



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

# BASIS FOR CONCLUSIONS FOR SBTi BUILDINGS CRITERIA V1.0

August 2024

## ABOUT SBTi

The Science Based Targets initiative (SBTi) is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis.

We develop standards, tools and guidance which allow companies to set greenhouse gas (GHG) emissions reductions targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest.

The SBTi is incorporated as a charity, with a subsidiary which will host our target validation services. Our partners are CDP, the United Nations Global Compact, the We Mean Business Coalition, the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF).

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The SBTi reserves the right to revise this document according to a set revision schedule or as advisable to reflect the most recent emissions scenarios, regulatory, legal or scientific developments, and GHG accounting best practices.

“Science Based Targets initiative” and “SBTi” refer to the Science Based Targets initiative, a private company registered in England number 14960097 and registered as a UK Charity number 1205768.

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This Basis for Conclusions Report is issued by the Science-based Targets Initiative (SBTi). Any feedback on SBTi Standards can be submitted to [info@sciencebasedtargets.org](mailto:info@sciencebasedtargets.org) for consideration of the SBTi.

## VERSION HISTORY

Version	Change/update description	Release date	Effective dates
0.1	<ul style="list-style-type: none"><li>Initial draft for the Technical Council information session</li></ul>		May 23, 2024
0.2	<ul style="list-style-type: none"><li>Final draft for the Technical Council no-objection session</li><li>Changes on the approval and release process.</li></ul>		July 16, 2024
1.0	<ul style="list-style-type: none"><li>Remove internal references</li></ul>	August 28, 2024	August 28, 2024

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# INTRODUCTION

## About this document

This Basis for Conclusions report accompanies, but is not part of, the Buildings Sector Science-Based Target-Setting Criteria V1.0. It summarizes the key considerations of the SBTi in developing the Buildings Criteria V1.0 and the initiative's responses to the significant issues raised during:

- Public consultation from May 16, 2023 to July 16, 2023. This report contains a summary of the feedback received through the public consultation survey and additional feedback letters provided in writing during the consultation period.
- Pilot testing from January 3, 2024 to March 26, 2024. This report contains a summary of the feedback received through the pilot test participant feedback survey, Q&A sessions with the pilot test participants, and emails received from the participants.

All comments received, together with an analysis of the issues raised, were considered by the SBTi Buildings Team.

This Basis for Conclusions report aims to:

- Summarize and explain the development process to date.
- Explain the main issues and concerns raised during the process, and how these have been responded to.
- Summarize major comments received during the public consultation and pilot testing, and how these comments were adopted and addressed in the final version of the Buildings Criteria V1.0.

The SBTi Buildings Criteria V1.0 was in advanced stages of development before the SBTi Board of Trustees adopted the [Standard Operating Procedure \(SOP\) for Development of SBTi Standards](#). However, the finalization of the SBTi Buildings Criteria V1.0 has aimed to align to the Standard Operating Procedures and processes where possible.

The project objectives and timelines are outlined in the [Buildings Expert Advisory Group Terms of Reference](#). The links to the publicly available public consultation and pilot test materials can be found in Annexes A and B.

## Objectives for the development of the SBTi Buildings Criteria V1.0

The SBTi Buildings Criteria V1.0 were initiated to address the buildings sector, which is a major contributor of emissions worldwide, accounting for over one third of global energy consumption and emissions. Global floor area is additionally estimated to grow approximately by 75% over 2020-2050, meaning that GHG emissions will rise dramatically if no decarbonization efforts are made. The SBTi Buildings Project also attempts to fill gaps in corporate GHG accounting that cause challenges for companies and financial institutions in science-based target setting.

The SBTi Buildings Project have three objectives to strive for ambitious climate action in the buildings sector and its value chain:

1. Establish a global pathway for buildings' in-use emissions aligned with 1.5°C.
2. Establish a global pathway for buildings' embodied emissions aligned with 1.5°C.
3. Issue criteria and guidance on emissions accounting and reporting, as well as target setting and validation.

Overall, the SBTi Buildings Project supports the SBTi in achieving its mission and vision by providing science-based target-setting resources for a sector with significant climate impact. By setting emission reduction targets in line with this goal and defining appropriate decarbonization strategies, companies in the building sector can help accelerate the transformation to a net-zero economy, and prevent the worst effects of climate change.

## DEVELOPMENT PROCESS OF THE SBTi BUILDINGS CRITERIA V1.0

The SBTi initiated the SBTi Buildings Project in October 2021. The researching and drafting phases of the project were completed between December 2021 and May 2023. A Buildings Expert Advisory Group (Buildings EAG) was formed to provide advice to inform the development of the decarbonization pathways, target-setting criteria, guidance and a tool. Please find the composition of the EAG on the [SBTi buildings page](#).

Once the drafting phase was completed, the deliverables of the Buildings Project were approved by the internal review team on April 30, 2023 and a public consultation was initiated between May 16, 2023 and July 16, 2023. PwC collaborated with SBTi to structure the public consultation questionnaire and to analyze the feedback received.

The public consultation was followed by further research and drafting alongside advisory meetings with the Buildings EAG. Once the revision phase was completed, the drafts for pilot testing were approved by the internal review team on October 25, 2023. From 21 November 2023 to 26 March 2024 the Science Based Targets initiative (SBTi) held the Pilot Test phase for the SBTi Buildings Criteria V1.0.

This Basis for Conclusions report received non-objection agreement to publish by the SBTi Technical Council on 26 July 2024.

### **Changes in document names**

As part of the adoption of the Standard Operating Procedure (SOP), the technical resources have undergone structural changes, such as the separation of the criteria and recommendations from the informative elements of the resources. As part of these changes, the documents have been renamed to align with these structural changes and the SOP.

