

Technical note on science-based targets

CDP Climate Change 2016

Please note that the deadline to submit targets to the Science-Based Targets Initiative to score Leadership points in CDP's 2016 Climate Change Questionnaire is April 15, 2016.

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Science-Based Targets in the Climate Change Questionnaire

Purpose of Document

This technical note provides guidance on setting new science-based greenhouse gas emissions reduction targets and evaluating existing targets by describing best practices. CDP is asking companies to raise the level of ambition of their targets and set their greenhouse gas emissions reductions in line with climate science. Starting in 2016, CDP's Climate Change Questionnaire will incentivize companies to set science-based targets and achieve the next level of performance in emissions reductions.

Science Based Targets Initiative's Official Quality Check Results in CDP Scoring

Companies are very strongly encouraged to have their targets officially evaluated by the Science Based Targets Initiative (SBTI). CDP considers targets approved by the Initiative to reflect best practices in science-based target setting. The evaluation of targets submitted to the SBTI for an official check by 15 April 2016, with all information needed to assess the target, will be used for scoring in CDP's 2016 Climate Change Questionnaire. Targets that did not pass the SBTI's review process or that have not been submitted for review prior to the deadline will still be evaluated using information disclosed in CDP's questionnaire and can still qualify for leadership (see CDP's 2016 Climate Change Scoring Methodology for more details).

To submit a target for official evaluation, please fill out the target quality check form and send it to info@sciencebasedtargets.org by 15 April 2016. Be sure to tick the box indicating it is an official check and fill out the form as clearly, completely and accurately as possible. Missing or disorganized information may cause significant delays in the review process and may result in the assessment not being recognized for scoring in the CDP questionnaire.

CDP aims to minimize the reporting burden on companies, in part by reducing changes to the questionnaire from year to year. At the same time, CDP must collect enough information to assess the appropriateness of thousands of company targets. The questions in the Climate Change Questionnaire balance the dynamics of these two contrasting principles. As a result, targets evaluated via the SBTI and the CDP questionnaire have different requirements. These reflect the application of science-based target setting principles rather than discrepancies in the principles themselves. For a description of how science-based targets will be scored, please see the 2016 Climate Change Scoring Methodology.

If you have any questions, comments or suggestions about the content of this document please contact respond@cdp.net.

The need for Science-Based Targets

Considering current GHG emissions trends and assuming current policies to mitigate emissions are effective, the world is on a trajectory leading to a 4°C temperature increase above pre-industrial levels, which will have adverse effects on the planet. Companies are responsible for a vast majority of world's emissions. As such, they need to substantially reduce their emissions and do their part to limit average global temperatures to well below a 2°C increase and pursue efforts to stay within a 1.5°C increase, in line with the widely-accepted global goal.

In order to meet this goal, emissions need to be substantially lower in 2050 than they were in 2010. Science-based target setting methods disaggregate the remaining global carbon budget and assign companies their fair share of emissions reductions. A number of factors may be taken into consideration in order to determine what is most appropriate for a given company. See the [SBTI's Science-Based Target Setting Manual](#) for more information. Though the manual is currently in draft form (with plans for finalization in spring 2016), based on the feedback collected during public consultation, the draft still serves as a viable resource.

Overview of the Science Based Targets Initiative

CDP has partnered with the UN Global Compact (UNGC), World Resources Institute (WRI), and World Wide Fund for Nature (WWF) to create the Science Based Targets Initiative. The Initiative seeks to create a systematic change in how targets are currently set, so that companies reduce their fair share of emissions and keep the planet well below a 2°C temperature increase. The SBTi is working to achieve this through the following actions:

1. Providing an array of resources to aid companies in understanding, setting, achieving, and communicating science-based targets.
2. Building momentum and creating a critical mass of companies adopting science-based targets through its Call to Action.

Resources available

Some resources provided by the Initiative include the following:

- [Science-Based Target Setting Manual](#) – Describes how to understand, set, achieve, and communicate targets. Includes an overview of science-based targets setting methods. At the time this technical note was in writing the manual was in draft form and was planned to be released in the first half of 2016.
- [Sectoral Decarbonization Approach](#) (SDA) – A science-based target setting method that takes into account inherent differences among company sectors such as mitigation potential and how fast each sector can grow relative to economic and population growth. There is also an accompanying [online tool](#) (in beta testing at the time of writing) companies can use to calculate their targets.

