A Guide to the Science Based Targets Initiative

Explaining what a Science Based Target is, how to achieve it, and key things to consider before doing so

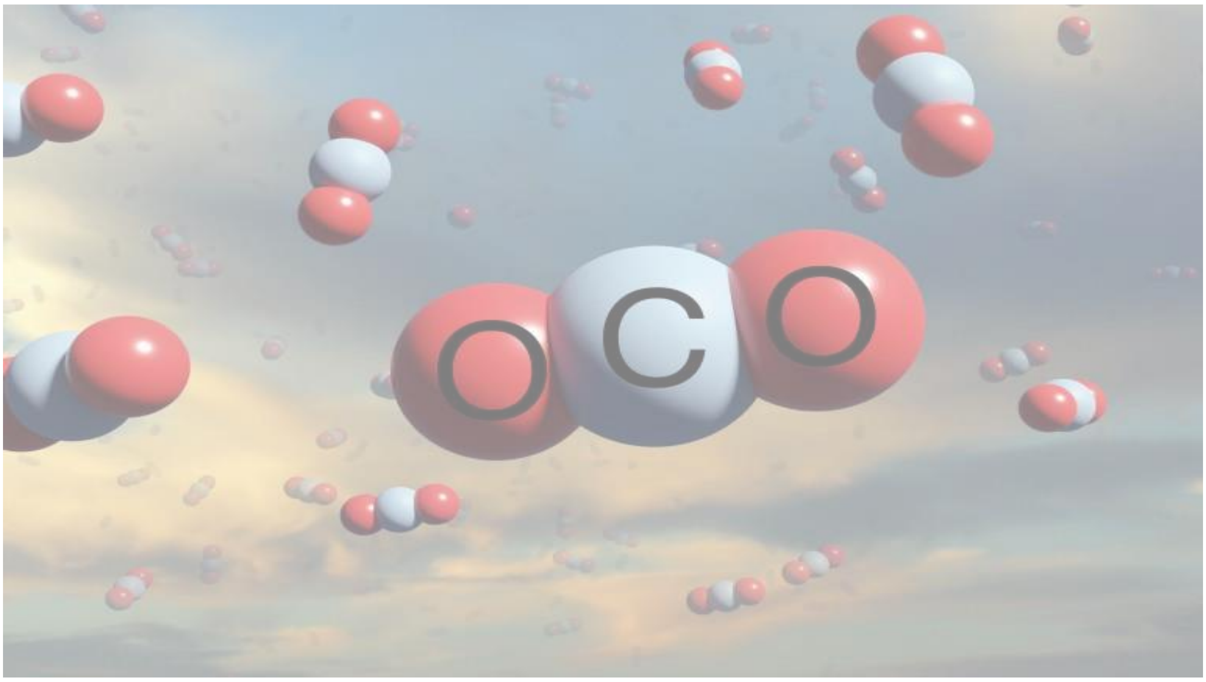


Image: Carbon dioxide molecules floating in the sky.

With the increasing magnitude of carbon emissions, we are facing rapid climate change. The urgency of decarbonising or lowering carbon emissions is of high importance and we need to embrace the targets that are in line with the Paris Agreement (2015)[1] in order to effect real change. Target-setting decisions are likely to be based on the economics rather than the concern for climate change. The voluntary top-down approach followed to govern the climate-aligned targets seem inadequate to deal with the massive problem of emissions reduction. The question is whether emissions reporting, publicly committing to targets vis-à-vis engaging with climate governing actors is just a tick-box compliance exercise or whether disclosing operational measurement and mitigation can improve emissions performance?

Net-zero or carbon neutral is a long-term goal providing a direction; and the global team at the Science Based Targets initiative (SBTi) inform us about a procedure or methodology that needs to be followed to set interim science-based targets. These targets are designed to maintain warming levels below 2^{o} Celsius, whilst, trying to keep global temperatures below 1.5^{o} Celsius above pre-industrial levels; depending on the scope of emissions.

[1]The Paris Agreement | United Nations

What is the SBTi?

SBTi is a team comprising of members from different organizations - Carbon Disclosure Project (CDP), UN Global Compact, World Wide Fund (WWF), and World Resources Institute (WRI). The initiative promotes sustainable, socially responsible policies, and research on global issues highlighting the importance of measuring, reporting and reducing the greenhouse gas (GHG) emissions.

The aim of SBTi is to verify and validate the targets set by a company with the purpose of reducing carbon emissions. It provides us with a set criterion which a company or business needs to follow while recognising the emission sources, and furthermore, setting up the targets.