The drafts for public consultation and pilot testing consisted of the following documents:

- SBTi Buildings Target-Setting Guidance (Draft for Public Consultation / Pilot Testing).
  - Criteria and recommendations.
  - Explanatory guidance for GHG accounting and target setting.
- SBTi Buildings Worked Examples (Draft for Public Consultation / Pilot Testing).
- SBTi Buildings Target-Setting Tool (Draft for Public Consultation / Pilot Testing).
- A 1.5°C Pathway for the Global Buildings Sector's Embodied Emissions: Pathway Development Description (Draft).

After the pilot testing, the criteria and recommendations were separated from the informative elements of the SBTi Buildings Guidance. The informative elements, including the GHG accounting guidance and worked examples were merged into one explanatory document. As part of these changes, the documents have been also renamed. Final resources thus consist of the following documents:

- SBTi Buildings Criteria V1.0.
  - Criteria and recommendations.
- SBTi Buildings Explanatory Document V1.0.
  - Explanatory guidance for GHG accounting and target setting.
  - Worked examples.
- SBTi Buildings Target-Setting Tool V1.0.
- A 1.5°C Pathway for the Global Buildings Sector's Embodied Emissions: Pathway Development Description.

For clarity, references to public consultation and pilot testing drafts use the old naming, and only the references to the final resources use the new document names. This is relevant for example in the summaries of the public consultation and pilot testing feedback reports.

## Scope of external consultations

Several outreach activities were carried out during the development of the SBTi Buildings Criteria V1.0, including webinars, bilateral engagement and a public consultation survey. Feedback was also received through emails to the Buildings Project Team.

### Public consultation

The SBTi Buildings Guidance Draft for Public Consultation was open for public comment from May 16, 2023 to July 16, 2023. The objective of the public consultation was to inform the development of robust, clear, and practical criteria and guidance to support building sector companies in their decarbonization journey.

The public consultation period was launched with two identical webinars to facilitate different time zones on November 21, 2023 at 9:00 am CET/4:00 pm HKT and 10:00 am ET/4:00 pm CET. In total, 1,503 individuals registered and 803 attended the webinars.



## Pilot testing

From November 21, 2023 to March 26, 2024 the Science Based Targets initiative (SBTi) held the Pilot Test phase for the SBTi Buildings Guidance Draft for Pilot Testing. The key objectives of the pilot testing were:

- Gather feedback on the clarity, robustness and practicality of the target setting tool, criteria and guidance.
- Identify key challenges for the adoption and implementation of the criteria and guidance across geographies and user types.

The open call to participate in pilot testing was launched with two identical webinars on November 21, 2023 to facilitate different time zones. In total, 789 individuals registered and 803 attended the webinars across 66 countries and 29 industries.

## Other outreach activities

Several outreach activities were carried out during the development of the SBTi Buildings Criteria V1.0, including public and closed-door webinars with key stakeholders and one-to-one meetings with Buildings EAG members and their stakeholders.

Annexes A and B contain more information about the public consultation and pilot test processes, webinars and feedback received from external stakeholders.

## Overview of the public consultation feedback

Respondents to the public consultation of the SBTi Buildings Guidance Draft for Public Consultation were asked to submit feedback through an online survey. The link to the survey was made available on the [SBTi buildings webpage](#). Some respondents also submitted additional feedback via email to the project team that was also considered as a part of the feedback analysis.

A total of 167 survey responses were received from industry (80%), followed by associations (10%), NGOs (8%), academia (1%) and public sector (1%). Survey respondents were headquartered in Europe (39%), Asia Pacific (34%), North America (24%), Latin America (2%), and Middle East & Africa (1%).

Additionally, 13 stakeholders submitted additional information through separate letters via email.

During the public consultation, the SBTi sought input from stakeholders representing a balance of interests in the subject matter and in the geographic scope to which the standard applies. However, as can be seen in the allocation of responses per stakeholder group, the responses are heavily weighted toward industry respondents. Strong interest from companies and financial institutions on the SBTi Buildings project has been seen throughout the development, including for example number of applications to the pilot testing, and number of participants in webinars that were both organized by the SBTi and by multilateral stakeholders where the SBTi project team presented. Additionally, there was limited

representation from Latin America and Middle East & Africa. In the next revision of these resources, the team will put additional emphasis on receiving more responses from stakeholder groups and geographies that were currently underrepresented.

The public consultation materials are outlined in Annex A.

### Overview of the pilot testing outcomes

In line with the development of the [SOP for Development of SBTi Standards](#), the SBTi decided to conduct a pilot testing phase. This pilot phase helped us to gather valuable feedback and identify key challenges for implementing the criteria and guidance across various regions and user groups.

For pilot testing, the SBTi issued a public call for relevant companies to voluntarily support piloting the implementation of the draft resources. In total 68 applications were received. Applications were assessed using a quantitative rating scale, where readiness of GHG data, ability to deliver targets in the given timeframe, coverage of all intended user types, geographical coverage of assets, coverage of various building typologies were assessed. In the selection, a balanced distribution of HQ locations was targeted.

15 companies were selected to participate in the pilot test, of which 3 were financial institutions and 2 were classified as small or medium-size enterprises, with organizations' headquarters having a regional coverage of Asia, Europe, North America, Oceania, Middle East and North Africa. No applications from corporations headquartered in Sub-Saharan Africa or Latin America were received, therefore these regions were not represented. However, all the participants had regional or global buildings portfolios.

