emissions 51% by 2030 from a 2018 base year. JLL commits to reduce absolute scope 1, 2, and 3 GHG emissions 95% by 2040 from a 2018 base year.

Ensure the target boundary is aligned with the GHG inventory boundary

The GHG Protocol defines three different approaches for determining the organizational boundaries of corporate GHG inventories:

- **Operational control:** A company accounts for 100% of the emissions from operations at which it has the full authority to introduce and implement operating policies. It does not account for any of the emissions from operations in which it owns an interest but does not have operational control.
- **Financial control:** A company accounts for 100% of the emissions from operations at which it can direct financial and operating activities with a view to gaining economic benefits from those activities.
- **Equity share:** A company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation.

Companies must align the boundaries of its SBT with those of its GHG inventory. To do so, it must select a single approach based on a range of company-specific considerations and apply that approach consistently across its corporate structure, for both the corporate inventory and the SBT. The [GHG Protocol Corporate Standard](#) provides further guidance.

Companies must also ensure that the SBT and corporate inventory cover all relevant emissions of the seven different GHGs or classes of GHGs covered by the UNFCCC/Kyoto Protocol. These are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

² This best practice is most applicable to emission reduction targets, i.e., absolute and intensity targets. Companies' renewable electricity, supplier engagement and customer engagement targets may and sometimes must have different target years than emission reduction targets.

Determine how to treat subsidiaries

Complex business relationships (subsidiaries, joint ventures, etc.) can complicate how the GHG inventory and thus the target boundary are drawn. Parent companies must set SBTs for subsidiaries in accordance with the selected organizational boundary approach. For more information, please consult page 19 of the [GHG Protocol Corporate Standard](#). When required by the organizational boundary approach, parent companies must include emissions from subsidiary operations in their GHG inventory. The SBTi does allow subsidiaries to submit targets. However, regardless of whether the subsidiary has approved SBTs, parent companies must include subsidiaries in their target boundary as required by the selected organizational boundary approach.

Exclude the use of offsets

Offsets are different than GHG reductions as they are used to compensate for GHG emissions elsewhere. They are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence of the mitigation project generating the offsets.

Offsets shall not be counted as reductions toward meeting a near-term SBT. Instead, companies must account for reductions resulting from direct action within their operations or value chains. Offsets may be useful, however, as an option for companies wishing to finance additional emission reductions beyond the SBT.

Exclude avoided emissions

A company's product avoids emissions if it has lower life cycle GHG emissions relative to some other company's product that provides an equivalent function. The avoided emissions occur outside of the product's life cycle inventory and therefore also outside of the company's scope 1, 2 and 3 inventory. For example, the company might manufacture appliances that are more energy efficient than comparable models available on the marketplace. In this case, the product avoids emissions during its use phase, but this benefit is not captured within its life cycle inventory.

Different methods are used to calculate a company's GHG inventory and avoided emissions, so avoided emissions must be reported separately from scope 1, 2 and 3 emissions, and must not be counted toward SBTs, including any scope 3 target.³

Determine how to treat optional scope 3 emissions

The SBTi requires that companies account for all relevant scope 3 emissions categories in their inventory, as per the GHG Value Chain Protocol. Within each relevant category for the company, the minimum boundary of emissions must be accounted for. Companies may include emissions that are beyond the minimum boundary within a given category. However, these

³ See <https://www.wri.org/publication/estimating-and-reporting-comparative-emissions-impacts-products> for a paper on avoided emissions.

additional emissions will not count towards the emissions coverage for scope 3 targets. As per the SBTi criteria, two thirds of scope 3 emissions must be covered by a target(s).

For example, it is common for some companies to address indirect use-phase emissions, especially if they are significant. Indirect use phase emissions are not within the “minimum boundary” for category 11 (use of sold products) and are listed as “optional”. They are generated by products that only consume energy indirectly during use over their expected lifetime. Examples of such emissions include the washing and dyeing of apparel and the cooking and refrigeration of food products.⁴

If companies have significant optional emissions and have levers to address them, they are encouraged to estimate these emissions and set an optional target on these emissions. However, optional scope 3 emissions will not be counted towards the two thirds scope 3 target boundary. Hence, the reduction of optional emissions will not be counted as progress towards targets on mandatory scope 3 emissions, i.e., emissions within the “minimum boundary.”

Sector-specific considerations

Companies must also align SBTs with the requirements established through sector development work approved by the SBTi and are encouraged to consider additional recommendations. See the [Sector Development](#) section of the SBTi website and in the [Target Validation Protocol](#) for information on sector-specific resources.

Companies with land-related emissions related to bioenergy must follow the specific GHG accounting and reporting specifications for these emissions as set out in the [SBTi criteria](#). Emissions and removals from other land intensive sectors shall be included in a separate Forest, Land and Agriculture (FLAG) SBT and shall be addressed in accordance with SBTi FLAG criteria (see [SBTi Forest, Land and Agriculture Project](#)).

Selecting the most ambitious target

In some cases, variation will exist in the minimum target ambition output by different methods for a given company. This is due to the differences in target formulation, as well as variation among the acceptable reduction pathways themselves; for example, different scenarios in the 1.5°C scenario envelope determined by the SBTi vary in linear reduction rate (2020-2035) from 4.2%-6%. Additionally, the minimum ambition required for a sector by the SDA may be more or less ambitious than the absolute contraction rate for a 1.5°C target.

To help ensure adherence to the carbon budget, companies should use the most ambitious decarbonization scenarios and methods that lead to the earliest reductions and the least cumulative emissions. A company should screen several of the methods and choose the method and target that drives the most ambitious emission reductions to demonstrate sector leadership. Method selection may also be influenced by practical considerations, such as the availability of input data for the base year and target year.

⁴ See page 38 of the [Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#) for more information.

Set a science-based target: Scope 1 and 2 emissions

Set target boundaries

SBTs must cover at least 95% of company-wide scope 1 and 2 emissions.

Account for scope 2 emissions

Setting and tracking performance against scope 2 targets entails some unique considerations laid out in the sections below.

Using renewable energy to meet SBTs

The [GHG Protocol Scope 2 Guidance](#) (WRI & WBCSD, 2015) defines two approaches for calculating the scope 2 emissions from purchases of renewable energy and other forms of energy:

- The “location-based” approach is designed to reflect the average emissions intensity of grids on which energy consumption occurs and mostly uses grid-average emission factors.
- In contrast, the “market-based” approach is intended to help companies reflect the emissions impacts of differentiated electricity products that they have purposefully chosen (e.g., supplier-specific emissions rates and power purchasing agreements).

For the purposes of setting SBTs, companies shall choose the results of only one approach for base year emissions reporting and tracking performance. Also, if a company chooses to use the market-based approach, it shall assess all contractual instruments for conformance with the Scope 2 Quality Criteria.⁵

As an alternative to setting percentage-reduction targets on scope 2 emissions, companies may instead set targets on the procurement of renewable electricity. Such procurement targets are acceptable if they are in line with procuring 80% of electricity from renewable sources by 2025 and 100% by 2030. Companies that already source electricity at or above these thresholds shall maintain or increase their share of renewable electricity.

Accounting for purchased heat and steam

The emissions from purchased heat and steam fall under scope 2 in a corporate inventory. However, for the purposes of setting an SBT using the SDA method, companies should model heat- and steam-related emissions as if they were part of their direct (i.e., scope 1) emissions. This is because International Energy Agency’s Energy Technology Perspectives (IEA ETP) pathways underlying the SDA methods do not take purchased heat and steam into account under scope 2 emissions.

⁵ These criteria are explained in Chapter 7 of the [GHG Protocol Scope 2 Guidance](#).

Available scope 1 and 2 target-setting methods

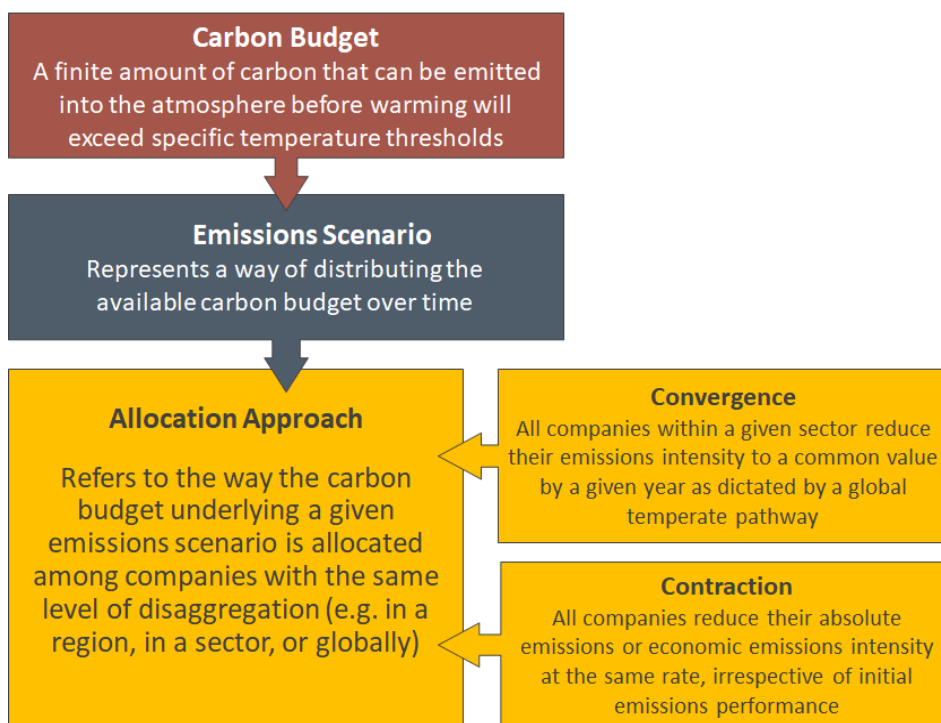
Currently, there are two main publicly available SBT-setting methods for scope 1 and 2 emissions: the Absolute Contraction Approach and the Sectoral Decarbonization Approach (SDA).⁶ This section provides an overview of these two available methods. Refer to the [Foundations of Science-based Target Setting](#) paper for an in-depth, technical discussion of these topics. A SBT setting tool is available for users to model targets using these two methods. This section also describes data inputs and outputs for each method. The methods are sensitive to the inputs used and errors can propagate throughout the methods, so company data should be as accurate as possible.