In addition to complying to the criterion, the company needs to consider the GHG protocol standard, scope 2 guidance, and corporate value chain (scope 3) accounting and reporting standard. SBTi specifies certain methods to set Science-based targets (SBTs) – absolute contraction approach (ACA) and the intensity-based sectoral decarbonization approach (SDA). When opting for the absolute contraction approach based targets the directive is - by the target year the company needs to contract the absolute emissions by a certain percentage relative to the base year. However, when using this approach, all companies need to reduce GHG emissions at the same rate regardless of the initial emissions performance. In case of having set the intensity or SDA based targets, the reduction of emissions is based on the business specific metric – typically related to the company's production output, revenue or number of employees. Currently, SBTi does not offer SDA for targets aligned with 1.5° Celsius.

What method should be adopted for target-setting?

ACA based targets are broadly applicable to most sectors, whereas the SDA could be adopted only by a few of homogenous sectors. Currently, SBTs for the power sectors can be set aligned to the 1.5° goal. Certain sectors still need to be guided and assigned dedicated methods; sector-specific guidance for companies in land, forest, agriculture, among others is still under development[2].

What are the criteria for setting an SBT?[3]

Any SBT that a company set must cover all greenhouse gases (GHGs) required by the GHG Protocol Corporate Standard and it is recommended that the targets relate to the emissions generated by the parent company or at a group level, not at a subsidiary level. The SBT must cover all company-wide Scope 1 and 2 emissions. Scope 1 and 2 emissions falling below a 5% materiality threshold may be excluded for targets. If a company's Scope 3 emissions aggregate to more than 40% of total

[2] Getting Started with Science Based Targets V2.0
[3] https://sciencebasedtargets.org/resources/files/SBTi-criteria.pdf

emissions, then they are also required to set Scope 3 targets. These Scope 3 near-term target must be set that collectively cover 2/3rds of total Scope 3 emissions.

It is important for companies to note that the targets must cover at least a span of 5 years and up to 10 years from the date of targets being submitted to SBTi. Targets submitted are to be met without any use of the offsets.

At a minimum, the targets must be aligned with net-zero emissions by 2050 and Scope 1 and 2 emissions must align with the level of decarbonization required to keep global temperature increase to 1.5°C compared to pre-industrial temperatures. At a minimum, near-term scope 3 targets must be aligned with decarbonisation methods required to keep global temperature increase below 2°C compared to pre-industrial temperatures. Intensity targets must be modelled using an approved 1.5°C sector pathway relevant to the companies' business activities. A company's suppliers/customers must also be encouraged to adopt SBTs in order to reduce upstream and downstream emissions.

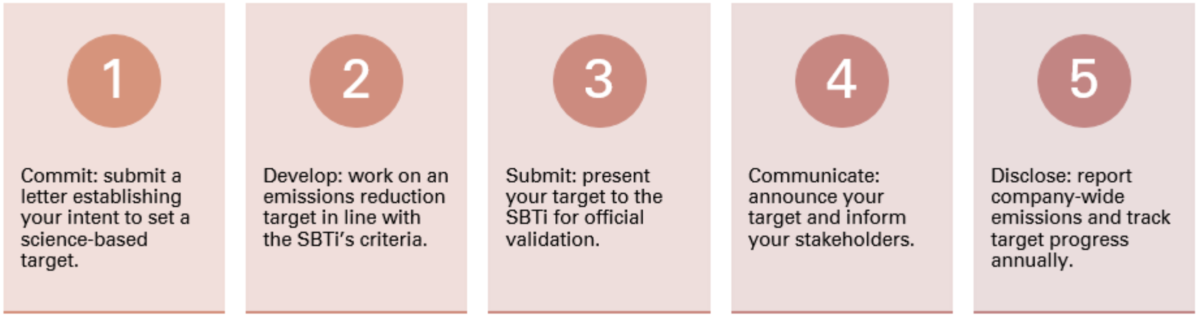
Consistent with the 1.5° Celsius threshold, one of the criterions of SBTi is that 80 % (or more) of electricity must be obtained from renewable sources in the target year and 100% by 2030.
Sector specific guidance is available from the SBTi, these mandate specific reporting and reduction targets relevant to each sector. Further details can be found here: Getting Started with Science Based Targets V2.0.