Key outcomes of the pilot testing:

- **14** participants submitted targets for review (93%)
- **6 out of 6** intended user types as defined in the draft guidance were covered (100%)
- **191 out of 644** in-use operational emissions pathways tested (29%)
- **4 out of 4** upfront embodied emissions pathways tested (100%)

**Table.** Countries covered in the pilot test at least once.

	COVERAGE OF COUNTRY-SPECIFIC PATHWAYS IN THE PILOT TESTING BY REGION	
	% OF TOTAL PATHWAYS INCLUDED IN PILOT TESTING	NUMBER OF COUNTRIES INCLUDED IN PILOT TESTING
<b>Americas</b>	75%	3 out of 4
<b>USA cities</b>	87%	13 out of 15
<b>Asia</b>	100%	8 out of 8
<b>Europe</b>	68%	21 out of 31
<b>Oceania</b>	100%	2 out of 2

COVERAGE OF COUNTRY-SPECIFIC PATHWAYS IN THE PILOT TESTING BY REGION		
	% OF TOTAL PATHWAYS INCLUDED IN PILOT TESTING	NUMBER OF COUNTRIES INCLUDED IN PILOT TESTING
<b>Australia climate zones (sub-regions)</b>	33%	2 out of 6
<b>Middle East and North Africa</b>	Only 'Other' pathway available*	
<b>Africa</b>	Only 'Other' pathway available*	

\* 'Other' pathway for building types and countries not covered with a SBTi-CRREM pathway has been tested multiple times on different building types in different countries.

**Table.** Building typologies covered at least once in the pilot test.

<b>Residential (any size) - non-EU regions</b>	X
<b>Residential - single family</b>	X
<b>Residential - multi-family</b>	X
<b>Office</b>	X
<b>Retail - High Street</b>	X
<b>Retail - Shopping Mall</b>	X
<b>Retail Warehouse</b>	X
<b>Hotel</b>	X
<b>Distrib. Warehouse - COLD</b>	X
<b>Distrib. Warehouse - WARM</b>	X
<b>Healthcare</b>	X
<b>Leisure/Lodging</b>	X

The pilot testing materials are outlined in Annex A.

### Methodology for feedback analysis

This section outlines the approach applied to analyze stakeholder feedback received during the development of the SBTi Buildings Criteria V1.0. All feedback received during the development of the SBTi Buildings Criteria V1.0 through the public consultation and pilot testing surveys are collated into separate summary documents.

The Project Team with support of external consultants (PwC) led analysis of the feedback received during public consultation. All feedback received through the public consultation survey or in written form through email was considered in the analysis. All submitted feedback underwent an initial review. Any comments identified in the initial review that were repeated in multiple submissions, were grouped and addressed together as one analysis stream. All remaining comments were considered in the analysis.

Feedback was categorized by topic. Where one comment contained feedback for multiple topics, these were split into distinct rows to aid categorization. Similar feedback for different participants were merged so that each topic was addressed only once. In total, there were 74 different feedback categories analyzed to inform the development of the SBTi Buildings Criteria V1.0.

For stakeholders that provided feedback to the public consultation, it was not compulsory to respond to all feedback questions. Stakeholders were provided with an option to choose the extent of the survey:

- Short survey with an opportunity to provide overall feedback.
- Survey with questions relevant to corporations only.
- Survey with questions relevant to both corporations and financial institutions.

For stakeholders that submitted feedback via means other than the public consultation, the content and scope of the feedback was at their discretion. Qualitative feedback was received and analyzed by thematic coding using the feedback categories created in the analysis of survey responses.

Key issues raised in the feedback were:

- Mandatory location-based accounting.
- No new fossil fuel equipment.
- Energy efficiency targets.
- Embodied emissions pathways and general data challenges.
- Requirements for architecture and engineering companies.
- Confusion between CRREM and the SBTi.

Aside from these topics, there was overall support for the choice of the pathways and the new criteria. Additionally, relevant comments were made about improving clarity: both structural and conceptual.

At the end of the pilot testing process, companies were given the opportunity to answer a final feedback survey. Feedback was also received by SBTi validation services on the feasibility of validating companies against the criteria.

Before publishing the Drafts for Public Consultation and Pilot Testing, an internal review panel consisting of technical experts from the SBTi technical department and validation experts from the SBTi validation services conducted a review of all the target-setting resources, including target-setting criteria, guidance, tool, worked examples, and developed

pathways. The target-setting tool and all pathways included in the target-setting tool were tested with example data of an imaginary buildings portfolio.

Inputs from pilot testing informed adjustments made to the draft. Adjustments made to the drafts were classified as major and minor:

- Major changes are changes that have affected the application or ambition of a criterion.
- Minor changes are changes that aim to increase, enhance, and add clarity of a criterion or recommendation, or that correct a typo or an error in the resources.

## SIGNIFICANT ISSUES AND SBTi RESPONSES

This section covers the main issues and concerns raised during the development of the SBTi Buildings Criteria V1.0 and how they have been addressed by the SBTi. It summarizes the significant issues raised through various feedback channels, specifically through the public consultation process, EAG meetings, webinars, workshops, emails, etc. For the purposes of this Basis for Conclusions report, issues have been deemed significant if feedback and concerns were repeatedly raised during the feedback process or topics have raised risks that need to be addressed.

Significant issues presented in this section cover technical aspects of the criteria, guidance, including pathways, methods, and target-setting criteria.

Minor editorial comments were reviewed and directly incorporated into the SBTi Buildings Criteria V1.0 and are therefore excluded from this report.