In general, an SBT method comprises three components:

1. A carbon budget.
2. An emissions scenario.
3. An allocation approach (convergence or contraction).

Methods can vary in terms of each of these components. Figure 3 further describes the three main elements of an SBT method.

Figure 3. Main Elements of Methods for Setting SBTs



⁶ Beyond currently available methods, it is expected that new scenarios and methods will be developed for a range of specific sectors. Information on this is posted to the SBTi's website as the methods are made publicly available and/or validated by the initiative.

Absolute Contraction Approach

Absolute Contraction is a method for setting absolute targets that uses contraction of absolute emissions. Through this approach, all companies reduce absolute emissions at the same rate, irrespective of initial emissions performance. Consequently, an absolute emissions reduction target is defined in terms of an overall reduction in the amount of GHGs emitted to the atmosphere in the target year, relative to the base year (i.e. reduce annual GHG emissions 35% by 2025, from 2018 levels).

The minimum reduction required for targets in line with 1.5°C scenarios is 4.2% in annual linear terms.

This method is a simple, straightforward approach to set and track progress toward targets that is applicable to most sectors. Table 1 summarizes the inputs and outputs of the method.

Table 1. Characteristics of the Absolute Contraction Approach

Method	Company Input	Method Output
Absolute emissions contraction	<ul style="list-style-type: none"> • Base year • Target year • Base year emissions, disaggregated by scope 	Overall reduction in the amount of absolute GHGs emitted to the atmosphere by the target year, relative to the base year

Box 2: Examples of absolute targets

CVS commits to reduce absolute scope 1 and 2 GHG emissions 47% by 2030 from a 2019 base year. CVS also commits to reduce absolute scope 3 GHG emissions from purchased goods and services 47% by 2030 from a 2019 base year.

Sectoral Decarbonization Approach (SDA)

The SDA is a method for setting physical intensity targets that uses convergence of emissions intensity. An intensity target is defined by a reduction in emissions relative to a specific business metric, such as production output of the company (i.e. tonnes CO₂e per tonne product produced). The SDA assumes global convergence of key sectors' emissions intensity by 2050. For example, the emissions intensity of steel production in China, the U.S., and Brazil is assumed to reach the same level by 2050, regardless of its current diversity.⁷ Regional pathways have not been incorporated into this method.

The SDA uses the B2DS scenario from the [International Energy Agency \(IEA\) report Energy Technology Perspectives \(ETP\) 2017](#), which comprises emissions and activity projections used

⁷ Each sectoral budget is maintained, to the extent the sum of sectoral activity does not go beyond that projected for the scenario (for homogeneous sectors) and that no new businesses are created.

to compute sectoral pathways aligned with limiting warming to well-below 2°C (IEA, 2017). 1.5°C-aligned sector pathways are available or in development for energy supply sectors, transport sectors, industry sectors including cement and steel, the buildings sector and sectors with significant FLAG emissions, as described in Pathways to Net-Zero. The SBTi's 1.5°C pathway for the power generation sector is based on an envelope of IPCC scenarios where the Low Energy Demand scenario (LED), referred to as P1 in IPCC SR15, is used as an upper limit.

Currently, the SDA method provides sector-specific pathways for the following homogenous and energy-intensive sectors aligned with well-below 2°C or 1.5°C pathways. Starting on July 15th 2022, however, only 1.5°C pathways will be eligible.⁸

Available in the SBT Setting Tool:

- Power Generation
- Iron & Steel
- Aluminum
- Cement
- Pulp & Paper
- Services/Commercial Buildings

Available in the [SDA Transport Tool](#):

- Passenger and Freight Road Transport
- Road Vehicle Manufacturers
- Aviation

The minimum target ambition modelled by both tools, expressed in intensity terms, varies by company base year emissions intensity, projected activity growth and sectoral budgets. Companies can use the relevant SDA pathways to calculate an intensity target in the selected target year. In addition to a reduction in emissions intensity of the company (i.e. tonnes CO₂e per MWh), the tools also provide absolute reduction targets as an output, as outlined in table 2.⁹ The SDA has limited applicability to other scope 3 categories (see box 5).

Table 2. Characteristics of the Sectoral Decarbonization Approach

⁸ The SDA sectors are drawn from the IEA. An appendix in the SDA user guidance maps the IEA sectors against common industrial classification systems: <http://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>.

⁹ A previous target setting tool specific to SDA calculated SBTs for a general "Other Industry" category that covers sectors other than the ones listed above, including construction industry and manufacturing sectors (e.g. food and beverage, electronics, machinery). The "Other Industry" pathway has been disabled in the new Science-Based Target Setting Tool. Companies in these sectors should use the absolute emissions contraction approach to set targets.

Method	Company Input	Method Output
SDA	<ul style="list-style-type: none"> • Base year • Target year • Base year emissions, disaggregated by scope • Activity level in the base year (e.g. building floor area, distance travelled, etc.) • Projected change in activity by target year 	A reduction in emissions relative to a specific production output of the company (i.e. tonnes CO ₂ e per MWh) and its translation to absolute emissions reductions

Box 3: Physical intensity targets set using the SDA

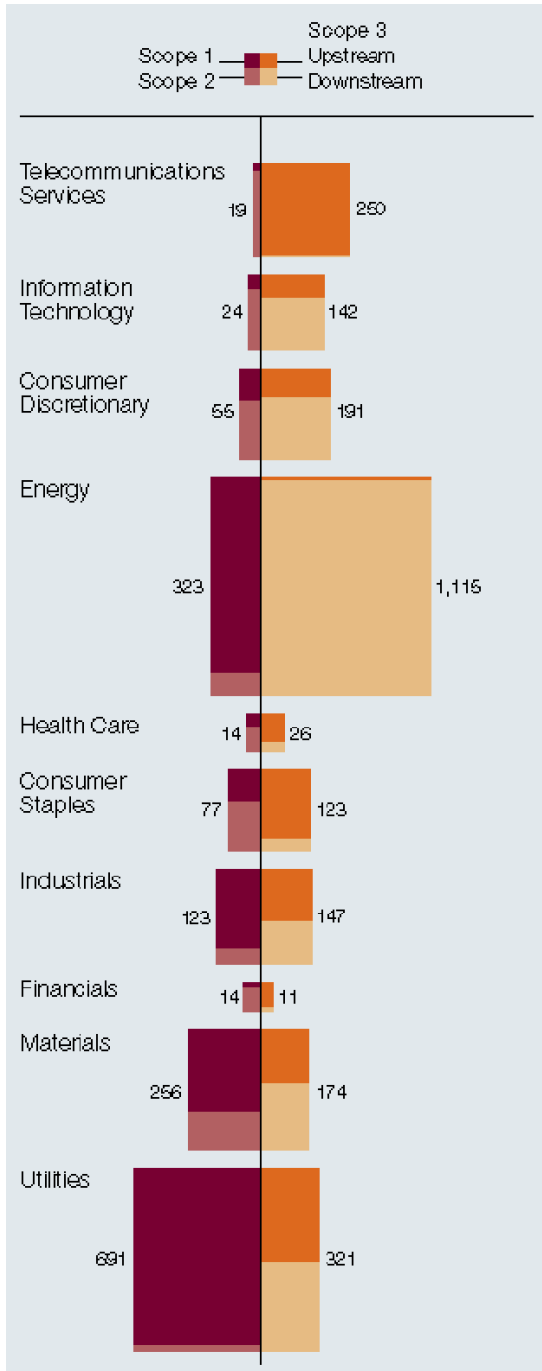
Ignitis Group commits to reduce scope 1 GHG emissions from electricity and heat generation 94% per MWh by 2030 from a 2020 base year. Ignitis Group also commits to reduce scope 1 and 3 GHG emissions from all sold electricity and heat 90% per MWh within the same timeframe.* Ignitis Group commits to reduce absolute scope 1 and 2 GHG emissions from all other sources 42% and reduce absolute scope 3 GHG emissions from use of sold products 25% within the same timeframe. *The target boundary includes biogenic emissions and removals from bioenergy feedstocks.

Set a science-based target: scope 3 sources

When companies set targets, they initially focus on scope 1 and 2 emissions because they are generally more able to influence these emissions. However, a company's scope 3 emissions are often much greater than its scope 1 and 2 emissions (figure 4), ambitious scope 3 targets can play an integral part in a company's GHG reduction strategy, allowing it to demonstrate performance and leadership, manage supply chain risks and opportunities and address the needs of stakeholders. Scope 3 targets also help companies to better understand whether current business models are compatible with a low-carbon future.