- [Mind the Science](#) – An interactive report and website that analyzes how the targets of 70 of the world’s largest companies representing 9% of global emissions align with the Sectoral Decarbonization Approach.
- [CAIT Business](#) – A dynamic website developed by WRI that displays statistics on company emissions and targets, powered by CDP data.

Call to Action Quality Check

The Initiative is asking companies to commit to setting science-based targets, then within 24 months set and announce the targets publically. The SBTi evaluates targets against the eligibility criteria below, then formally acknowledges them on the [Science Based Targets website](#) and through other communications opportunities.

The text below describes the SBTi’s eligibility criteria and recommendations at the time of writing. Please refer to the [SBTi website](#) for the most up to date information.

Eligibility criteria

Boundary: The target must cover company-wide Scope 1 and Scope 2 emissions and all relevant GHGs as required in the GHG Protocol Corporate Standard

Timeframe: The target must cover a minimum of 5 years and a maximum of 15 years from the date of announcement of the target.

Level of ambition: At a minimum, the target is consistent with the level of decarbonization required to keep global temperature increase well below 2°C compared to pre-industrial temperatures.

Scope 3: Companies should complete a Scope 3 screening before setting their GHG emission reduction targets. An ambitious and measurable Scope 3 target with a clear time-frame is also required when Scope 3 emissions cover a significant portion (greater than 40% of total scope 1, 2 and 3 emissions) of a company’s overall emissions. The target boundary must include the majority of value chain emissions as defined by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (e.g. top 3 categories, or 2/3 of total scope 3 emissions).

Reporting: The company will disclose company-wide GHG emissions inventory on an annual basis.

Additional recommendations

Companies are encouraged to also develop long-term goals (e.g. 2050).

Companies are encouraged to express their targets on an absolute AND intensity basis.

To ensure consistent tracking of performance over time, the target should be recalculated, as needed, to reflect significant changes that would compromise its relevance and consistency. A target recalculation should be triggered by significant changes in the types of gases in its greenhouse gas inventory, growth projections, other assumptions used with science-based

target-setting methodologies and significant changes to your business or data and emissions factors used in your inventory process. The latter will also require recalculation of the base year inventory.

Guidance on scope 3

Companies should complete a Scope 3 screening before setting their GHG emission reduction targets.

Scope 3 is considered significant when it represents more than 40% of the total GHG inventory of the company.

If Scope 3 is significant, companies must develop an ambitious target that is measurable and has a clear timeframe (including highest emitting categories as per the GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard).

Scope 3 and Financial Institutions in CDP's Climate Change Questionnaire

Due to the complexities in accounting and barriers to data collection, scope 3 emissions targets will not be evaluated for their ambition in CDP's 2016 questionnaire. CDP plans to evaluate the ambition of scope 3 targets in the future when sufficient data and are available.

Financial institutions, which are currently not eligible to be evaluated through the SBTi may still qualify for leadership through CDP's questionnaire.

Financial Institutions

Financial institutions are invited to commit to setting science-based targets for scope 1 and 2 and for their investment activities under the Call to Action by submitting the commitment letter. However, because there is not yet sufficient development as to how to assess a financial institution's scope 3 emissions against a 2°C trajectory, the partners of the Science Based Targets Initiative are currently not be able to verify the targets.

Financial institutions that submit the commitment letter will be invited to participate in future developments in this area.

Recommendations on accounting and reporting science-based targets in 2016

This section provides guidance in addition to the criteria above (see Call to Action Quality Check Eligibility Criteria section) on how to set a science-based target. These topics are relevant to questions CC3.1a and CC3.1b in the climate change questionnaire, unless otherwise noted.

Methods

There are several science-based target setting methods available. The [Science-Based Target Setting Manual](#) provides an overview of components common to all methods, descriptions of the major attributes of each method, and guidance on choosing what is most appropriate for different companies.

Scopes

The methods can be applied to emissions scopes 1 and 2. All methods cover scope 1, as it measures a company's direct emissions. Scope 2 is covered by many methods and is given the same reduction pathway as scope 1, with the exception of the Sectoral Decarbonization Approach (SDA), which derives independent pathways for scopes 1 and 2. Due to limited data availability, only a few methods cover scope 3, though they are not specialized trajectories and assign the same percentage of reductions as they do to scopes 1 and 2. The only method that provides a specialized scope 3 pathway is the SDA for the light-duty vehicles manufacturing sub-sector.