1. GHG ACCOUNTING APPROACH FOR SCOPE 2	
Description	In the Draft for Public Consultation, a mandatory use of location-based approach was proposed (Buildings-C11 in the Draft for Public Consultation). The reasoning for this requirement was to keep accounting consistent in the whole building approach when combining scopes, to put emphasis on buildings' performance, and to avoid net zero claims by procuring renewable energy from sources that may not have the influence on real world emissions that they claim to have.
Summary of feedback received	<p>Public consultation:</p> <ul style="list-style-type: none"> <li>• Positive: 29%, neutral 10%, negative 61% when asked if the respondent agreed with the criteria that requires the location-based method only to be used for target setting.</li> <li>• Main feedback against: mandatory use of location-based method limits mitigation options to energy efficiency and relocation of activities to greener grids, requirement makes the sector criteria stricter than the general SBTi framework is, criteria could disincentivize procurement of renewable energy,</li> </ul>

1. GHG ACCOUNTING APPROACH FOR SCOPE 2	
	<p>criteria was seen as a risk of not treating all organizations and regions equally,</p> <ul style="list-style-type: none"> <li>• Main feedback in favor: some respondents supported the approach but suggested finding solutions that would combine both approaches, e.g. by including additional target for renewable energy and/or developing additional criteria for renewable energy products that can be procured.</li> </ul>
Changes (if any) implemented in draft for approval	<ul style="list-style-type: none"> <li>• The requirement has been changed to a recommendation to use the location-based accounting when setting an in-use operational target (Buildings-R1).</li> <li>• Additionally a new requirement (Buildings-C13 in the final criteria) has been introduced: companies setting targets with the criteria may use either location- or market-based method for their target setting, but they shall disclose their buildings-related emissions using both methods. This is an addition to the dual reporting in the GHG Protocol, as companies may also have emissions not related to buildings in their scope 2.</li> </ul>
Rationale	<ul style="list-style-type: none"> <li>• While the benefits of using the location-based accounting method in the buildings sector have not changed, the requirement to use location-based accounting has different consequences in different regions due to strong dependence on the grid decarbonization. The requirement is also deviation from the general SBTi criteria and sector criteria and standards.</li> </ul>

2. NO NEW FOSSIL FUEL EQUIPMENT COMMITMENT	
Description	<p>Companies required to use the SBTi Buildings Criteria v1 to set targets must publicly commit to install no new fossil fuel equipment. This commitment is focused on fossil fuel systems that are used in buildings for space heating, cooking, power generation, and hot water in buildings. It applies to both existing and new buildings.</p> <p>Emergency and back-up systems, such as those used by the healthcare sector, or specific uses in other sectors where required for regulatory reasons or other local restrictions as critical, are exempt from this commitment.</p> <p>This commitment means that when the current fossil fuel installations in the buildings reach the end of their lifetime, they would not be renewed but instead substituted with technologies that do not demand fossil fuels.</p> <p>The commitment is not validated by the SBTi but is disclosed together with the targets on the SBTi webpage and companies must communicate it together with the target.</p>

## 2. NO NEW FOSSIL FUEL EQUIPMENT COMMITMENT

<p>Summary of feedback received</p>	<p>Issues raised in public consultation:</p> <ul style="list-style-type: none"> <li>● Positive: 35%, neutral 11%, negative 54% when asked if the respondent agreed with the proposed commitment as an additional mandatory requirement for all criteria users submitting targets for SBTi validation: no new fossil fuel installations in users’ buildings portfolios from 2025.</li> <li>● Main feedback against: applicability of the criteria in different regions, the timeline by 2025 was perceived to be too early as the consultation was held in mid-2023, limited influence over equipment in buildings that are not owned by the target-setting entity (such as property managers).</li> <li>● Main feedback in favor highlighted that the sector already has technologies to replace many of these equipment, and that the commitment is aligned with the zero- ready building definition by the IEA.</li> <li>● Some misunderstandings were also seen in the feedback, as it was often interpreted as a phase out of all equipment on site by 2025.</li> </ul> <p>Issues raised in pilot testing:</p> <ul style="list-style-type: none"> <li>● The commitment's scope and application to existing buildings.</li> <li>● Clarification on the exemptions (e.g. Emergency and back-up systems).</li> <li>● The organizational and operational boundaries: operational vs. financial control.</li> </ul>
<p>Changes (if any) implemented in draft for approval</p>	<p>The requirement (Buildings-C14 in the final criteria), was updated to include clarifications:</p> <ul style="list-style-type: none"> <li>● Extending the timeline from 2025 (as proposed in the Draft for Public Consultation) to 2030 at the latest,</li> <li>● More nuance to the operational boundaries by including only fossil fuel equipment that are owned or financially controlled by the company,</li> <li>● More details about the exemptions and an advice to explain more details as a part of their commitment disclosure,</li> <li>● Additional commitment wording to entities that do not have fossil fuel equipment that are owned or controlled by them,</li> <li>● Additional guidance was added to the informative section of the document.</li> </ul> <p>Buildings-C14 in the final criteria states:</p> <p><i>“Companies required to use the SBTi Buildings Criteria v1 to set targets shall publicly commit to install no new fossil fuel equipment that are owned or financially controlled by the company in their buildings portfolios from 2030 at the latest.”</i></p>
<p>Rationale</p>	<p>Previous wording was perceived to be vague and a lot of clarifications were requested regarding the requirement. Additional wording “owned</p>

## 2. NO NEW FOSSIL FUEL EQUIPMENT COMMITMENT

	<p>or financial controlled” was introduced to have clearer boundaries to the commitment, acknowledging the limited influence on selection of equipment that is not owned or controlled financially. Additionally the timeline was extended from the initial 2025 (proposed in the Draft for Public Consultation) to “from 2030 at the latest” to indicate that companies can commit to an earlier year (2027, 2028, etc), which may be of an interest in certain geographies. The timeline was also adjusted to remove “from five years of target submission”, which is obsolete as the resources are expected to be published mid-2024.</p>
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## 3. PROPERTY MANAGERS