Scope 3 emissions are important and are often the most challenging to address. Key steps in setting scope 3 targets as part of an SBT strategy include constructing a scope 3 inventory to assess whether an ambitious scope 3 target should be set and, if so, which scope 3 emissions categories should be targeted. Subsequent steps include identifying the appropriate type(s) of target and level of ambition for these categories.

Figure 4. The relative magnitude of scope 1, 2 and 3 emissions by sector



Notes: Graph based on CDP data for S&P 500 firms.

Source: CDP 2013.

Conduct a scope 3 inventory

Companies must develop a complete scope 3 inventory, which is critical for identifying emissions hotspots, reduction opportunities and areas of risk up and down the value chain. The [GHG Protocol Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#) (WRI & WBCSD, 2011), together with the [Scope 3 Calculation Guidance](#), provide detailed guidance on how to complete a scope 3 inventory. The [Scope 3 Standard](#) defines 15 distinct categories of upstream and downstream emissions sources and requires companies to include all relevant categories in an inventory, based on such criteria as the magnitude of emissions or the level of influence exerted over the categories. See chapter 7 of the Scope 3 Standard for further details.

A useful approach to calculating scope 3 emissions is to first calculate a high-level screening inventory. Such an inventory can be used to directly set a target or to identify high-impact categories for which more accurate data are needed. Over time, companies should strive to develop complete inventories and improve data quality for high-impact categories (i.e. collect primary data) to better track progress against targets.

Box 4 describes the Scope 3 Evaluator, a tool useful in constructing screening inventories.

Box 4: The Scope 3 Evaluator Tool

The GHG Protocol worked with Quantis, a consultancy, to develop [a free scope 3 screening tool](#). This tool provides users with a simple interface to make a first, rough approximation of their full scope 3 inventory, regardless of their organization type and size. The tool leads users through a series of questions about their organizational structure and their activities, such as the purchase of goods and services, use of fuels, transportation of materials, and more.

Linking these inputs to a combination of economic input-output and process life cycle inventory data, the tool provides the user with a scope 3 inventory which can be used as an initial basis for identifying reduction areas, public reporting, and informing future efforts to produce a more accurate emissions inventory. Companies should work to collect primary data for categories shown to be a significant percent of their total scope 3 inventory.

Scope 3 data quality

Companies are likely to face challenges in collecting data and ensuring data quality for scope 3 sources because these sources are not under the reporting company's ownership or control. These challenges include:

- Reliance on value chain partners to provide data (e.g., for calculating the emissions from purchased goods and services)
- Lesser degree of influence over data collection and management practices

- Lesser degree of knowledge about data types, sources and quality
- Broader need for secondary data (i.e. data not specific to a company's value chain)
- Broader need for assumptions and modeling (e.g. for calculating the emissions from the use of sold products)

In general, companies should select data that are the most complete, reliable and representative in terms of technology, time and geography. Companies should collect high-quality ("primary") data from suppliers and other value chain partners for scope 3 activities deemed most relevant and targeted for GHG reductions. Companies' own marketing and sales departments may also be able to provide primary data on product use phase and end-of-life activities. Secondary data are acceptable but do limit a company's ability to track performance. Secondary data are therefore better suited for scope 3 categories that are not significant. Chapter 7 of the [Scope 3 Standard](#) provides further guidance on data quality issues.

If scope 3 emissions compose over 40% of total scope 1, 2 and 3 emissions, companies must develop ambitious scope 3 targets that collectively cover at least two-thirds of scope 3 emissions. For more information on how the SBTi defines ambition for scope 3 targets, consult the [SBTi criteria](#).

Identify which scope 3 categories should be included in the target boundary

Using a scope 3 inventory, companies can identify which categories should be included in the boundary of a scope 3 target(s) to meet the two-thirds threshold. Across sectors, category 1 (purchased goods and services) and category 11 (use of sold products) account for the majority of scope 3 emissions (CDP 2016). These categories will therefore be integral to many companies' targets. However, the relative importance of different scope 3 categories will vary by sector. Scope 3 categories likely to be important (in terms of emissions magnitude) for companies in specific sectors include:

- Automotive: Use of sold products.
- Chemicals: End of life treatment of sold products.
- Consumer Packaged Goods: Purchased goods and services.
- Electronics: Use of sold products.
- Food Processing: Purchased goods and services.
- Gas Distribution and Retail: Use of sold products.
- Logistics: Upstream transportation and distribution.

Available scope 3 target-setting methods

Scope 3 targets can be framed as absolute targets, emission intensity targets, or supplier or customer engagement targets, as described in the SBTi Criteria and Target Validation Protocol. This section provides an overview of options available for companies to formulate scope 3 targets.

Absolute Contraction and SDA

Companies can use the Absolute Contraction Approach and SDA to set targets on one or more of their scope 3 categories. The mechanics of these two methods are described in detail in the section entitled “[Available scope 1 and 2 target-setting methods](#)”. The use of the SDA may be limited for setting scope 3 targets, as described in box 5.

Considering the challenging nature of reducing scope 3 emissions, the minimum ambition for scope 3 targets set using these two approaches is a well-below 2°C (minimum 2.5% annual linear reduction under Absolute Contraction and well-below 2°C alignment option for SDA pathways). While well-below 2°C is the minimum level of ambition for scope 3 targets, companies are encouraged to pursue greater efforts toward a 1.5°C trajectory (minimum 4.2% annual linear reduction in absolute terms).

Box 5: Applicability of the SDA in setting scope 3 targets

Companies should be aware of two limitations in using the SDA to set absolute or emissions intensity scope 3 targets. Note that the content in this box does not apply to the SDA transport method, which is specifically applicable to several scope 3 categories.

One limitation is that the SDA can only be used for scope 3 targets when the GHG emissions of tier 1 suppliers are significant, relative to those of suppliers further removed from the company, and when scope 1 and 2 data can be obtained from the tier 1 suppliers. In practice, this means the SDA is most appropriate for buildings (leased assets and franchises) and upstream or downstream transportation and distribution.

The second limitation is that the SDA can limit options for tracking reductions in certain scope 3 categories, depending on how comprehensive a company’s overall scope 3 target is. For example, a construction company could set an intensity target for purchased steel using the iron and steel SDA pathway. This pathway does not support material switching to less GHG-intensive steel substitutes, so the company could only meet this target by reducing the GHG-intensity of purchased steel. This problem can be circumvented by setting a target (or targets) for all purchased goods and services.

Physical intensity reduction

Companies can also drive physical intensity reduction to cap absolute emissions at a base year level and achieve a physical intensity reduction at a minimum 7% year on year reduction rate. For example, a company could set a target to reduce scope 3 emissions at least 52% per pair of shoes by 2030 from a 2020 base year.

Economic intensity contraction

GHG Emissions per Value Added ([GEVA](#)) is a method for setting economic intensity targets using the contraction of economic intensity. Targets set using the GEVA method are formulated

by an intensity reduction of tCO₂e/\$ value added.¹⁰ Under the GEVA method, companies are required to reduce their GEVA by 7% per year (compounded). The 7% year-on-year reduction rate is based on an absolute emissions reduction of about 75% by 2050 from 2010 levels. Based on recent economic projections and estimates of historic emissions, the 7% rate is broadly compatible with high-confidence IPCC (RCP2.6) pathways, and its ambition is intermediate between the IEA 2DS and B2DS pathways under idealized conditions that are expounded below (ETP, 2017; SBTi, 2019).

The 7% year on year reduction rate must be applied on the companies' value added in the base year, which can be calculated using one of the formulas below:

- Value added = sales revenue - the cost of goods and services purchased from external suppliers
- Value added = gross profit (in U.S. accounting, often available in the annual financial statement)
- Value added = operating profit = earnings before interest and depreciation (EBITDA) + all personnel costs¹¹

Unlike the Absolute Contraction and SDA methods, GEVA only maintains a global emissions budget to the extent that the growth in value added of individual companies is equal to or smaller than the underlying economic projection. The differentiated growth of companies and sectors is not balanced by GEVA (and other economic intensity target-setting methods); thus, the currently accepted GEVA value depends on idealized conditions where all companies are growing at the same rate, equal to that of GDP, and GDP growth is precisely known. For these reasons, and due to the volatility of economic metrics, economic intensity target-setting methods are considered less robust than absolute and physical intensity methods. GEVA is therefore only applicable for scope 3 target-setting. See table 3 for a summary of the method.

¹⁰ Please note that value added is the only economic metric allowed for the application of GEVA.

¹¹ Personnel costs should include payment to management and board members (Randers 2012).

Table 3. Characteristics of the GEVA approach

Method	Company Input	Method Output
GEVA	<ul style="list-style-type: none"> • Base year • Target year • Base year emissions, disaggregated by scope • Value added in the base year • Projected change in value added by target year 	A reduction in emissions relative to financial performance of the company (i.e. tonne CO2e per value added).

Box 6: Economic intensity target set using GEVA

Apotea commits to reduce scope 3 GHG emissions from purchased goods and services and use of sold products 35.3% per SEK value added by 2025 from a 2019 base year.

Supplier or customer engagement targets

Supplier or customer engagement targets may be valuable if a company has yet to identify levers for more specific reduction opportunities amongst its value chain partners and/or if it has mostly indirect spend and therefore does not spend enough on individual suppliers to support collaborative reduction efforts. Supplier engagement targets may help to drive reduction behaviors that benefit other customers of the same supplier.