Once targets have been approved, the company must announce their target publicly on the SBTi website within 6 months of the approval date. Any company committed to the SBTi must publicly report their annual company wide GHG emissions profile, alongside publishing reduction targets. Targets must be reviewed and revalidated at least every 5 years to ensure best practice and relevance. The SBTi recommends that targets are internally reviewed and validated to ensure a company remains aligned to their net-zero goal.

Eligibility to join SBTi

All businesses and sector specific organizations that fall in the category of highest emitting sectors are encouraged to join the initiative and set a science-based target. SBTi has now introduced a new SME route for smaller companies; non-subsidiary, independent company with fewer than 500 employees to take account of their emissions across the value chains. The SME can bypass the initial stage of committing to set a science-based target and the standard target validation process. SBTi does not require SMEs to set targets for their scope 3 emissions; however, SMEs must commit to measure and reduce their scope 3 emissions.

The following steps are to be followed to start working with SBTi:



After sending a commitment letter, companies have 24 months to submit targets for validation and publication by SBTi.

Why join SBTi?

- Boost investor confidence
- Gain financial control
- Future-proof growth
- Enhances corporate reputation and relationship with investors
- Increases visibility amongst investors
- Prepare for the shifts in public policy and guidelines
- Promote innovation and competitiveness – while also demonstrating concrete sustainability commitments to increasingly-conscious consumers.

Could SBTi be serving as a platform for greenwashing?

On a scientific basis the target of 1.5° Celsius has been regarded as potentially outdated, not all countries are able to abide by this agreement. With the current trend followed by industries and policies adopted, it is hard to say if it is practically feasible to achieve this target. After the Paris Agreement, huge capital has been flowing into the sustainable investment funds and the climate-transition aligned businesses. Corporate Climate Initiatives (CCI) like the CDP have been used by companies previously for disclosing their environmental data, however, the reporting has not led to any improvement in their carbon performance. SBTi, another CCI that has made inroads into the public climate governance requires absolute or intensity targets set for the scope 1 and 2 emissions in line with the 1.5° goal.

Sustainably minded investors and regulators should pay close attention to the operational improvements and not just the climate talks since it is a high possibility of that the corporate environmental groups that have been tasked to track the commitments are just concealing the poor performance of emissions and are camouflaging company's non-climate aligned behaviour.

Carbon Responsible support to companies applying for the SBTi

Carbon responsible help in monitoring, measuring, and evaluating the carbon emissions in addition to setting up targets for reduction of the same.

The services include all aspects of carbon measurement and management. From initial measurement to profile analysis, target setting and data capability improvements, Carbon Responsible provides support and governance frameworks to support company's robust and successful measurement and reduction programmes. The company has developed considerable expertise in the broad and complex area of Scope 3, indirect emissions analysis, including both upstream and downstream impacts. In addition to supply chain, product, and lifecycle analysis it provides bespoke and sector specific emission reduction strategies.
One shortcoming of the SBTi is that the SDA's method lacks the attention to nations "common but differentiated responsibilities". SDA assumes that all companies of a given sector have similar average value chain and emission intensities. This could lead to SBTs that are conflicting with the national commitments to the Paris agreement. Target-setting methods, accounting practices for current emissions, insufficient transparency and SBT governance may lead to insufficient emission reductions collectively.

Carbon Responsible provides relevant value-based solutions to the risks, challenges and opportunities driven by the climate change. The company operates its own extensive databases, API and front-end reporting tools to support business from small SMEs to global businesses. Its current and recent clients include UK PLCs, fast growing companies, investment firms, private equity funds and consultancies. Its specialist focus on carbon emissions enables it to deliver best practice in this complex and growing area and to support the wider ESG strategy objectives of its clients. Bespoke targets would be set by Carbon Responsible using no proxy data and that would help in setting right targets which could be verified with the SBTi.

Carbon Responsible can advise its clients on carbon offsetting but does not sell or broke these products to its clients in view of the risk attached to their use and the limited value they will have in meeting globally agreed 2050 Net Zero targets. The company uses carbon financial risk models and input cost of carbon to support cost effective reduction activity as a priority.

Although lower rates of adoption of SBT by high emitting sectors and SMEs of the low- and middle-income countries pose a barrier for mainstreaming the SBTi, presently more than 2000 companies and financial institutions across 50 sectors have set up their targets with them.

It is debatable, whether voluntary adoption of SBTs will drive the public climate policy and the nationally determined targets or not. The global allowable emissions, SBTs, accounting of scope 3 emissions and the use of renewable energy certificates, collectively need to be aligned with the climate goal.