Description	<p>Property managers have an important role in the buildings sector and are classified as one of the intended users of the criteria. Their business model is however different from other intended users of the final criteria, and therefore some caveat to the methods and criteria is required.</p>
Summary of feedback received	<p>Issues raised in public consultation:</p> <ul style="list-style-type: none"> <li>● While the public consultation survey did not have a specific question for property managers, in the written feedback property managers have raised questions and possible challenges regarding the applicability of the criteria.</li> <li>● Key issues highlighted in the written feedback relate to no new fossil fuel commitment, the whole building approach, and the required SDA targets on in-use operational emissions under management.</li> </ul> <p>Issues raised in pilot testing:</p> <ul style="list-style-type: none"> <li>● Property managers have little control over buildings because they are bound by the contract and agreed-upon services between themselves and the customer.</li> <li>● Challenges with accounting whole building approach: the scope of services and the share of a building under management vary, which causes challenges in gathering the required data. In some cases, such as when a property manager is providing services to a tenant, some buildings-related emissions may fall outside the scope 3 minimum boundary.</li> <li>● Further clarification needed in defining the boundaries of the no new fossil fuel commitment.</li> </ul>
Changes (if any) implemented in draft for approval	<ul style="list-style-type: none"> <li>● Permitted target-setting methods (Buildings-C6 in the final criteria) for property managers modified, allowing property managers to use also the sector-agnostic methods with 1.5C ambition.</li> <li>● More nuance was added to how the whole building approach can be applied for property managers in cases where the</li> </ul>



3. PROPERTY MANAGERS	
	<p>building is only partially under management (section 6.1 in the final criteria),</p> <ul style="list-style-type: none"> <li>The no new fossil fuel equipment commitment (Buildings-C14) was updated to include clarifications on commitment boundaries. The table for no new fossil fuel commitment in this document provides more details.</li> </ul>
Rationale	<p>Property managers have an important role in the buildings sector, but their influence over buildings' performance is mostly indirect. Property managers are tied to the contract and agreed services between themselves and the client (can be either a building owner or a tenant) as well as contracts between the landlord and the tenant. While property managers may have operational control over the use of equipment and technologies in buildings, they may not have influence over decisions on retrofitting, renovations and shifts in building systems.</p> <p>Additionally the whole building approach causes a GHG accounting challenge especially for property managers to whom buildings-related emissions are likely to be in scope 3 or even in the scope 3 of the company in the value chain (e.g. the client is a building owner that leases space to tenants, thus having part of the buildings-related emissions in scope 3). The challenge is that the minimum boundary of scope 3 categories include only scope 1 and 2 emissions of the company in the value chain, causing a situation where not all buildings-related emissions would be captured.</p>

4. ARCHITECTURE AND ENGINEERING COMPANIES	
Description	<p>Architecture and engineering companies are important actors in the buildings' value chain and are crucial in the decarbonization of the sector. Architecture and engineering companies have been explored as an intended user category as a part of the SBTi Buildings project.</p>
Summary of feedback received	<p>Public consultation:</p> <ul style="list-style-type: none"> <li>Positive: 47%, neutral 17%, negative 37% when asked if architecture and engineering firms should account for the lifetime in-use operational emissions resulting from the use of their designed buildings in their emissions inventory under scope 3 category 11 (Use of Sold Products).</li> <li>Main feedback against: Category 11 boundary only includes energy from the buildings use, while architecture and engineering companies have particular influence over embodied emissions over a building's lifetime, project scopes for architecture and engineering companies vary both between companies and projects, challenges with reporting embodied emissions as a part of corporate GHG accounting were asked to be solved first.</li> </ul>

4. ARCHITECTURE AND ENGINEERING COMPANIES	
	<ul style="list-style-type: none"> <li>Main feedback in favour: Many respondents agreed that architecture and engineering companies need to have accountability over designs but the lack of accounting guidance regarding the incorporation of embodied emissions.</li> </ul>
Changes (if any) implemented in draft for approval	The SBTi Buildings Criteria V1.0 does not provide target-setting methodologies for architecture and engineering companies. These companies are encouraged to set targets using the SBTi Corporate Net Zero Standard.
Rationale	The new SDA-based methodologies developed in the SBTi Buildings project are not applicable to architecture and engineering companies, and more exploration for accounting methodologies for architecture and engineering would be needed before setting requirements in the SBTi framework.

5. THRESHOLDS FOR IDENTIFYING THE COMPANIES IN THE SCOPE OF THE CRITERIA	
Description	Many companies, irrespective if they define themselves as a buildings sector company, have buildings-related emissions and can be classified as one of the user types of the criteria. This is especially the case for the intended user category owner-occupier.
Summary of feedback received	<p>Public consultation:</p> <ul style="list-style-type: none"> <li>The Draft for Public Consultation had the following user categories in the scope, and did not include a quantitative metric: owner-lessor, owner-occupier, tenant, developer, architecture, engineering and construction company, property manager, financial institution.</li> </ul> <p>Pilot testing:</p> <ul style="list-style-type: none"> <li>Lack of clarity on how criteria and recommendations apply to different user groups within the Buildings sector.</li> <li>Thresholds developed during the revision phase were so detailed that they covered nearly all companies with physical office, retail, logistics and other space needed for operations.</li> </ul>
Changes (if any) implemented in draft for approval	<p>Separate thresholds for in-use operational (Buildings-C1) and upfront embodied emissions (Buildings-C2).</p> <p>Significant changes in thresholds determining the companies in the criteria scope were made. Previously, Buildings-C1 included different thresholds to capture as many companies into the scope as possible. Thresholds included a relative threshold (% of GHG emissions inventory), an absolute threshold (tCO<sub>2</sub>e) and a floor area related threshold (m<sup>2</sup>). Only the relative 20% of the total GHG emissions inventory threshold is kept.</p>