Engagement targets may be set around any relevant upstream or downstream scope 3 category where engagement efforts could lead to reduction in emissions. Companies can identify which suppliers and customers to include under the target based on spend and/or emissions impact. Engagement targets may alternately focus on “critical suppliers” or “strategic suppliers” that the company has already identified based on a variety of factors, such as operational risk. Spend data and critical supplier lists are advantageous when they can reliably serve as a proxy for leverage over suppliers. However, the biggest suppliers by spend are not always the biggest GHG emitters, so companies should ensure that, together with any additional scope 3 targets, the engagement target covers at least two-thirds of total scope 3 emissions.

Box 7: Supplier engagement target

Fisher & Paykel Healthcare Corporation Limited also commits that 87% of suppliers by spend covering purchased goods and services and the use of sold products will have science-based targets by FY2024.

Various other considerations are important when setting engagement targets. Importantly, engagement targets should result in timely emissions reductions at suppliers and customers. To this end, targets shall be fulfilled within a maximum of five years from the date on which the target is submitted to the initiative for validation. Also, suppliers and customers must set SBTs for their scope 1 and 2 emissions, at a minimum, where emissions data tend to be more available. Over time, scope 3 targets should also be set if suppliers' scope 3 emissions are 40% of total GHG emissions and as data become more available. Suppliers should also report progress on an annual basis.

Further information and guidance about engagement targets from the SBTi will be released soon.

Determine whether to set a single target or multiple targets

Companies can choose to set multiple, category-specific targets or a single target covering all relevant scope 3 categories. They may also choose to set a single target covering total scope 1, 2, and 3 emissions. Each type of target boundary has advantages and disadvantages (see table 4).

Table 4. Advantages and disadvantages of different target boundaries covering scope 3 emissions

Target Boundary	Target Examples	Advantages	Disadvantages
A single target for total scope 1, 2 and 3 emissions	Latin American wine producer Viña Concha y Toro commits to reduce absolute scope 1, 2 and 3 GHG emissions 55% by 2030.	<ul style="list-style-type: none"> • Ensures a more comprehensive management of emissions across the entire value chain. • Simple to communicate to stakeholders. • Does not require base year recalculation for shifting activities between scopes (e.g. outsourcing). 	<ul style="list-style-type: none"> • May provide less transparency for each scope 3 category. • Requires the same base year for the different scopes, which may be difficult if scope 1 and 2 base years have already been established.
A single target for total scope 3 emissions	Siemens AG also commits to reduce absolute scope 3 GHG emissions 15% by 2030 from a 2019 base year.	<ul style="list-style-type: none"> • Ensures more comprehensive GHG management and greater flexibility on how to achieve GHG reductions across all scope 3 categories (compared to separate targets for selected scope 3 categories). • Relatively simple to communicate to stakeholders. 	<ul style="list-style-type: none"> • May provide less transparency for each scope 3 category. • May require base year recalculation for shifting activities between scopes (e.g., outsourcing).
Separate targets for individual scope 3 categories	Best Buy also commits to reduce absolute scope 3 GHG emissions from use of sold products 20% by	<ul style="list-style-type: none"> • Allows customization of targets for different scope 3 categories based on different circumstances. • Provides more transparency for each scope 3 category. 	<ul style="list-style-type: none"> • More complicated to communicate to stakeholders. • May require base year recalculation for outsourcing or insourcing.

Partner organizations



WORLD
RESOURCES
INSTITUTE



	<p>2030 from a 2017 base year.</p> <p>Eneco commits to reduce absolute scope 3 emissions from use of sold products 15% by 2025 from a 2015 base year.</p>	<ul style="list-style-type: none"> • Provides additional metrics to track progress. • Does not require base year recalculations for adding additional scope 3 categories to the inventory. • Easier to track performance of specific activities. 	<ul style="list-style-type: none"> • May allow increases in absolute emissions and/or emissions intensity from other categories, unless those categories also have their own targets.
--	---	---	--

Combining multiple target-setting approaches

Companies may also use various target setting approaches and aggregate the modelled target results into one single target, expressed in a single unit. For instance, a company may wish to set one single scope 3 target covering multiple categories for the ease of communication. The company may use the SDA for scope 3 categories where sector pathways are available. For instance, it may use the SDA transport tool for category 4 (upstream transportation and distribution). For the rest of the categories, the company may use the Absolute Contraction Approach.

To combine the results into one single target, the company should use the absolute emissions reduction output in the SDA tool. The company should sum up the target year emissions in category 4 as an output of the SDA tool and the target year emissions of all other categories modelled under the Absolute Contraction Approach. It should then proceed to calculate the percentage reduction in absolute emissions from base year to target year of all categories. Together with base year, target year, scope and optionally category information, the percentage reduction figure is used to define the combined target.

Unsuitable targets

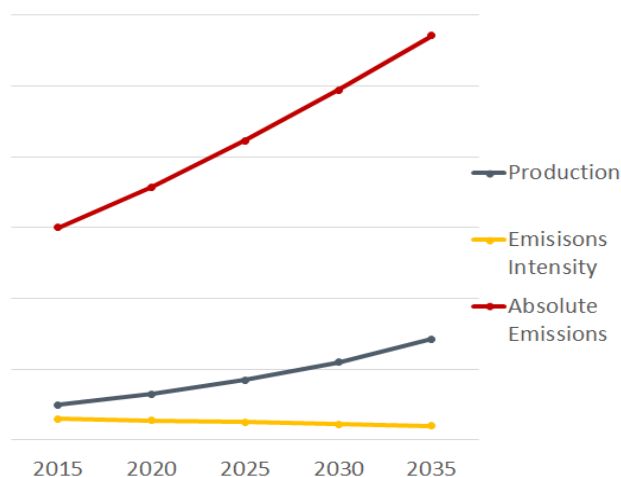
Certain other types of targets shall not be set because of the difficulty in establishing whether these targets lead to the reductions expected of an absolute, intensity or engagement target. In particular, companies shall not set targets to reduce emissions by a specified mass of GHGs (e.g. “to reduce emissions by 5 million tonnes by 2030”) or targets that benchmark performance against sector average values. This is because such targets are not transparent about changes in emissions performance. Also, sector-benchmarked targets may also change over time with changes in sector performance, reducing the ability to track long-term changes in performance.

Benefits and drawbacks of different types of targets

Comparing absolute targets and intensity targets

Absolute and intensity targets each have advantages and disadvantages. Intensity targets do not necessarily lead to reductions in absolute emissions. This is because increases in business output can cause absolute emissions to rise even if efficiency improves on a per unit basis (please see figure 5 for an illustration of this point).

Figure 5. Intensity reduction targets can lead to absolute emissions increases when production levels increase



Absolute targets also have some shortcomings. They do not allow comparisons of GHG intensity amongst peers, and they do not necessarily track with efficiency improvements, as reported reductions can result from declines in production output, rather than improvements in performance.

Box 8: Combination of absolute and intensity targets

Klockner Pentaplast commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2025 from a 2019 base year. Klockner Pentaplast also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, processing of sold products, and end of life treatment of sold products 20.4% per tonne of raw materials by 2029 from a 2019 base year.

Comparing physical intensity targets and economic intensity targets

Physical intensity targets and economic intensity targets also have their own strengths and limits. Physical intensity metrics (e.g. tonnes GHG per tonne product or MWh generated) are best suited for use within sectors that create a uniform product (e.g. steel or cement sectors) and may be less suitable for companies that generate a diverse product mix.

In general, economic intensity metrics (e.g. tonnes GHG per unit value added) can be used to normalize emissions for sectors with varying products that are difficult to directly compare against each other (e.g. retail or chemical sectors).

Economic intensity targets may only be appropriate for sectors with limited fluctuations in product prices over time, where growth in emissions is often tied to economic growth of the company. In other words, if a company sells more products, more emissions are produced to make those products.

However, economic intensity indicators are subject to a number of variables that can lead to apparent changes in a company's carbon intensity that are not linked to its environmental performance, but rather with extrinsic factors. Examples include the fluctuation of commodity prices, inflation, or changes in the relative contribution of different business activities to a company's bottom line. Economic metrics may not be useful for tracking emissions performance. Companies should use absolute emissions contraction or develop intensity targets in line with absolute emissions contraction.

Over time, the SBTi's analysis of and experience assessing targets using economic allocation and intensity methods revealed that these methods can often lead to high absolute increases in emissions when used by fast-growing companies and therefore don't support the goals of the initiative. For example, a company with a compound annual growth rate of 10% would be allowed to *increase* absolute emissions by 48% between 2015 and 2030 when modelling 1.5°C aligned targets using one of the economic-intensity target-setting methods discontinued by the SBTi. For comparison, a company using the Absolute Contraction method would be expected to *reduce* absolute emissions by 63% over the same timeframe. The SBTi therefore does not recommend that companies set economic intensity targets for their operational emissions (scope 1 and 2) where they have direct influence over emissions reduction. Considering the difficulty of measuring and reducing scope 3 emissions, economic intensity targets are accepted for scope 3.

Examples of sectors with volatile pricing:

- A pharmaceutical company's prices for certain drugs may fluctuate based on demand, patents or regulatory factors.
- The value added (or gross profit) of a luxury brand company can be related to marketing and consumer willingness to pay for a premium product, introducing variability into pricing.
- The price of many commodities (e.g. metals and agricultural commodities) is set by trades placed on commodity exchanges.

In addition to absolute or intensity emissions reduction targets, supplier or customer engagement targets can enable early actions from companies with limited data or information on what reduction levers are most suitable. However, as companies tend to focus on suppliers' or customers' scope 1 and 2 emissions as the most straightforward starting point, the scope of such targets can be limited at least in the early engagement phase. For more information, see section "[Supplier or customer engagement targets](#)".

