

Towards investor-oriented carbon targets data

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Introduction

As the low carbon transition accelerates, GHG emissions reduction targets have become a focal point of the conversation between investors and management teams. Over one third of the companies in the FTSE All World Index, with a combined market capitalisation of about US\$29 trillion are now covered by such targets.¹ Forward-looking metrics to assess portfolio alignment, such as implied temperature rise (ITR) or climate Value-at-Risk (VaR), depend critically on targets to capture future emissions trajectories of constituents.

However, four years after the release of the TCFD recommendations in 2017, there is still no standardisation or consistency in the disclosures of emissions reductions targets. In practice, this makes it challenging for investors and other stakeholders to understand the exact nature of carbon commitments and systematically compare company ambitions across large portfolios. In many cases, we also find that companies choose a target specification that makes the headline numbers appear significantly more ambitious than the actual commitment.

More granular, comprehensive, and standardised disclosures are key to overcoming these challenges. Based on discussions with experts from a variety of initiatives such as the TCFD, the Transition Pathway Initiative, and Climate Action 100+, FTSE Russell has developed a TCFD-aligned disclosure template to promote concise and unambiguous disclosures of corporate GHG emissions reduction targets, which is introduced in this report.

¹ Calculation based on FTSE All World as of December 2020.

Corporate carbon targets – from niche to norm

Climate negotiations at COP26 in Glasgow are focused on national and international GHG targets, but emissions targets set by corporates play an increasingly important role in global efforts to combat climate change. Indeed, new research from Generation Investment Management finds that listed corporates globally are responsible for as much as 40% of GHG emissions worldwide.²

The list of companies announcing goals for reducing their emissions has grown rapidly since a small vanguard of multinationals first set targets after the establishment of the Kyoto Protocol (early adopters included IBM in 1998, and Johnson & Johnson and Danone in 2000).³

By the end of 2020, about one third of the 6,000 plus companies covered by our research had set one or multiple GHG targets, with companies being spurred on by the Paris Agreement in 2015 and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in 2017⁴.

This includes over one third of the companies in the FTSE All World Index, with a combined market capitalisation of about US\$29 trillion.⁵ Over two thirds of constituents in Western Europe, over 45% in North America and Japan, and a quarter of constituents in emerging economies, including China, are now covered by such targets

Figure 1: The number of companies setting carbon targets more than doubled between Paris and Glasgow



² This estimate includes Scope 3 emissions but avoids double counting. See Felix Preston and John Ward (2021) '[Listed company emissions](#)', [Generation Investment Management](#).

³ 2008 – IBM Climate Brochure October 2008; 2015 – Johnson & Johnson Commits to New Energy and Climate Goals; 2009 – Danone Sustainability Report/.

⁴ TCFD (2017) – Recommendations of the Task Force on Climate-related Financial Disclosures.

⁵ Calculation based on FTSE All World as of December 2020.

Maturing from incremental to transformative

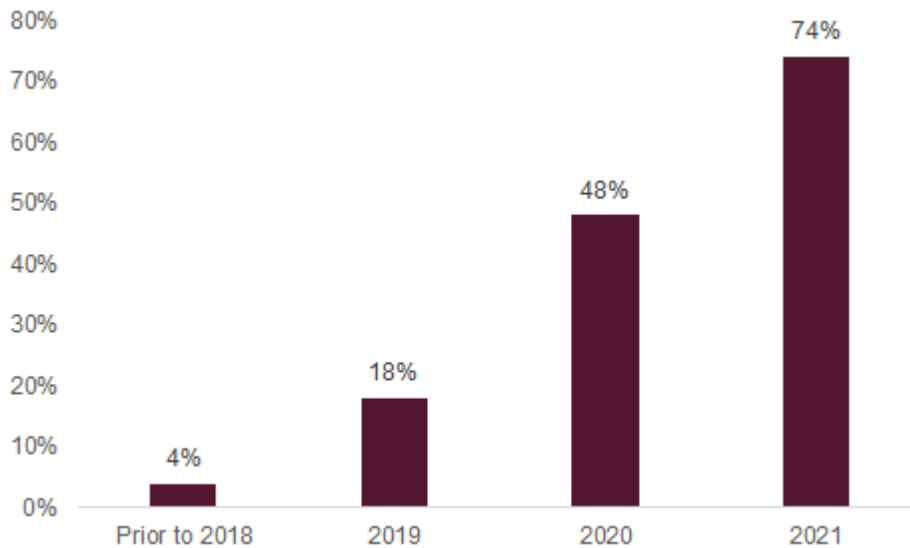
Perhaps even more important than the rapid increase in the number of companies setting targets has been the step change in ambition levels expressed in these goals.