## 5. THRESHOLDS FOR IDENTIFYING THE COMPANIES IN THE SCOPE OF THE CRITERIA

Rationale	<p>The change to separate thresholds for in-use operational and upfront embodied emissions aims to increase clarity when a company needs to set targets for different emission types.</p> <p>Thresholds defined in the draft for pilot testing were capturing more companies than intended, thus causing a situation where it was expected that nearly all global companies would fall into the scope and would thus be subject to the criteria.</p>
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## 6. WHOLE BUILDING APPROACH (ESPECIALLY SCOPE 3)

Description	Companies must adhere to the whole building approach if they set an SDA target for in-use operational emissions. The whole building approach means that emissions arising from operational energy consumption from both landlord and tenant-controlled spaces must be included within target boundaries, regardless of their chosen GHG boundary consolidation approach and consequent allocation of emissions across their inventory.
Summary of feedback received	<p>Public consultation:</p> <ul style="list-style-type: none"> <li>● Positive: 57%, neutral 20%, negative 23% when asked whether the respondent agreed with the use of the whole building approach.</li> <li>● Feedback against: Legal, contractual, and/or practical challenges in acquiring data and influencing tenant consumption and energy supply, some challenges were also identified with property managers and building occupier's limited influence on sometimes only parts of a building.</li> <li>● Feedback in favor: the method was perceived to be important in harmonizing the operational emissions data from buildings, and noted that different practices are causing challenges to understand and evaluate company reporting.</li> </ul>
Changes (if any) implemented in draft for approval	A small caveat was added for property managers, to whom the whole building approach is required only if they decided to set an SDA target for operational emissions.
Rationale	The in-use operational pathways are developed to address operational emissions from entire buildings.

## 7. THRESHOLDS DEFINING A SIGNIFICANT CHANGE THAT TRIGGERS A RECALCULATION

Description	Companies that have significant changes in growth projections and other assumptions that were used in developing the target, as well as the business or data and emissions factors used in the inventory process are recommended to recalculate their validated
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## 7. THRESHOLDS DEFINING A SIGNIFICANT CHANGE THAT TRIGGERS A RECALCULATION

	<p>science-based targets, as needed, to reflect significant changes that would compromise the relevance and consistency of the targets.</p> <p>Many real estate companies have challenges with the general SBTi recalculation rules, as frequent selling and/or buying buildings, which is standard part of business operations for many real estate companies, easily trigger the recalculation requirement.</p>
Summary of feedback received	<p>Pilot Testing:</p> <ul style="list-style-type: none"> <li>Significance thresholds for buildings portfolio changes (5% in the Draft for Pilot Testing) are tight for real wstate entities, due to the frequent selling and/or buying of buildings.</li> </ul>
Changes (if any) implemented in draft for approval	<p>Significance threshold for changes in the portfolio increased from 5% to 10% (Section 7.5.2 in the final version).</p>
Rationale	<p>With the changes provided, the aim is to accommodate the nature of real estate business better. While the 10% threshold may still cause challenges especially for smaller portfolios, it provides some necessary flexibility in the portfolio composition for larger portfolios. Companies that meet the thresholds in Buildings-C1 and/or Buildings-C2, have a significant amount of emissions coming from buildings and if the portfolio composition significantly changes, recalculation of targets seems inevitable. As a monitoring and evaluation process of the criteria, the team will follow and assess the applicability of the thresholds for recalculation in particular.</p>

## 8. FIXED INTENSITY TARGETS

Description	<p>Companies and FIs with a high level of turnover in their portfolios may therefore find portfolio-level target-setting methods challenging. To account for these challenges, the buildings sector criteria allow intended users whose business model results in a high turnover of assets, subject to the conditions outlined in the criteria and guidance document in section 7.5.3, to set fixed intensity targets aligned to sectoral decarbonization pathways for in-use operational emissions. This method requires companies to meet a specific portfolio emission intensity performance in the target year and exempts users from target recalculation in the intervening period.</p>
Summary of feedback received	<p>Public consultation:</p> <ul style="list-style-type: none"> <li>Positive: 44%, neutral 48%, negative 9% when asked if the respondent agreed with the inclusion of special considerations for portfolios with high turnover and found them appropriate and useful for target setting.</li> </ul>

