1.5°C SCIENCE BASED TARGET SETTING IN THE CEMENT SECTOR

GUIDANCE LAUNCH WEBINAR

21 September 2022
VIDEO-CONFERENCE GUIDELINES

- This is a **zoom webinar**. Your camera and microphone are automatically muted.
- Participants can **send questions via the Q&A button**.
- **Slides from this webinar will be shared** after this call.
- Please note that this webinar will be **recorded** for the benefit of those who cannot attend.
- English event with **simultaneous interpretation**.
AGENDA

1. Welcome and introduction - Zniko Nhlapho/Lígia Ramos - 5 mins
2. Introduction to the SBTi - Alberto Carrillo Pineda - 10 mins
3. The Cement Science Based Target Setting Guidance - Karl Downey - 20 mins
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INTRODUCTION TO THE SBTi
What is the Science Based Targets initiative?

The Science Based Targets initiative (SBTi) is a global body enabling businesses and financial institutions to set ambitious emissions reductions targets in line with the latest climate science.
INTRODUCTION TO THE SBTi

What we do?

Develop standards
We develop standards, guidance, tools and resources to support the adoption and implementation of science-based climate targets in the corporate and financial sectors.

Drive adoption
Through an extensive network of partners, we drive the adoption of science-based targets amongst the most climate-relevant companies in key sectors and regions.

Independent assessment
We provide independent assessment of targets against the SBTi criteria following transparent and publicly available protocols and assess progress against targets.

Advocacy
We engage with key actors and initiatives to drive alignment, raise ambition and embed the concept of science-based target setting in key parts of the climate action ecosystem.
INTRODUCTION TO THE SBTi
Our target setting framework: The SBTi Net-Zero Standard

1. To set near-term science-based targets:
   5-10 year emission reduction targets in line with 1.5°C pathways*

2. To set long-term science-based targets:
   Target to reduce emissions to a residual level in line with 1.5°C scenarios by no later than 2050

3. Beyond value chain mitigation:
   In the transition to net-zero, companies should take action to mitigate emissions beyond their value chains. For example, purchasing high-quality, jurisdictional REDD+ credits or investing in direct air capture (DAC) and geologic storage

4. Neutralization of residual emissions:
   GHGs released into the atmosphere when the company has achieved their long-term SBT must be counterbalanced through the permanent removal and storage of carbon from the atmosphere

*Note: it is still possible to set a near-term SBT only, without a long-term target

Cement Guidance launch webinar - 21 September 2022
INTRODUCTION TO THE SBTi
Our approach to maximise impact and accountability

Companies are expected to re-validate their targets every five years to reflect changes in the underlying assumptions of the target, latest science, latest criteria and others.

Target re-validation (every 5 years)

- Commitment to set a net-zero targets
- Target modelling
- Target validation
- Target announcement
- Target implementation
- Tracking progress & disclosure

Validation to ensure target integrity, in line with SBTi NZ standard, including:
- Baseline emissions;
- Target boundary;
- Alignment of decarbonisation plans with 1.5°C scenarios;

Validated targets are listed on the SBTi website

Progress against targets is assessed on an annual basis based on publicly available information (sustainability reports, CDP disclosure);

Progress against targets is reported for each company as part of the SBTi annual progress report
INTRODUCTION TO THE SBTi

Progress to date

To learn more about the progress of the initiative, consult the SBTi Progress Report 2021
Companies with science-based targets are delivering emissions reductions at scale

- Reduced emissions by **29%** between 2015-2020
- **1.5B tonnes of annual CO$_2$e** emissions covered by the SBTi
- **$38trn** of global market capitalization
- **70 countries and 15 industries**

# SBTi UP COMING WORK

<table>
<thead>
<tr>
<th>Cross-sector Standards</th>
<th>Cross-sector Guidance</th>
<th>Energy</th>
<th>Transport</th>
<th>Industry</th>
<th>Land use</th>
<th>Others</th>
<th>FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRV framework</td>
<td>Beyond Value Chain Mitigation</td>
<td>Oil &amp; Gas</td>
<td>Shipping</td>
<td>Iron &amp; Steel Buildings Chemicals</td>
<td>Forestry, Land-use &amp; Agriculture***</td>
<td>Insurance underwriting** Sovereign debt** Securities underwriting**</td>
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<tr>
<td>Financial Sector Net Zero</td>
<td>Scope 3 / Value Chain Alignment</td>
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<td>Corporate Net Zero</td>
<td>Corporate near-term</td>
<td>Power generation</td>
<td>Aviation* Transport*</td>
<td>Cement***</td>
<td>Apparel ICT</td>
<td>Private Equity</td>
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<td>FI near-term</td>
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*Phase 1 completed (WB2C) aligned. Planned update to align to 1.5°C
**Asset class alignment guidance / method
***Guidance approved, pending publication
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COMPANIES TAKING ACTION

Non-exhaustive list of cement/concrete companies committed to set targets or with SBTi- approved targets.