Earlier generations of targets were mainly focused on incremental carbon savings, often in anticipation of potential future carbon pricing. They typically aimed at improving carbon efficiency, with targets frequently being expressed in terms of reductions of emissions per unit of output or revenues (or 'intensity targets'). Few companies were willing to make promises to reduce their absolute volume of annual GHG emissions – let alone publicly commit to timelines to cease emissions altogether.

However, under pressure from campaigners, investors, and governments, corporate targets have become much more ambitious in nature. Indeed, according to the UNFCCC's Race to Zero campaign in 2020, over 1,500 companies have set so-called 'net-zero' targets⁶. These targets aim to bring a company's residual emissions to such a low level that they can be balanced by the company's removal of emissions from the atmosphere (whether through biological carbon sinks such as forests, or potential technological sinks such as direct air-capture systems).

Crucially, this includes many companies in carbon intensive industries. Over half of the world's 159 'systemically important' corporate carbon emitters have now committed to net zero targets, according to the investor initiative CA100+.⁷ In the UK, which is hosting the COP26 negotiations, the share of FTSE 100 companies setting targets has risen from 4% in 2018 to 75% today.

Figure 2: Share of FTSE 100 companies with a net-zero target



Some companies have also started to include value chain emissions in their targets, rather than focusing solely on their direct emissions (Scope 1) and their indirect emissions from electricity use (Scope 2). While such 'Scope 3' targets are still the exception rather than the norm, they are

⁶ <https://unfccc.int/climate-action/race-to-zero-campaign> Accelerating Net Zero Exploring Cities, Regions, and Companies' Pledges to Decarbonise (September 2020).

⁷ [Climate Action 100+ issues its first-ever net zero company benchmark of the world's largest corporate emitters | Climate Action 100+](#).

essential in some sectors like autos, chemicals, and oil & gas, where Scope 3 emissions typically account for the lion's share of emissions associated with a company's activities.

A pivotal yardstick for climate investing

As the low carbon transition accelerates, GHG emissions reduction targets have become a focal point of the conversation between investors and management teams. This is particularly the case in carbon intensive industries, where the transition involves rapidly winding down profitable core activities and replacing them with revenue streams from entirely new products and services. In many cases, this will involve huge bets on technologies that do not yet exist such as zero-emission steel, cement⁸ or air travel⁹.

Greenhouse gas targets are not only tools for investors to assess individual companies – they also play a growing role in assessing portfolios. As asset owners and managers begin to set ambitious portfolio-level 'net zero' or 'Paris Alignment' goals, assessing the commitments of portfolio constituents – individually and collectively – is increasingly front of mind.