8. FIXED INTENSITY TARGETS	
	<ul style="list-style-type: none"> <li>● Feedback in favor: Respondents in favor of the approach agreed with the challenges in accounting and target setting that entities with high portfolio turnover.</li> <li>● Feedback against: Concerns if the approach reduces the ambition of targets, if the method does not reward retrofitting poorly performing buildings, the threshold for companies to comply with this method was considered to be too tight.</li> </ul> <p>The following issues were identified in pilot testing:</p> <ul style="list-style-type: none"> <li>● Limited guidance on how annual intensities should be calculated (when owned less than 1 year).</li> <li>● There was no target wording for this method.</li> <li>● Requirement to meet the curve annually is not in line with how other target setting methods work in the SBTi framework and question marks on how targets would be validated.</li> <li>● The 5-year target date was added to bring the new requirement closer to the original intention of requiring annually staying below the pathway (which in itself was intended to incentivise improvements in all held buildings, rather than a simple divestment of poor-performing buildings as the target date approached).</li> </ul>
Changes (if any) implemented in draft for approval	<p>Companies are not required to meet the pathway within the target period but only in the target year. Target period is changed to be fixed 5 years (following the SBTi recalculation rule C26).</p> <p>Also the following changes have been made:</p> <ul style="list-style-type: none"> <li>● Added informative guidance on how to calculate an aggregated target.</li> <li>● Added target wording.</li> <li>● Added informative guidance and a requirement on estimating annual intensity.</li> <li>● Removed the applicability to embodied emissions because the whole section has targeted operational emissions.</li> </ul>
Rationale	<p>The option to set fixed intensity targets aims to support the real estate companies with substantial portfolio turnover to set targets without constantly triggering recalculation. The threshold for determining if a company can set targets with the method is intended to address especially companies with a reduced ability to effect building improvements due to short hold periods. The changes made are essential for the applicability of the method.</p>

9. EMBODIED EMISSIONS PATHWAYS	
Description	<p>As a part of the SBTi Buildings project, the SBTi developed a set of global pathways for buildings' embodied emissions aligned with 1.5°C, which were opened for consultation and tested in the pilot testing.</p>

## 9. EMBODIED EMISSIONS PATHWAYS

Summary of feedback received	<p>Public consultation:</p> <ul style="list-style-type: none"> <li>• Positive: 35%, neutral 22%, negative 41% when asked if the respondent agreed with the choice of data and methodology to develop the upfront embodied emissions pathways.</li> <li>• Feedback against: Some respondents were concerned about the underlying WLCA data used to allocate the budget to different building types due to limited data and strong weight on European buildings data, some criticism against not having WLCA pathways but focusing on stages A1-A5 from a building's life cycle.</li> <li>• Feedback in favor: Several respondents were in favor of the data and methodologies, however, were concerned that the pathways are too steep and reduction rates difficult to achieve in practice. Some respondents agreed with the data and methods, and had similar results in their own work.</li> <li>• Both respondents in favor and against the choice of data and methodology highlighted the need for more granular pathways, including a regional approach and more building types covered. Additionally, a pathway for retrofits was requested.</li> </ul>
Changes (if any) implemented in draft for approval	Pathways were provided in the SBTi Buildings Criteria V1.0, but their use was changed from mandatory to optional. Companies that are required to set embodied emissions targets may also do it with the cross-sector absolute contraction method with 1.5C ambition.
Rationale	The included set of pathways is the first attempt to develop global 1.5C aligned pathways for embodied emissions. Accounting practices for embodied emissions are still widely developing, and therefore methods, criteria, and guidance to embodied emissions targets are likely to evolve by the next revision of the criteria.

## 10. 29% OF IN-USE OPERATIONAL EMISSIONS PATHWAYS PILOT TESTED

Description	As a part of the SBTi Buildings project, the SBTi developed a set of global pathways for buildings' embodied emissions aligned with 1.5°C, which were opened for consultation and tested in the pilot testing.
Summary of feedback received	No feedback received by external resources.
Changes (if any) implemented in draft for approval	<p>The following qualifier added to the SBTi Buildings Criteria V1.0 as part of the criterion Buildings-B6:</p> <p><i>29% of SBTi-CRREM in-use operational pathways were tested using real-world data via pilot testing by volunteer companies. All the pathways included in the SBTi target-setting tool have gone through a public consultation phase organized by CRREM and have been reviewed by the SBTi in 2022. CRREM-SBTi in-use operational</i></p>

10. 29% OF IN-USE OPERATIONAL EMISSIONS PATHWAYS PILOT TESTED

	<p><i>pathways were published on <a href="#">CRREM's webpage</a> in January 2023 and have been used for climate risk assessment purposes since then. The SBTi will monitor efficacy of the untested pathways during the validation process, which may cause slight delays or requests for additional information. In the event of the SBTi Buildings Target-Setting Tool giving errors, outputting unexpected or incorrect values such as negative reduction rates, please visit the <a href="#">SBTi buildings page</a> for possible updates. If needed, contact <a href="mailto:buildings@sciencebasedtargets.org">buildings@sciencebasedtargets.org</a> providing as many details as possible including any tools used.</i></p>
<p>Rationale</p>	<p>The project team did not identify any issues with the pathways when applying the relevant target-setting methods to these pathways with real company data. All pathways were also tested as a part of internal review with example data without any issues or errors.</p> <p>CRREM-SBTi in-use operational pathways have been developed in collaboration with CRREM, which has provided decarbonization pathways for the real estate industry since 2017. The SBTi-CRREM pathways have been publicly available since January 2023, and companies and financial institutions have used the pathways to assess their portfolios' and assets' climate performance. The pathways are also in commercial use by licensed global service providers such as MSCI, JLL, PwC, and McKinsey (full list of partners on <a href="#">CRREM's webpage</a>). Therefore, as the pilot testing with the SBTi methods did not expose any issues, the project team is confident with the use of the in-use operational pathways. However, to avoid any issues during target setting and validation, a statement outlining the pilot testing coverage was added to the criteria and guidance document under Buildings-B6. The same statement will be also added to the final Criteria Assessment Indicators document prepared by the Target Validation Team.</p>

# ANNEX A: PUBLIC CONSULTATION AND PILOT TEST DOCUMENTS AND QUESTIONNAIRES

## Public Consultation

The following draft target-setting resources were published on the [SBTi buildings webpage](#) for Public Consultation:

- SBTi Buildings Guidance Draft for Public Consultation.
- SBTi Buildings Target-Setting Tool Draft for Public Consultation.
- SBTi Buildings Worked Examples Draft for Public Consultation.
- A 1.5°C Pathway for the Global Buildings Sector's Embodied Emissions: Pathway Development Description Draft for Public Consultation.