Table 5 summarizes the main advantages and disadvantages of these four types of targets.

Table 5. The main advantages and disadvantages of absolute, physical intensity, economic intensity, and engagement targets.

	Absolute Target	Physical Intensity Target	Economic Intensity Target - Recommended for Scope 3 only	Supplier or Customer Engagement target - Scope 3 only
Advantages	<ul style="list-style-type: none"> • Relatively low data requirement. • Designed to reduce the quantity of GHGs emitted to the atmosphere by a specific amount. • Demonstrates strong ambition for target communications. • Environmentally robust and more credible to stakeholders as it entails a commitment to reduce total GHGs by a specified amount, thus also making the contribution to global emissions reductions 	<ul style="list-style-type: none"> • Reflects GHG performance and efficiency improvements independent of business growth or decline. • Can be more in line with emissions reduction strategies and internal progress tracking. • May increase the comparability of GHG performance among companies (assuming that inventory consolidation approaches used are the same and product mixes are highly similar). 	<ul style="list-style-type: none"> • For companies that generate diverse products and services, economic units can be used as the denominator to formulate intensity targets. • Provides more flexibility for companies that are prioritizing growth. 	<ul style="list-style-type: none"> • Relatively low data requirement • Can enable early actions from companies with limited data or information on suitable reduction levers. • Given the global nature of companies' value chains, engagement targets can scale up adoption of science based emissions reduction targets globally.

	efforts predictable and transparent.			
Disadvantages	<ul style="list-style-type: none"> Does not allow comparisons of GHG intensity/efficiency to that of peers. Reported reductions can result from declines in production/output, rather than improvements in performance. Target may be more challenging to achieve if the company grows and growth is linked to GHG emissions. 	<ul style="list-style-type: none"> Higher data requirement given that physical activity data may not always be readily available. Risk of being seen as less credible to stakeholders because absolute emissions may rise even if intensity decreases (e.g. because output increases more than GHG intensity decreases). Companies with diverse operations may find it difficult to define a single physical intensity common business metric. 	<ul style="list-style-type: none"> Challenging to track progress if companies experience financial losses in certain years. Economic intensity indicators are subject to extrinsic factors that can lead to apparent changes in a company's carbon intensity that are not linked to its environmental performance (e.g., fluctuation of commodity prices and inflation, etc.). May not correlate with emissions tied to physical production processes, especially for sectors with high price fluctuations. Can be less environmentally robust due to the volatility of economic metrics and 	<ul style="list-style-type: none"> The scope of such targets can be limited if companies focus on scope 1 and 2 emissions of value chain partners. As the target metric is percentage of suppliers or customers engaged, the amount of emissions reduction is less clear than emissions-based targets. Available strategies to achieve targets are limited given that the target focuses on engagement.



			<p>method reliance on “idealized” conditions (e.g. GEVA targets).</p> <ul style="list-style-type: none"> • For economic intensity targets that lead to sufficient absolute emissions reduction given the growth projection provided at the validation stage, the actual emissions reduction impact is unclear if growth trajectory is not in line with projected growth in reality. 	
--	--	--	--	--

Step 3: Submit your target for validation

Validation of a company's target ensures that it meets a set of rigorous criteria defined by the SBTi. It is the company's responsibility to make the case that the target is science-based and clearly provide appropriate information. The section below provides an overview of the validation process.

Submit the target for validation

Target submission form

Companies that wish to submit targets to be evaluated should download the latest [Target Submission Form and Guidance](#) and fill it out as clearly, completely and accurately as possible. It is highly recommended that companies consult the guidance available before completing the form, including the target language guidance. Additional documents should be attached only if they are directly related to the information requested. Companies should reference the specific page numbers, figures or text that is being referred to in accompanying documents. Missing, unclear or erroneous information will result in the validation process being delayed.

It is the company's responsibility to ensure the integrity of the information provided. Once the form is completed, companies should submit the form together with any supporting documents via the online Target Validation Booking System for near-term targets. The booking system reserves a date for your target validation service to begin and submits your target submission form and any other relevant documents to the SBTi for validation purposes. The submission form should be submitted in **Word format**.

How company information is treated

The SBTi safeguards the confidentiality of all information provided by companies to assess targets. This means that information provided will be used in accordance with the target validation service contract that companies are asked to sign before target assessments commence.

The target validation service

Preliminary validations, offered as a separate service before July 2020, have been combined with our official validation process to create a single validation option. Feedback can be delivered for certain specific scopes or for all scopes, and companies can indicate which scopes are included when completing the [Target Submission Form](#). For example, if a company would like to receive feedback on the proposed scope 1 and 2 target while the scope 3 inventory is developed, there is an option to select a validation of "scopes 1 and 2 only". Note that if a company does not select "All Scopes (complete submission)", its submitted targets will not be officially approved but specific feedback on the portion that was submitted will be provided. Table 6 outlines various aspects of the validation process.

The target validation service costs USD 9,500 (+ applicable VAT), which includes up to two target assessments. Subsequent resubmissions cost USD 4,750 (+ applicable VAT) per submission. The results of the validation will be ready within 30 business days from the date the contract has been fully executed by both parties (or 60 days for financial institutions) and provided that any queries for further information or clarification sent by the validation team are resolved within 2 business days.

Resubmissions only include one target assessment. The resubmission price is available to companies that 1) have submitted at least once using the paid target validation service, or 2) already have approved targets but need to update them.

Companies headquartered in developing countries and emerging economies are eligible for a fee exemption on request.¹² The service offering is summarized in table 6 below.

Table 6. Target validation service summary

Item	Target validation service
Who can be assessed	Any company that passes the initial screening. Note that the cost for companies headquartered in developing countries and economies in transition can be waived.
Scope	Evaluation of a company's target(s) against all SBTi criteria.
Target Submission Form	Submission form must be completed as required per the validation requested, indicating if the company is using the full service or the resubmission option.
Reviewed by	The SBTi Target Validation Team; escalation to Technical Working Group or Leadership Team for special cases.
Level of feedback provided	Detailed feedback is provided for each round of assessment through: <ul style="list-style-type: none"> • A comprehensive target validation report including recommendations to address non-compliances, if applicable. • An official decision letter. • Up to 60 minutes of feedback conversations with a technical expert from the SBTi, upon request and prioritized for companies who are not approved.
Turnaround times	Official decision letter and target validation report within 30 working days from the full execution of the validation service terms & conditions.
Validity of decision	Approved targets modelled with an old version of tool(s)/method(s) will be accepted in a target submission only within six months after the issuance date of the most recent tool(s)/method(s). After that period, the targets must be recalculated using the new tool/method for submission.
Communications	Companies are assigned an opt-out publication date for the SBTi website one month from their approval date (when deliverables were sent). This is

¹² As defined by the Department of Economic and Social Affairs of the United Nations Secretariat in the World Economic Situation and Prospects 2018. See FAQs for more information.

communicated in their approval email. However, should this date not be agreed upon, companies must announce approved targets publicly within six months of the approval date.

3.1 SME validation option

SMEs are entitled to submit targets through a dedicated SME target validation route. For target validation by SBTi, an SME is defined as a non-subsidiary, independent company that employs fewer than 500 employees. Public entities with fewer than 500 employees that are interested in validating targets are also eligible to set emissions reduction targets using the SMEs streamlined route.

By submitting the [SME science-based target setting form](#), SMEs commit to:

- Work towards achieving the chosen science-based scope 1 and 2 target following the rules of the GHG Protocol within the specified timeframe.
- Measure and reduce scope 3 emissions. While the SBTi does not require specific scope 3 targets to be set by SMEs, it encourages companies to orientate themselves on the SBTi criteria and best practice recommendations when considering their scope 3 emissions.
- Publicly report its company-wide scope 1 and 2 GHG emissions inventory and progress against published targets on an annual basis. Companies shall follow the GHG Protocol Corporate Standard and Scope 2 Guidance.

Table 7 below displays the scope 1 and 2 target options available to SMEs. Submissions will be considered valid if the company selects one of these options and meets other requirements as described in the SME science-based target setting form.

Table 7. SME scope 1 and 2 SBT options

1.5°C aligned option

“_____ commits to reduce absolute scope 1 and scope 2 GHG emissions ___% by 2030 from a 20__ base year, and to measure and reduce its scope 3 emissions.”

- 50% from a 2018 base year
- 46% from a 2019 base year
- 42% from a 2020 base year

3.2 Financial sector options

In October 2020, the SBTi formally launched its target setting framework for Financial Institutions (FIs). A specific set of [criteria and guidance](#) for FIs has been developed and must be followed by all relevant FIs. A target setting protocol, to complement the target setting criteria for Financial Institutions, is under development.

The SBTi defines a FI as a company whose business involves the arrangement and execution of financial and monetary transactions, including deposits, loans, investments, and currency exchange. More specifically, the SBTi deems a company a financial institution if 5% or more of its revenue or assets comes from the activities described above

FIs may still submit their scope 1 and 2 targets for partial validation via the standard SBTi corporate route. Targets submitted through partial validations are not formally recognized and published by SBTi even if they meet all criteria. FIs can use the set of resources available to design and submit scope 1 and 2 and scope 3 financed emissions targets to the SBTi.

3.3 Corporate validation process

Process overview

After the target is submitted, the target validation process follows a multi-step process as described in [Target Validation Protocol](#) and outlined in figure 6 below.