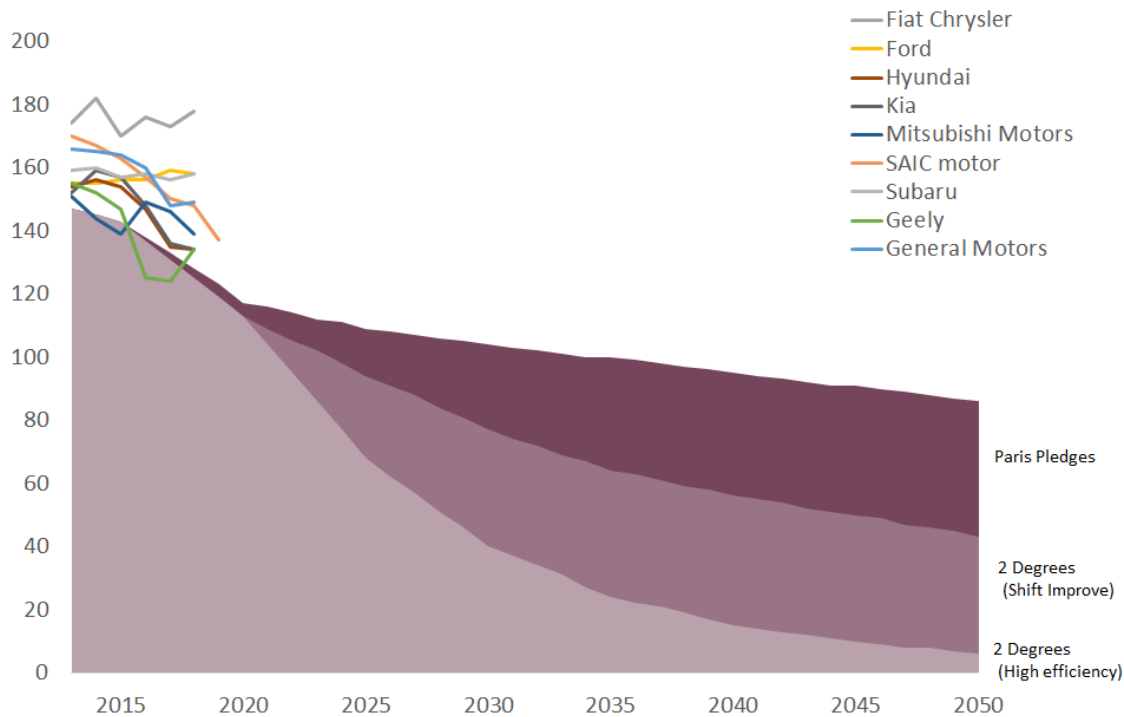
Forward-looking metrics to assess portfolio alignment, such as implied temperature rise (ITR) or climate Value-at-Risk (VaR), depend critically on targets to capture future emissions trajectories of constituents. In the context of companies and sectors trying to deliberately engineer a trend break in emissions, the alternative – simple forward projections of current emissions trajectories – is likely to provide a highly skewed picture (see Figure 3).

Investment-quality carbon targets data that meets investment needs is therefore emerging as a critical tool for investors to determine climate risk inherent in both individual portfolio holdings and overall portfolios.

⁸ OECD (2019) - Low and zero emissions in the steel and cement industries: Barriers, technologies and policies.

⁹ McKinsey & Company (2020) - How airlines can chart a path to zero-carbon flying.

Figure 3: Which automakers can hit the brakes?



GHG intensity in grams of CO2 per km of the largest 10 automakers by emissions intensity based on the company assessment performed by TPI in 2020.