Old drafts have been removed from the webpage to avoid confusion.

Other materials:

- [Summary of the SBTi Buildings Guidance Public Consultation Feedback](#) on SBTi buildings webpage.
- [Public consultation webinar recording](#) on YouTube.
- [Public consultation webinar slides](#) on SBTi buildings webpage.

Internal materials (for information):

- SBTi Buildings Guidance Public Consultation survey questions.
- SBTi Buildings Public Consultation Feedback Survey (Responses).
- Webinar reports.
- Webinar recording.
- Webinar documents (polls, Q&A tracker, agenda).
- Webinar final presentation.

## Pilot Testing

The following draft target-setting resources were published on the [SBTi buildings webpage](#) for pilot testing:

- SBTi Buildings Guidance Draft for Pilot Testing.
- SBTi Buildings Target-Setting Tool Draft for Pilot Testing.
- SBTi Buildings Worked Examples Draft for Pilot Testing.
- A 1.5°C Pathway for the Global Buildings Sector's Embodied Emissions: Pathway Development Description Draft.



Other materials:

- [Summary of the SBTi Buildings Guidance Pilot Test Feedback](#) on SBTi buildings page.
- [Pilot testing webinar recording](#) on YouTube.
- [Pilot test webinar slides](#) on SBTi buildings webpage.

Old drafts have been removed from the webpage to avoid confusion.

Internal materials (for information):

- Pilot testing resources in Google Drive.
- SBTi Buildings Pilot test report.
- Pilot test participant selection.
- Pilot test webinar reports.
- Pilot test webinar recording.
- Pilot test webinar documents (polls, Q&A tracker, agenda).
- Webinar presentation.
- Q&A session slides and minutes, including closure call.
- Buildings Pilot Test Participants Final Survey.
- Buildings Pilot Test Participants Final Survey (Responses).

## ANNEX B: PARTICIPATION IN WEBINARS AND EVENTS

### Public consultation launch webinars

- [Public consultation webinar recording on YouTube.](#)

**Table.** Public consultation webinar attendee information.

PUBLIC CONSULTATION WEBINARS	# REGISTERED	# ATTENDED	ATTENDANCE RATE	# QUESTIONS ASKED
Session 1: May 16, 2023 at 10:00 am (CET) / 5:00 pm (HKT)	825	432	52%	123
Session 2: May 16, 2023 at 10:00 am (ET) / 4:00 pm (CET)	678	371	55%	143
<b>Total</b>	<b>1,503</b>	<b>803</b>	<b>54%</b>	<b>266</b>

**Table.** Public consultation webinar poll responses.

<b>1. Where is your organization based?</b>	
Africa	1%
Asia	12%
Europe	66%
North America	17%
South America	1%
Oceania	3%
Total respondents (n=614, incl. both sessions)	100%
<b>2. What type of organization do you represent?</b>	
Academia	2%
Company	36%
Consulting firm	40%
Financial Institution	7%
Government	2%
Industry association	3%
NGO	7%
Other	4%
Total respondents (n=565, incl. both sessions)	100%
<b>3. What is the status of your company with respect to the SBTi?</b>	
My organization has a validated SBT	30%
My organization has committed to set an SBT	15%

My organization is considering committing to set an SBT	28%
My organization is not interested in setting an SBT	3%
N/A because I am not representing a company	24%
Total respondents (n=397 incl. both sessions)	100%
<b>4. What is the area you are most interested in with regard to the SBTi Buildings Guidance?</b>	
Learn how SBTs will encourage industry to decarbonize	15%
Learn what the target setting process entails	16%
Other	2%
Understanding how SBT setting works for the buildings sector	67%
Total respondents (n. 473 incl. both sessions)	100%

### Pilot Testing

- [Webinar recording on YouTube.](#)

**Table.** Pilot test webinar attendee information.

WEBINARS	# REGISTERED	# ATTENDED	ATTENDANCE RATE	# QUESTIONS ASKED
Session 1: November 21, 2023 at 9:00 am (CET) / 4:00 pm (HKT)	647	381	59%	150
Session 2: November 21, 2023 at 10:00 am (ET) / 4:00 pm (CET)	713	408	57%	130
<b>Total</b>	<b>1360</b>	<b>789</b>	<b>58%</b>	<b>280</b>

**Table.** Pilot test webinar poll responses.

<b>1.What type of organization do you represent?</b>	
Academia	2%
Company	37%
Consulting firm	43%
Financial institution	7%
Government	1%
Industry association	2%
NGO	4%
Other	4%
Total respondents (n=486, incl. both sessions)	100%
<b>2.Where is your organization based?</b>	
Africa	1%
Asia	16%
Europe	62%

North America	17%
South America	2%
Oceania	2%
Total respondents (n=632, incl. both sessions)	100%
<b>3. What is the status of your company with respect to the SBTi?</b>	
My organization has a validated SBT	31%
My organization has committed to set an SBT	20%
My organization is considering committing to set a SBT	25%
My organization is not interested in setting an SBT	3%
N/A because I am not representing a company	20%
Total respondents (n=459, incl. both sessions)	100%
<b>4. What is the area you are most interested in with regard to the SBTi Buildings Guidance?</b>	
Learn how SBTs will encourage the sector to decarbonize	17%
Learn what the target-setting process entails	16%
Other	3%
Understanding how SBT setting works for the buildings sector	65%
Total respondents (n=429, incl. both sessions)	100%



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