Combined scope targets are acceptable.

These are targets where the same percentage of reductions are applied to more than one scope. For example, in a target where there is a 30% absolute emissions reduction applied to scopes 1+2 combined from 2010 to 2030, the 30% reduction can come from scope 1 and/or 2 and there is no individual target for each scope. To provide insight into how these reductions are being/will be made, it is recommended to succinctly describe efforts in the comments column of CC3.1a and CC3.1b. For example, efforts may include increasing energy efficiency, switching to cleaner energy

sources, and/or the company producing its own electricity. Describing how reductions are made in scope 2 provides visibility regarding a company's efforts to reduce its direct vs. indirect emissions. This information may be scored in the future.

There are several additional questions this year regarding scope 2 accounting. Please see the CDP Technical Note on Accounting of Scope 2 Emissions for further guidance. This year you have the option to specify if your scope 2 target is set using a location-based approach (average energy generation emission factors for defined locations including local, subnational, or national boundaries) or market-based approach (greenhouse emissions by generators from which the reporter contractually purchases electricity bundled or unbundled with instruments). Information regarding market-based scope 2 reductions may be scored in the future taking in consideration the way those reductions have been achieved.

What greenhouse gases should be included?

Questions CC3.1a and CC3.1b ask that companies express their targets as CO₂e. This means that targets don't necessarily have to cover all greenhouse gases, only that they be expressed as CO₂e in these questions. For companies where non-CO₂ gases are immaterial and therefore not meaningful to the target (e.g. a cement or transportation company where nearly all emissions are CO₂), the company should state in the comments section that the target only covers certain gases.

Relevance

For general guidance on setting boundaries and determining what can be excluded please see the [Greenhouse Gas Protocol Corporate Standard](#). For a target to be relevant (i.e. cover a meaningful percentage of total emissions) it should cover the maximum portion of emissions within its boundaries.

If there are significant exclusions, whether considered relevant or not, they should be concisely described in the comments column. You may also provide details in question CC8.4a. See the 2016 Climate Change Guidance document for more details. Disclosing exclusions is paramount to data quality and the integrity of setting a meaningful target. At some point in the future CDP may require verification to confirm that exclusions are made appropriately, but this is not required for 2016.

Timeframe

It is best to set a recent base year so that the target describes current and future efforts, rather than using a base year far in the past to take advantage of reductions that have already been made. Later target years (i.e. long-term targets) are preferred, as they drive the strategies, investments and activities that can result in the greatest emissions reductions as opposed to smaller, incremental efforts.

In addition to mid-term targets, long-term should also be disclosed so that measurable progress can be made in the near future.

Science-based target setting methods have different ranges for base and target years, which are restricted by limitations of the datasets they are based on. Base years vary and no methods go past the year 2050.

Ambition

Please see chapters 2 and 3 of the [Science-Based Target Setting Manual](#) for a detailed description of what constitutes a science-based target setting method and the applicability of these methods to your company. A company should evaluate the parameters and strengths of the different methods available and choose the method that is most appropriate given its sector,

geography, and growth projections. Components of different methods may be blended together to formulate a science-based target when applied properly within the context of what is applicable to the company. If multiple methods are suitable, the most conservative (i.e. the method with the most aggressive emissions reductions) is recommended to have the greatest chance of preserving the world's remaining global carbon budget.

Offsets

Offsets do not count toward science-based targets. Offsets can be applied additionally, beyond reductions needed for science-based targets e.g. toward carbon or climate neutrality targets. When submitting targets to be assessed for science-based ambition do not include reductions that are planned to be made with offsets.

Absolute vs. intensity targets

It is recommended to express targets on both an absolute and intensity basis so that there is maximum visibility in how meaningful targets are.

Absolute reductions are the most meaningful in reducing global emissions and ensuring the world's remaining carbon budget is conserved. Thus, they are also the most relevant in terms of science-based target setting. All science-based target setting methods aim to achieve absolute reductions. Absolute targets are also more straightforward to measure and communicate. However, companies that are growing may have difficulties meeting these targets. Likewise, if a company is shrinking, absolute targets may not be meaningful if emissions reductions are met by proportionate reductions in activities rather than improvements in environmental performance.