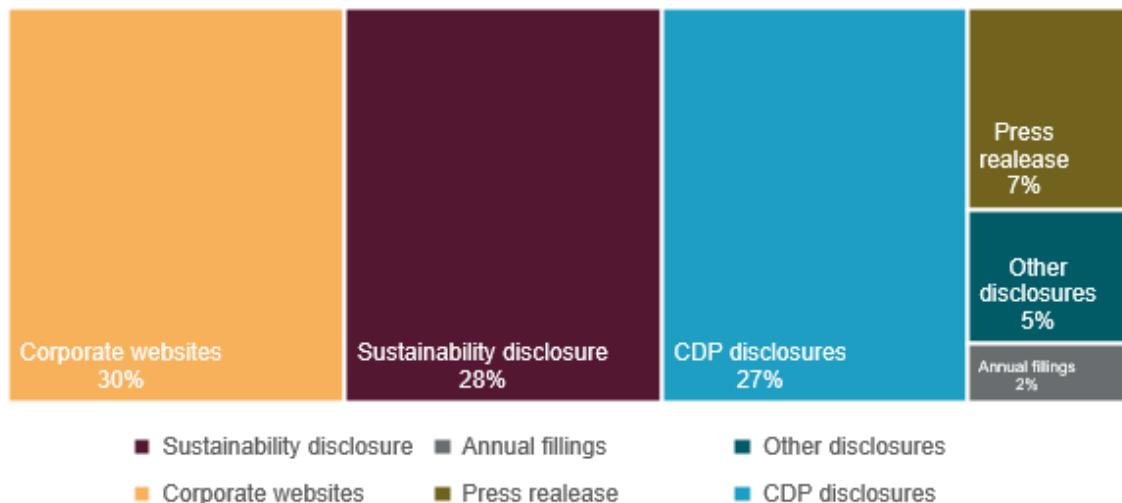
Source: TPI.

Inconsistent disclosures hinder scrutiny

Faced with a frenzy of corporate net-zero goals, targets and pledges publicised ahead of COP26, investors may wonder whether these commitments genuinely signal a newly found ambition for transformative change, or to what extent companies are trying to greenwash business as usual.

This is a question that remains surprisingly hard to answer. Four years after the release of the TCFD recommendations in 2017, there is still no standardisation or consistency in the disclosures of emissions reductions targets. Indeed, concise, data-centric plain-language climate commitments, as part of annual filings, are a rare find. As result, the exact content of targets often remains opaque to investors and notoriously difficult to compare.

Figure 4: Collecting targets data requires processing a plethora of corporate disclosures



Breakdown of the type of documents in which carbon emissions targets are disclosed for 159 systemically important carbon emitters assessed in the CA100+ Net-Zero company benchmark.

Source: Climate Action 100+, TPI, FTSE Russell, as of March 31, 2021.

At their most basic, corporate carbon targets consist of a commitment to a relative percent reduction of emissions by a specific target year. For example, a chemicals company may state that it is looking to reduce its emissions by 40% by 2030. Such commitments appear deceptively simple, but in practice are anything but.

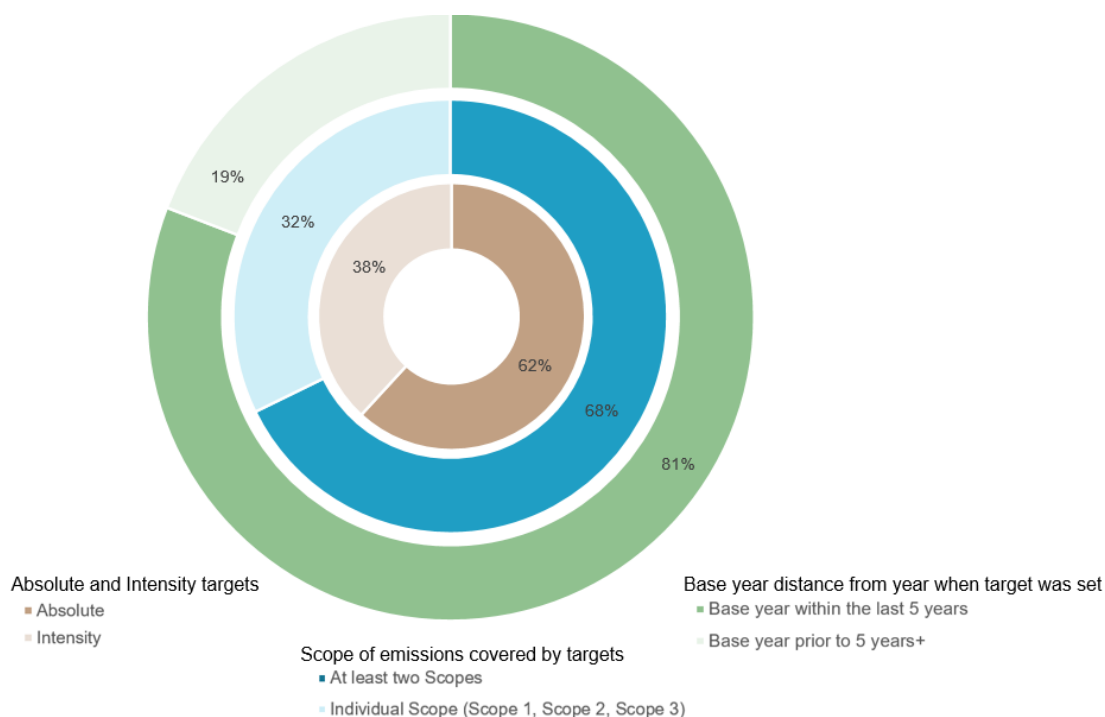
There is frequently an implicit assumption that carbon target commitments are relative to the company’s absolute current total emissions. In practice, this is seldom the case (see Figure 5). Instead, companies sometimes define emission baselines in terms of carbon intensity, looking back far in the past, excluding specific business lines or geographies, or covering only specific scopes of emissions. (Scope 3 emissions in particular are generally excluded, even in industries where it presents the most material share of emissions.)