Figure 6. Overview of the target validation process

You are here



For processes and timelines regarding validations for CDP scoring, companies can refer to CDP's [Technical Note](#) on SBTs. Submission deadlines for CDP leadership point responses will be communicated on the SBTi website and newsletter.

Initial screening

Upon receiving the company's submission, the validation team performs the initial screening which is not included within the 30 business day turn around (or 60 business days for financial institutions). The initial screening is a first, high-level assessment of the submission form to verify its completeness and the company's eligibility to be validated. In the initial screening, the administrative team also assesses compliance with several criteria as indicated in table 8. Please note that not all criteria are assessed at this stage.

- a) If the company does not pass the initial screening, a formal desk review will not be undertaken by the Target Validation Team (TVT). A decision letter indicating the reasons for non-compliance and recommendations for resubmission is then issued and sent to the company. Companies can make the recommended changes and immediately resubmit to the SBTi for another initial screening.
- b) If the company passes the initial screening, the submission proceeds to the next stage for a formal desk review by the TVT. The company will receive an email indicating they have passed the initial screening and will be directed to sign the terms & conditions and informed of the next steps for invoicing related to the validation service. The target validation service is conducted within 30 business days (or 60 business days for financial institutions) with the start date beginning once the company passes the initial screening

Table 8. Initial screening steps

Steps	Screening procedure	Screening outcome
I. Eligibility check	The submission is reviewed to assess if the company belongs to one of the following cases:	

	<p>The oil and gas sector is defined as any company with exploration/production activities, in addition to companies who derive more than 50% of revenue from value chain activities related to fossil fuels (involved in sale or distribution).</p> <p>Companies in the fossil fuel extraction and production business (including traditional O&G service companies and companies with active and/or dormant extraction assets); companies that derive 50% of their revenue or more from activities in the value chain of fossil fuels (including companies with dedicated infrastructure and companies with sales, transmission and distribution)</p>	<p>Companies in any of the situations described in the screening procedure, cannot yet submit targets for validation, and will be kindly asked to wait for SBTi methods, criteria and guidance to become available.</p> <p>If the company is in the oil and gas sector, no submissions can be reviewed at this time and these companies are kindly asked to wait for the relevant sector development to be completed before submitting targets for assessment. Additionally, if the company has any dedicated infrastructure for coal extraction, regardless of the percentage of revenue derived, the SBTi cannot currently validate their targets.</p>
--	---	--

	<p>The submission is reviewed to assess if the company operates in the financial sector. The SBTi defines FIs as organizations whose business involves the dealing of financial and monetary transactions, including deposits, loans, investments, and currency exchange. If 5% or more of a company’s revenue or assets comes from activities such as those described above, they are considered to be an FI. Development financial institutions are currently out of project scope.</p>	<p>If the company is classified as an FI, it will be requested to submit its targets via the SBTi FI framework. Scope 1 and 2 targets can still be submitted for a partial validation.</p>
	<p>The submission is also reviewed for organizational type - the SBTi does not validate targets of cities, local governments, educational institutions or non-profit organizations.</p>	<p>No validation is conducted.</p>
	<p>SMEs, defined as a non-subsubsidiary, independent company with fewer than 500 employees must validate targets using the streamlined process for SMEs, instead of the standard route.</p>	<p>SME is redirected to the streamlined route. No validation is conducted.</p>

II. Form completeness	The submission is reviewed to assess if the form is completed as required.	If the form is incomplete and missing key information, the submission cannot be assessed due to lack of information.
III. Scope 3 - screening	The submission is reviewed to assess if the company has conducted a complete scope 3 screening or inventory. All company submissions need to complete a full scope 3 inventory in order to pass the initial screening stage.	For companies not selecting a partial validation for scope 1 and 2 only, an incomplete scope 3 GHG inventory means that the submission will not pass the initial screening stage.
IV. Scope 3 - target	The submission is reviewed to assess the contribution of scope 3 emissions to the GHG inventory. If scope 3 emissions account for more than 40% of total emissions, the submission is further reviewed to assess if the company has a scope 3 target.	If scope 3 emissions are less than 40% of total emissions and no target is set, the submission will not pass the initial screening stage.
V. Timeframe check	The submission is reviewed to assess if all relevant targets have a valid target year.	If the company does not cover relevant emissions with target(s) that have valid target year(s), the submission will not pass the initial screening stage.
VI. Use of offsets	The submission is reviewed to assess if the company indicated the use of offsets in the submission form.	If the company uses offsets to achieve its targets, the submission will not pass the initial screening stage.
VII. Avoided emissions	The submission is reviewed to assess if the company indicated the use of avoided emissions in the submission form.	If the company uses avoided emissions to achieve its targets, the submission will not pass the initial screening stage.

Target validation team assignment

A validation team consisting of a lead reviewer (LR) and an appointed approver (AA) is assigned for each target submission, avoiding any potential conflict of interest. This is determined through the conflict-of-interest process detailed in the following section. The LR will be the main point of contact between the company and the SBTi. The following rules are also considered when assigning a validation team:

- The LR and the AA are always selected from different partner organizations.
- In cases where the company is re-submitting targets, the same validation team is assigned whenever possible, to ensure continuity.

Any SBTi partner organization with a conflict of interest (COI) must be excluded from the assessment process. When all partners have a COI, the results of the validation must be unanimous. The validation must also be approved by the SBTi Executive Leadership Team. This aims to ensure an independent, credible and objective target validation process.

What is considered a conflict of interest?

Any situation where the impartiality and independence of a reviewer is at risk is considered a COI. More specifically, COIs include but are not limited to the following:

- When any member of a partner organization is paid any amount to provide advisory services to a company on their target
- When a company provides any significant amount of funds to any of the SBTi partner organizations (e.g. through a partnership, service offering or donation). No SBTi partner organization shall accept funding where an objective of such funding is to influence any SBT validation decisions. This applies equally to grants, sponsorship, sales of services or any other income.

Any attempt, by any member of the SBTi that is excluded from a target validation due to a COI to amend responses or influence validation results, or assist any other party in doing so for personal gain will be regarded as gross misconduct and dealt with on a case-by-case basis.

Desk review

- Once the validation team has been assigned, the target submission form and all supporting documents are assessed against [SBTi Criteria and Recommendations](#).
- The LR thoroughly assesses the accuracy, relevance, completeness, consistency and transparency of the information provided by the company in the submission form and any accompanying documents.
- If clarifications or additional information is required from the company, the LR may send a query to the company to obtain the required information. Queries may be sent to the company at this or any other stage in the process. If it is deemed necessary, the LR may request a call to clarify certain aspects of the company's submission. Queries from the LR range in subject but are focused on ensuring a target is assessed correctly against SBTi criteria. Common query topics include clarifying GHG accounting processes, asking for underlying assumptions or calculations and ensuring the correct interpretation of data provided by the company in the target submission form. For more information, refer to section 4 in the [Target Validation Protocol](#).

- The company must respond to queries sent by the LR **within 2 business days¹³ to receive a decision within 30 business days** from execution of the terms & conditions (or **60 business days for financial institutions**). If a response is not received within 2 business days, the SBTi cannot guarantee the decision or deliverables will be ready within a 30 (or 60) business day timeframe. If a company uses target wording that deviates from SBTi guidelines, this may also delay a decision beyond 30 (or 60) business days. The SBTi recommends that the company contact is in office or is available to field queries throughout the duration of the target review process to limit delays in response. An alternative company contact should be provided, should the primary contact be out of office due to holidays or illness. If a company changes or updates submitted data during the validation process, this also constitutes a 2 business day miss and may also delay a decision beyond the 30 (or 60) business days.
- It is the company's responsibility to provide all the information required to complete the desk review. If a company needs to update or change data that deviates from the original target submission information during the validation process this may delay a decision beyond 30 (or 60) business days. If the information provided is deemed insufficient by the SBTi after at least two query attempts, the SBTi may consider the submission to be non-compliant. During the desk review, the target language is also assessed to ensure compliance with SBTi guidelines. This process is initiated to avoid delays in case the company's targets are ultimately approved but does not mean the target will be approved.
- Once the desk review is completed, the LR drafts the deliverables and the results of the assessment for the peer-review process.

Box 9: Query vs. non-compliance

LRs use a "query form" to clarify any elements that are not clear in the submission form or to request any additional information required to determine compliance or non-compliance against any of the SBTi criteria (e.g. the company has submitted an intensity target but has not provided the activity data needed to assess the ambition in absolute terms).

Non-compliances rather than queries are declared when the lack of information clearly implies that the criteria will not be met, and/or if the request for additional information would require a substantial amount of time for the company to complete. (e.g. the company's scope 3 emissions are more than 40% of total emissions and there is no scope 3 target).

¹³ A business day means any day except any Saturday, any Sunday, or any day which is not a holiday within the United States. A 2 business day turnaround means for example, a query sent anytime on Monday would need to be resolved by the immediate Wednesday close of business.

Appointed approver review

- A review of the assessment results and deliverables is completed by the AA to ensure accuracy and compliance with the [SBTi Criteria](#) and [Target Validation Protocol](#).
- Disagreements between the LR and the AA on the results of the assessment are resolved during TVT meetings. If the AA agrees with the recommendations of the LR, the LR presents the joint recommendation on targets for discussion at the TVT meeting.

TVT and TWG discussion

- Upon completion of the desk and peer review process, the assessment is discussed at the weekly TVT meeting.
- If the TVT is unable to decide on the results of the assessment during the TVT meeting, the case is further discussed by the wider TWG until a decision is reached.
- If for any reason, the TWG is unable to make a final decision on the results of the assessment, the case is raised to the ELT for a final decision.