Intensity (normalized) targets do not necessarily result in total atmospheric reductions because absolute emissions can still increase while intensity decreases. They may also reveal economic and physical metrics that companies do not want to make public (e.g. gross profit, physical output). However, these metrics provide a basis that makes it easy to compare performance between different companies, allows for a fair recognition of different starting points in terms of emission reductions, and allow for growth.

Answers to frequently asked questions

Resources

Where can I find resources related to science-based targets scoring CDP's 2016 Climate Change Questionnaire?

See questions CC3.1a and CC3.1b in the resources below:

[CDP's 2016 Climate Change Questionnaire](#)

[CDP's 2016 Climate Change Scoring Methodology](#)

[CDP's 2016 Climate Change Guidance](#)

Where can I find resources on setting a science-based target?

See chapters 2 and 3 of the [draft Science-Based Target Setting Manual](#). The manual gives an overview of all the methods available and how to choose one. The final version will be available by mid-2016. The draft is still a useful resource in the interim. The [Science Based Targets Initiative's website](#) also has an array of tools and resources about the initiative and target setting.

Scoring

How are science-based targets scored?

Science-based targets will be scored in questions CC3.1a and CC3.1b in two places:

1. Disclosure and Awareness level points can be obtained by answering the question "Is this a science-based target?" in CC3.1a and CC3.1b.
 - a. Any answer from the dropdown menu awards 0.5 Disclosure level points:
 - Yes
 - Don't know
 - No, but we are reporting another target which is science-based
 - No, but we anticipate setting one in the next 2 years
 - No, and we do not anticipate setting one in the next 2 years
 - b. The following answers, which demonstrate knowledge and planned action achieve 1 Awareness level point:
 - Yes
 - No, but we anticipate setting one in the next 2 years
2. Science-based targets also earn 2 Leadership level points through either of the two routes below. Partial points are not given.
 - a. If a target is submitted to the Science Based Targets Initiative by **April 15, 2016** and passes the Science Based Targets Initiative's Official Target Quality Check, Leadership points are automatically awarded for CC3.1. These targets should still be disclosed in the CDP questionnaire.

- b. Leadership points can also be obtained by information disclosed in the Climate Change questionnaire. However, these targets are not considered science-based. The deadline for submission is June 30, 2016.

What are the differences between the SBTI’s Official Target Quality Check and CDP’s Questionnaire criteria for Leadership level points?

Criteria	SBTI Official Quality Check	CDP Questionnaire
Absolute vs. intensity	A target can be absolute or intensity-based. The initiative recommends that targets be expressed on both an absolute AND intensity basis. More information may be required for the initiative to assess intensity targets relative to absolute targets.	Absolute targets can qualify. We are unable to assess intensity targets via this route.
Relevance (% of emissions covered)	Must cover company-wide scope 1 and 2 emissions and all relevant GHGs as required in the GHG Protocol Corporate Standard. There is no set threshold. Exclusions must be justified. The initiative will determine its appropriateness.	At least 70% of emissions per scope must be covered.
Scopes	Must cover company-wide scope 1 and 2 emissions. An ambitious target is required if scope 3 emissions are greater than 40% of total emissions. The target boundary must include the majority of value chain emissions as defined by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (e.g. top 3 categories, or 2/3 of total scope 3 emissions).	Must cover scopes 1 and 2. Ambition of scope 3 targets is not assessed at this time.
Financial institutions	Because there is not yet sufficient development as to how to assess financial institutions’ scope 3 emissions against a 2°C trajectory, the partners of the SBTI are currently not able to verify the targets (scopes 1, 2, or 3).	Financial institutions may qualify since the ambition of scope 3 targets is not assessed at this time.
Timeframe	The target must cover a minimum of 5 years and maximum of 15 years from the date of announcement of the target. For targets announced in 2016, the target year must be between 2020 and 2030 inclusive. A long-term target (ending after 2030) is recommended by not required.	Must have mid-term target (ending between 2020 and 2035 inclusive) and long-term target (ending after 2035).
Reductions	The target will be assessed against the most appropriate science-based target setting method(s).	Meets at least a 2.1% average year-on-year absolute emissions reduction between base year and target year for both mid- and long-term targets together

Why do the criteria for the two routes differ?