SBTi Cement Guidance launch webinar - 21 September 2022
THE SBTi CEMENT PROJECT

- Cement companies could already set well-below 2°C-aligned targets using the SBTi tools

- The SBTi launched this project in October 2021 to provide resources for companies to set 1.5°C-aligned targets:
  - 1.5°C pathway
  - Detailed target-setting rules
  - Near- and long-term targets

The SBTi would like to recognize Holcim as a key supporter of this project
## CEMENT PROJECT - EXPERT ADVISORY GROUP

<table>
<thead>
<tr>
<th>Company</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Bellona</td>
<td>Holcim Ltd.</td>
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<tr>
<td>Cementos Argos</td>
<td>Institute for European Environmental Policy (IEEP)</td>
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<tr>
<td>Cemex</td>
<td>Potsdam Institute for Climate Impact Research</td>
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<td>CRH plc</td>
<td>RMI</td>
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<td>Dangote Cement Plc</td>
<td>Siam Cement Public Company Limited (SCG)</td>
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<td>European Climate Foundation</td>
<td>UltraTech Cement Limited</td>
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<tr>
<td>Global Cement &amp; Concrete Association (GCCA)</td>
<td>VDZ/ECRA</td>
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<tr>
<td>Grupo Cementos Chihuahua</td>
<td>Votorantim Cimentos</td>
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<tr>
<td>HeidelbergCement</td>
<td>WWF</td>
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DOES CEMENT WARRANT A DEDICATED PATHWAY AND GUIDANCE?

- Cement is a large industrial sector and source of emissions
- Modeling and data on cement is available
- Allocation of carbon budget to sectors aims at a cost-optimal scenario across sectors. The size of the allocation to each sector depends on decarbonisation levers available and their cost
  - Due to its process (geogenic) emissions, the rate cement sector can decarbonise may differ from rate for society as a whole
- **Note:** although the pathway is at the level of cement, concrete production is also covered by the guidance!

### CO₂ emission by sector in IEA Net Zero scenario

IEA (2021), Net Zero by 2050, IEA, Paris
https://www.iea.org/reports/net-zero-by-2050
WHAT THE GUIDANCE COVERS
WHAT CHANGES WITH THIS NEW GUIDANCE?

- This guidance codifies and clarifies criteria already being applied
- It also aligns to the latest SBTi criteria, Net-Zero Standard and 1.5°C ambition
- Definitions remain aligned to industry practice
- There is one major new requirement: cement companies are required to have near-term scope 3 target covering purchased clinker & cement
TARGET-SETTING STEPS

Step 1: Determine target boundaries and approaches

Step 2: Calculate emissions inventory

Step 3: Construct targets

Step 4: Submit targets to the SBTi
TARGET BOUNDARIES

Near-term targets:
- At least 95% of scope 1 and 2 emissions
- If company’s scope 3 emissions are 40% or more of total, a scope 3 target is required
- **New:** For cement companies, a scope 3 near-term target covering purchased cement and clinker is **always required**
- For cement companies, a scope 3 near-term target covering upstream emissions from fuels is **recommended**

Long term (net-zero) targets: scope 1, 2 and 3 shall be included
TARGET-SETTING APPROACHES

Homogeneous sectors:
- Power
- Cement
- Iron & Steel
- Transport (some sectors)
- Buildings

Heterogeneous sectors & other industry

Note: The guidance explains how companies can use each of these methods to cover different activities, and how targets can be combined if desired.
WHAT DOES THE 1.5°C CEMENT PATHWAY LOOK LIKE?

- Sector convergence approach means a company’s target depends on its starting point
- “Forward-looking ambition” criterion means that while target base year can be in the past, ambition must be as high as if calculation were made on the basis of the most recent year
GUIDANCE FOR DIFFERENT TYPES OF COMPANIES

Different types of companies may use the guidance, including use of the cement pathway for their cement (clinker) emissions

Company producing clinker and cement
GUIDANCE FOR DIFFERENT TYPES OF COMPANIES

Different types of companies may use the guidance, including use of the cement pathway for their cement (clinker) emissions.

Company producing clinker, cement and concrete

Note: Cross-sector absolute reduction method must be used to cover emissions not related to clinker production.
GUIDANCE FOR DIFFERENT TYPES OF COMPANIES

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GUIDANCE FOR DIFFERENT TYPES OF COMPANIES

Different types of companies may use the guidance, including use of the cement pathway for their cement (clinker) emissions.

Other potential user of cement pathway, e.g. construction companies

Note: Optimization of cement in concrete and concrete in buildings can be encouraged through absolute targets.
CALCULATING EMISSIONS INVENTORY

- All greenhouse gas accounting for target-setting shall follow the **GHG Protocol** Corporate Accounting and Reporting Standard and Corporate Value Chain (Scope 3) Standard

- Definitions are aligned with the **Cement CO$_2$ Protocol** (v3.0, 2011) and **GCCA GNR**:
  - kg CO$_2$ / t **cementitious product** or cement
  - "Gross" emissions: emissions from waste-derived fuels included
  - **Biogenic** emissions: SBTi bioenergy criteria must be followed; cement industry biogenic emissions can often be justified as carbon neutral
The guidance provides worked examples on how to use the target-setting tools for different types of companies.