Final approval

- In cases where both the TVT and the TWG are unable to decide on the results of the assessment, the ELT discusses the submission and makes the final decision.
- Upon reaching a final decision, the LR completes the deliverables for the company.

Communicating decisions and feedback

- Deliverables are sent directly to the company contacts included in the submission form.
- The company receives a target validation report, which contains detailed information on the assessment and the overall target validation decision (approval/non-approval).
- In addition to the target validation report, the company can request a feedback call with the lead reviewer of their target validation after the deliverables have been received by the company. The company should contact their LR directly to request the call. The SBTi only recommends a feedback call when the result of the decision is a rejection and there is feedback to discuss with the company.

Step 4: Announce the target

- **Should a target be approved**, upon receipt of the final deliverables communicating the outcome of the target review process, the relationship management passes from the TVT to the Communications Team. For complete submissions approved by the SBTi, the Communications Team directly coordinates target publication plans with the company and a company should direct all queries relating to target publication to the Communications Team that is copied in the decision email.

- Communications guidelines are available to all approved companies, which includes messaging to use and how the SBTi logo may be used.
- The SBTi suggests a publication date when sending the deliverables, usually one month from the date these are sent. The SBTi can accept requests to embargo the release/announcement date of an approved target, but it should be announced within six months of the date the approval was sent to the company. In cases where a company requests not to publish a target within six months, their targets will no longer be valid, and they will need to resubmit targets for validation to be recognized. The SBTi recommends that companies should have final approval of the proposed SBT ahead of the validation process as the SBTi cannot extend the six month announcement period, should a company need additional time for clearance of an approved SBT by a Board or a similar decision-making body.
- All approved companies are listed on our [webpage](#) as well as on our partner websites at [We Mean Business](#).

The SBTi reserves the right to remove a company from its list of companies with approved targets as well as from partner websites at its discretion, for reasons including non-compliance with the SBTi criteria, reputational concerns or failure to update the SBTi on business changes (e.g. no longer existing as an entity due to merger or dissolution).

Step 5: Disclose your progress

Following approval, companies must disclose emissions and progress against targets annually.

Decide where to disclose

Setting an SBT can set apart a company as a leader and so it is in the company's interest to publicly disclose their target and progress against the target in accessible resources.

CDP's Climate Change Questionnaire is a well-known public resource for reaching large external audiences. CDP provides a platform to disclose climate leadership to investors, purchasers and governments. CDP also communicates SBTs to the Global Climate Action portal, which tracks significant commitments made by "non-state actors," including companies, as part of the UNFCCC's Action Agenda.

Company reports (e.g., sustainability reports, Corporate Social Responsibility reports, annual reports and strategic plans) are also good platforms upon which to periodically report on progress and integrate this information with the other activities of the company. The disclosure of progress against targets can also be presented in the company's sustainability webpage.

The Global Reporting Initiative (GRI) provides a widely used framework for reporting environmental, social, and economic performance and impacts. SBTs and reduction efforts can

be included in GRI reports although they may not be highlighted to the same degree that a separate webpage or company report would afford.

Follow guiding reporting principles

It is essential to disclose all pertinent aspects of the target so that the audience can fully understand its context, implications, and nuances. The [GHG Protocol Corporate Standard](#) defines five overarching principles that should guide the development of corporate GHG inventories. These same principles should also be used to describe the target and report on progress.

- **Relevance:** Ensure the target appropriately reflects the GHG emissions of the company and serves the decision-making needs of the users – both internal and external to the company.
- **Completeness:** Account for and report on all GHG emission sources and activities within the chosen target boundary. Disclose and justify any specific exclusions.
- **Consistency:** Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods or any other relevant factors in the time series.
- **Transparency:** Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.
- **Accuracy:** Ensure the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.

Specific recommendations for describing the target and reporting on progress are outlined below. Depending on the audience and focus, a company should tailor their communications to focus on one or a combination of these specific recommendations.

Describe the target

A description of the SBT should include technical information on the boundary and ambition of the target, as well as the assumptions and methods used to set the target. Companies may choose to also include qualitative, contextual information on the target.

Technical information on the SBT

At a minimum, a company should provide the following information:

- Base year and target year.
- The emissions scopes that are and are not included in the target (e.g. whether scope 3 emissions are excluded because they do not account for a significant portion of total emissions) and any future plans to include them.

- Percentage of the company's total emissions covered by the target.
- For intensity targets, an explanation of the metric (note that it is best to express intensity targets on both an absolute AND an intensity basis).
- Percent reductions, for all targets.
- Emissions scenario, allocation approach and method(s) used to set target.
- Whether a location- or market-based approach is used to calculate scope 2 emissions in the base year and track performance against an SBT.
- Any other information required by the method (assuming data is not commercially sensitive).
- A link to the company's annual GHG inventory that follows the GHG Protocol Corporate Standard's reporting requirements.

Companies are also encouraged to specify the actual target emissions level (in tonnes CO₂e) in addition to the percentage reduction.

Scope 3 targets

The recommendations above also apply to scope 3 targets, although some recommendations may not be relevant, depending on how the scope 3 target has been formulated. For instance, it would not be necessary to disclose an emissions scenario if an SBT method had not been used.

In addition, companies should communicate the following when describing scope 3 targets:

- Describe which scope 3 categories are covered by the target as well as any categories that are specifically excluded.
- Contextualize the significance of the target by, for example, describing the percentage of scope 3 emissions covered by the target or the size of the scope 3 target relative to that of the company's scope 1 and 2 emissions.

As with scope 1 and 2 target disclosures, it is important to understand the audience and present the target in a way that is meaningful and relevant to them. It is also important to recognize that achieving a scope 3 target depends on collaboration and cooperation from suppliers, customers and other external stakeholders, so it must be communicated in terms that encourage them to be motivated and inspired to contribute.

Qualitative and contextual information

Explaining the context for a target has two important benefits. First, stakeholders will better understand the significance of the target, thereby recognizing the company's leadership on climate change. Second, the company will contribute its voice to a larger narrative on how corporate climate action is both feasible and business smart. Contextual information can include:

- **Motivation:** Why did the company commit to such significant emissions reductions? Why is following climate science important to corporate leadership? The answers to

these questions are illuminating for stakeholders, journalists and others who are interested in business management trends and/or climate change. They might provide an incentive to others to contribute to the target or follow suit by setting an SBT at their own organization.

- **Relationship with broader company objectives:** Many companies will explore radically different business models, technologies, operational procedures, suppliers, and other business practices in order to become a low-carbon business. Stakeholders may require a full understanding of the company's current standing and vision for the future when considering an SBT. Therefore, the company may wish to connect the target to its strategic, financial and operational plans.
- **How the company will cut emissions:** While most companies will not have a fully engineered plan for meeting their SBT at the outset, they may be able to provide near-term examples of the steps they will take to reduce emissions. Tangible examples that are easy to visualize are helpful; for example, a company may state, "We plan to put solar panels on 20% of our facilities next year."
- **The case for following climate science:** SBTs are notable because they support the global effort to prevent the most dangerous consequences of climate change. It is important for stakeholders to understand that climate science can and should guide decisions on emissions reductions.
- Links to awards, press coverage and other notable communications materials.

Describe progress toward the target

On an annual basis, companies must report on progress toward their target(s) and their corporate-wide GHG emissions inventory. Such information is important to help stakeholders better understand a company's progress and efforts before reaching the target year. The following information should be included by a company in communications about its progress:

- A description of the target itself, following the recommendations in this section.
- Emissions changes from the base year to the current year (annual breakdowns are preferable). Variability between years is expected, so it is important to show trends over multiple years.
- When a company has sub-targets for a specific scope or scope 3 category, a company should demonstrate progress against each sub-target.
- Reasons for substantial emissions variations (e.g. emissions reduction activities, significant increases or decreases in growth or changes in product lines).
- If progress is not on track or deviates away from the target pathway: explain why and the strategy for addressing these deficits in the future.
- Whether the target has been revised, and if so, what changes were made and why (e.g. due to a recalculation of the base year inventory or an update to the emissions scenario).
- Information on successful projects that have helped to reduce emissions.

- Novel or innovative efforts or partnerships that have been put into place and can differentiate a company and highlight it as a leader.
- Investments or changes that have been made that may not yet have delivered significant results but that are expected to do so in the coming years or that enable the necessary transformation towards the long-term goal.

In addition, to ensure consistent tracking of performance over time, a company should recalculate its SBT as needed to reflect significant changes that would otherwise compromise the target's relevance as described by recommendation 12 (triggered recalculation) of the SBTi criteria.¹⁴ Recalculation should not be triggered by organic growth and decline, which is defined as “increases or decreases in production output, changes in product mix, and closures and openings of operating units that are owned or controlled by the company” (WRI & WBCSD 2011, 106).