CDP aims to minimize the reporting burden on companies, in part by reducing changes to the questionnaire from year to year. At the same time, CDP must collect enough information to assess the appropriateness of thousands of company targets. The questions in the Climate Change Questionnaire balance the dynamics of these two contrasting principles. As a result, CDP is unable to collect the type and amount of information necessary to determine if a target is science-based.

How can a company submit their target for an official quality check by the SBTI? What is the deadline?

Visit <http://sciencebasedtargets.org/commit-to-setting-science-based-targets/> and download the target quality check form. Fill out the form as completely, accurately, and clearly as possible. Be sure to tick the box that says this an official check. Send the form to info@sciencebasedtargets.org by April 15, 2016. Missing or disorganized information may cause delays in the target review process potentially resulting in the assessment not being recognized in time for CDP scoring. Be sure to also disclose this target in the CDP questionnaire.

How and when will companies receive a decision from the SBTI on whether or not their target is science-based?

The SBTI will email the contact listed on the quality check form a letter stating whether or not the target is science-based. If the target is not approved, the letter will state where it has not met the eligibility criteria. Companies should expect to receive this information by the end of July.

If this is the first year science-based targets are in the questionnaire, why are they already being scored? Doesn't CDP normally not score new questions?

CDP is asking companies to raise the level of ambition of their targets and set their greenhouse gas emissions reductions in line with climate science. The [Climate Change questionnaire](#) now includes a question about science-based targets in the existing section on targets and is being scored in accordance with other targets information provided by companies. This will incentivize companies to set science-based targets and achieve the next level of performance in emissions reductions.

Why is CDP using information outside of the questionnaire (i.e. taking into consideration companies that have passed the SBTI quality check) for scoring?

CDP considers the Science Based Targets Initiative to represent the most comprehensive and authoritative source on setting and assessing targets in line with climate science. Scoring of CDP's 2016 Climate Change Questionnaire will account for companies who have had targets submitted by April 15, 2016 and approved by the Initiative. Targets that did not pass the SBTI's review process or that have not been submitted for review prior to the deadline will still be evaluated using information disclosed in CDP's questionnaire and can still qualify for leadership (see [CDP's 2016 Climate Change Scoring Methodology](#) for more details).

Are targets that qualify for leadership through the CDP questionnaire but haven't passed the SBTI official quality check considered science-based targets?

CDP only considers companies whose targets have been formally assessed through the SBTI official quality check as science-based.

Why don't intensity targets qualify for CDP leadership through the information provided in the CDP questionnaire?

Intensity targets submitted by 15 April 2016 and approved by the SBTI Official Quality Check will receive Leadership points (see page 63 of [CDP's 2016 Climate Change Scoring Methodology](#) for more details). Due to the complexities of assessing the level of ambition and appropriateness of intensity targets, intensity targets cannot qualify for leadership points via the CDP questionnaire alone.

Are scope 3 targets assessed for leadership points in the CDP questionnaire?

Due to the complexities of scope 3 accounting, the questionnaire is not able to capture the full suite of relevant information to properly assess scope 3 targets at this time.

I am a financial institution. Can I my targets be validated as science-based? Am I eligible for Leadership points in the targets section of CDP's Climate Change Questionnaire?

Financial institutions can only earn Leadership points in the targets section through information provided in the CDP questionnaire. The targets can't be validated as science-based by the Science Based Targets Initiative because there is not yet sufficient development as to how to assess financial institutions' scope 3 emissions against a 2°C trajectory. As such, the partners of the Science Based Targets initiative are currently not able to verify the targets (scopes 1, 2, and 3). However, financial institutions may still qualify for CDP Leadership points in question CC3.1 of the questionnaire since the ambition of scope 3 targets is not assessed in the scoring methodology at this time.

Are combined scopes acceptable (e.g. in a target where there is a 30% absolute emissions reduction applied to scopes 1+2 combined from 2010 to 2030, the 30% reduction can come from scope 1 and/or 2 and there is no individual target for each scope)?

Combined scope target (e.g. scopes 1 + 2, scopes 1, 2, + 3) are acceptable for both routes. For the CDP questionnaire route, the 2.1% absolute reduction must apply to each scope if the targets communicate the scopes separately. For combined targets, the 2.1% absolute reduction applies to both scopes combined.