### Near-term scope 1 and 2:

**Section 1 input data**

<table>
<thead>
<tr>
<th>Target-setting method</th>
<th>Sectoral Decarbonization Approach</th>
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<tbody>
<tr>
<td>SDA scenario</td>
<td>SBTi 1.5°C</td>
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<tr>
<td>SDA sector</td>
<td>Cement</td>
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<tr>
<td>Base year</td>
<td>2020</td>
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<tr>
<td>Base year</td>
<td>Activity output (t cement)</td>
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<tr>
<td>Base year</td>
<td>Scope 1 emissions (t CO₂e)</td>
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<tr>
<td>Base year</td>
<td>Scope 2 emissions (t CO₂e)</td>
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<td>Target year</td>
<td>2030</td>
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<tr>
<td>Target year</td>
<td>Type of activity projection</td>
</tr>
<tr>
<td>Target year</td>
<td>Activity output (t cement)</td>
</tr>
<tr>
<td>Most recent year (MRY)</td>
<td>2020</td>
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</table>
SUBMITTING TARGETS TO THE SBTi

- **Requirement:** The company shall provide justification of the growth projection used to calculate the target using the SDA.

- **Recommendation:** Cement companies should disclose information such as near-term investments that demonstrate they commit to ensuring breakthrough technology relevant to meeting target ambition is available in the timeframe expected.
**Recommendation:** Companies whose targets are expressed in intensity terms are recommended to publish also the absolute emissions reductions to be achieved by their targets, in order to:

- Demonstrate that intensity targets lead to absolute emissions reductions, and
- Demonstrate progress through the optimization of cement use in concrete and construction
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FAST FACTS ABOUT HOLCIM – BECOMING THE GLOBAL LEADER IN INNOVATIVE AND SUSTAINABLE BUILDING SOLUTIONS

- **Largest footprint**
  - 2,300 operating sites
  - ~70,000 employees
  - 27 billion CHF net sales

- **Net Zero pledge**
  - SBTi validated 2030 targets
  - ESG Rankings from MSCI to Sustainalytics
  - Green Solutions 1/3 of our sales

- **Global R&D organization - 6 hubs worldwide**
  - 300 Scientists in green construction
  - 1,500 Patents in green construction
  - 100+ startups open innovation ecosystem
KEY MILESTONES ACHIEVED AND NEXT STEPS

1. 2019
   VALIDATION OF 2DS TARGET

2. 2020
   BUSINESS AMBITION 1.5°C AND 2030 WB2DS TARGET

3. 2020
   PARTNERSHIP WITH SBTi TO DEVELOP 1.5°C GUIDELINES

4. 2021
   HOLCIM AMONG THE FIRST COMPANIES WITH 2050 NET-ZERO TARGETS ACROSS 3 SCOPES

5. 2022
   LAUNCH OF 1.5°C GUIDELINES FOR CEMENT
HOLCIM CO\textsubscript{2} FOOTPRINT

Raw materials decarbonation
Cement production

Fuels combustion
Cement production

Energy generation

Aggregates and RMX operations

All indirect emissions
Purchased electricity

47%

25%

2.5%

5%

20%

0.5%
ESG RATINGS

PARTNERSHIPS

Founding Member of the MIT Climate and Sustainability Consortium

SUPPLY CHAIN

Suppliers / Customers demand on SBTs and decarbonisation pathways

INVESTORS

Increasing number of request to align with SBTs

SUSTAINABLE FINANCE

sustainability-linked bonds

SBTi VALIDATION HAVE BEEN FUNDAMENTAL TO FURTHER STRENGTHENING HOLCIM’S SUSTAINABILITY JOURNEY
BUILDING PROGRESS FOR PEOPLE AND THE PLANET

INDUSTRIAL CUSTOMERS
- Alternative Raw Materials
- Alternative Fuels
- Cement Plant

Sustainable Solutions
- ECOConcrete
- ECOConcrete

CONSTRUCTION CUSTOMERS
- Prescriptive Selling to Owners & Architects
- Construction Maintenance Deconstruction
- Recycling Aggregates

Sustainable Cements
- ECOConcrete
- Susteno

HOLCIM
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CALL TO ACTION

- The new guidance and materials, and a recording of this webinar, can be found on the SBTi cement webpage.

- LATEST NEWS: A group of leading cement companies have committed to submitting 1.5°C targets this month according to the new guidance, for validation before COP27.

We are urgently calling on all companies to set science-based net-zero targets.
CONTACT US

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THANK YOU!

PARTNER ORGANIZATIONS

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