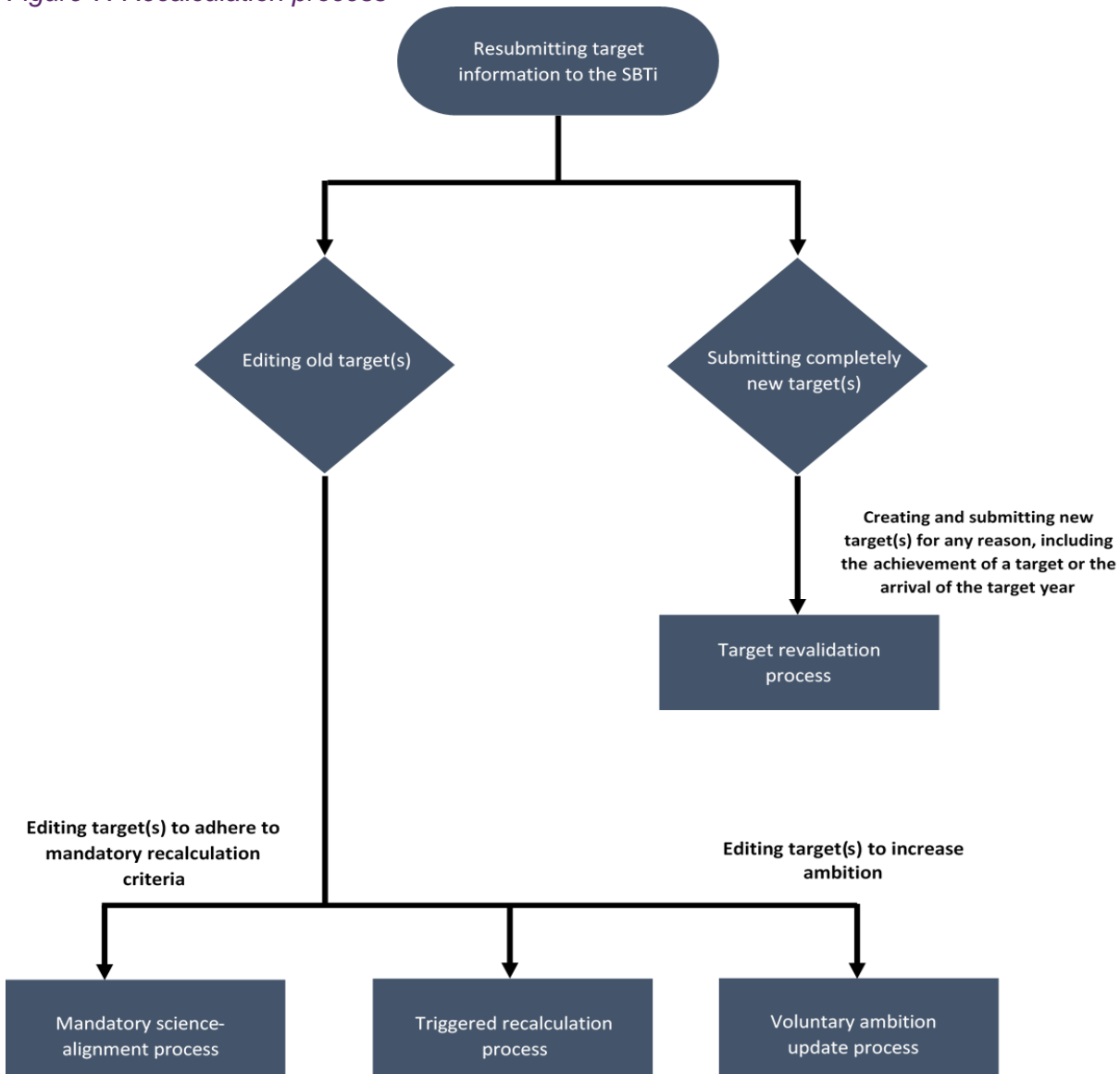
Starting from version 4 of the SBTi criteria, companies are required to review, and if necessary revalidate, their targets every five years from the date of the original target approval . Near-term targets may require recalculation to update the company growth assumptions used to project the target and to reflect the latest climate science. For example, targets could be recalculated to align with the latest emissions scenarios available from the IPCC or other scientific bodies, as these scenarios are published.

¹⁴ To ensure targets remain aligned with the most recent climate science, the latest version of the SBTi criteria requires that companies review, and if necessary revalidate, their targets every five years from the date of the original target approval.

Step 6: Target recalculation protocol

Companies may review and revise approved targets to keep them up to date and aligned with the most recent climate science and best practices. Figure 7 demonstrates the various options and reasons a company would choose to recalculate and resubmit targets to the SBTi.

Figure 7. Recalculation process



6.1 Updating and editing old targets

Mandatory recalculation

Mandatory target recalculation process - Updating previously submitted targets to fulfill criterion C26:

C26 - 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. For companies with targets approved in 2020 or earlier, the latest year targets must be revalidated is 2025. Companies with an approved target that requires recalculation must follow the most recent applicable criteria at the time of resubmission.

When submitting under the mandatory update process, the following rules apply:

- All previously submitted targets must be assessed against current SBTi criteria at the time of submission.
- Any targets not in line with current SBTi criteria will be removed from SBTi website and communications; companies are able to edit previously submitted targets to ensure they are aligned with current SBTi criteria.

Triggered recalculation process – Updating previously submitted targets to reflect business changes or growth of exclusions beyond allowable thresholds.

The following changes should trigger a target recalculation:

- Scope 3 emissions become 40% or more of overall scope 1, 2, and 3 emissions.
- Exclusions in the inventory or target boundary change significantly and/or exceed allowable exclusion limits (more than 5% of scope 1 and 2 emissions and/or more than 33% of scope 3 emissions). Significant changes in company structure and activities (e.g. acquisitions, divestitures, mergers, insourcing or outsourcing, shifts in product or service offerings) that would affect the company's target boundary or ambition. Significant changes in data used to calculate the targets such as growth projections (e.g. the discovery of a significant error or several cumulative errors that are collectively significant).
- Other changes to projections/assumptions used with science-based target setting methods.

When submitting under the triggered recalculation process, the following rules apply:

- Only the affected previously submitted target(s) must be assessed against current SBTi criteria at the time of resubmission.
- Active targets that are not affected by changes will not need to be brought in line with current SBTi criteria.

Submitting new targets

Target revalidation process - Submitting new target(s) to the SBTi when a company already has approved SBTs. Likely reasons for a target resubmission process include:

- Designing new targets to increase the ambition of previously submitted target(s).
- Arriving at the target year of one or more targets, regardless of whether the target was achieved.
- Submitting new targets to meet current SBTi criteria outside of the mandatory recalculation process.
- Achieving a target ahead of time (before target year).

When submitting under the target revalidation process, the following rules apply:

- Only the newly submitted target(s) must be assessed against current SBTi criteria at the time of resubmission.
- Active targets that are not affected by new targets will not need to be brought in line with current SBTi criteria.

For all options companies must submit an updated target submission form and submit via the target revalidation service to allow the SBTi to assess the nature and the impact of the relevant changes. It is highly recommended for companies to provide a detailed explanation of the causes and implications of the changes in relation to the methods, emissions factors, assumptions, company structure, inventory and/or targets in the newly submitted target submission form.

Glossary

Appointed approver (AA): A technical expert, directly employed by one of the SBTi partners, who performs target validations and reviews assessments made by LRs. Within a Validation Team for a specific target, the AA is from a different organization than the LR.

Executive Leadership Team (ELT): The decision-making body of the SBTi initiative composed of one representative from each of the four SBTi partner organizations. One of its functions is to provide the final sign-off on target validation decisions that are particularly complex.

Initial screening: A review for completeness of the Target Submission Form, to ensure the company has provided all information required to assess the target and if the target meets certain criteria that are assessed at this stage (e.g., boundary, timeframe).

Lead reviewer (LR): A technical expert directly employed by one of the SBTi partners, who performs target validations including the following activities: reviews submission forms, assesses targets against SBTi criteria, liaises with companies, and submits assessments and recommendations.

Query log: A record of questions or requests for further information sent to the company and the company's response.

Resubmission: When the company sends a new or improved target back to the SBTi for evaluation after a previous official validation determined that the target did not meet one or more of the criteria.

Round of Assessment: Process from when the company sending a completed submission form to when the SBTi issues a decision on proposed targets and the related deliverables after the targets have been assessed against the SBTi criteria.

Science Based Targets initiative partners (SBTi partners): SBTi is a joint initiative by CDP, UNGC, WRI and WWF, commonly referred to as the partner organizations.

Target Submission Form: The form the company fills out with its inventory and target information. The SBTi uses the information in the form to determine if the targets meet its criteria during target validation.

Target validation: Evaluation process that a target must pass in order for the SBTi to endorse it as science based. Only positive results are communicated publicly. The target validation is not a negotiation of a company's target(s), rather an assessment of the target(s) against the SBTi criteria.

Target validation service: A paid service for the target validation process that aims to provide a faster process and additional feedback to companies.

Target Validation Team (TVT): The technical arm of the SBTi that conducts target validations. Lead Reviewers are typically members of the TVT, but they might be supported by the TWG to

act as AA and/or external consultants hired to assist with the desk review portion of the target validation process.

Technical Working Group (TWG): The technical arm of the SBTi that develops tools and sector-specific developments. The TWG might also support the TVT as Appointed Approvers.

Document history

Version	Change/update description	Date finalized	Effective date
1.0	Combined the Science-based Target Setting Manual and the SBTi Call-to-Action Guidelines to provide comprehensive step-by-step guidance for companies that would like to commit to SBTi, develop and submit targets and track progress against targets.	April 15 th , 2021	April 15 th , 2021
1.1	Updated the “benefits and drawbacks of different types of targets” section to reflect current best practices and to be inclusive of all acceptable target types, including supplier/customer engagement targets.	June X, 2021	June X, 2021
2.0	Updated with new requirements and recommendations from version 5 of near-term criteria.	December 6, 2021	July 15, 2022
2.0.1	Corrected scope 3 physical intensity minimum reduction rate from 7% linear annual reduction to 7% year on year reduction	December 15, 2021	July 15, 2022