The following provides a list of common issues in target disclosures our analysts encountered in analysing corporate emissions targets in portfolios and as part of investor initiatives like CA100+.

- GHG reduction **commitments are often described in ambiguous terms** such as "goal", "commitment", "ambition" or "target"¹⁰ leaving it unclear to what extent these represent corporate planning or are more aspirational in nature.
- Companies do not necessarily specify whether targets reflect **a shift in strategy to reduce emissions or the outcome of an existing business-as-usual (BAU) trajectory**.
- **The choice of base years can make goals appear more ambitious than they are.** Almost 20% of the disclosed targets we examined apply a base year of five or more years prior to the establishment of the target. Furthermore, we found a significant number of companies that had already achieved over half of their reduction goal at the point of publishing the target.

- **Companies use a mix of absolute and intensity targets.** Absolute emissions are easier to compare across companies; however, emission intensities are often easier to predict as they do not require making assumptions about a companies' future growth trajectory.
- **Companies use different emissions scopes.** One third of GHG targets only cover a single emissions scope, with only 12% of the targets covering Scope 1, 2, and 3 emissions.
- For the specified scopes, the **share of emissions that is covered by a target is rarely explicitly specified and usually incomplete** (with exceptions often made for specific activities, geographies, or types of GHG emissions).
- Companies are often **vague about the intended use of offsets** in net zero targets,¹¹ raising questions on whether companies make genuine efforts to reduce emissions from carbon intensive business lines.

Figure 5: Heterogeneous GHG emissions reduction targets parameters



Source: FTSE Russell as of December 31, 2020.

Investors' efforts to tackle the carbon confusion

In aggregate, these issues make difficult for investors and other stakeholders to understand the exact nature of carbon commitments and makes systematic comparisons of company ambitions across large portfolios is difficult to achieve. In many cases, companies choose a target specification that makes the headline numbers appear significantly more ambitious than the actual commitment.

¹¹ Rogelj, J., Geden, O., Cowie, A. & Reisinger, A. Three ways to improve net-zero emissions targets. Nature 591, 365–368 (2021).

In practice this means that the analysis of carbon targets today is a highly technical task that often requires a forensic examination of a large volume of corporate disclosures. Several multi-stakeholder initiatives – including TPI, CA100+, and SBTi – have begun to tackle this challenge through independent assessments and comparisons of the ambition levels of carbon targets (see below).

However, in the absence of more standardised and detailed disclosures, these efforts remain resource-intensive, difficult to scale, and ultimately require significant expert guesswork. As a result, while these initiatives provide critical insights for investors on corporate emissions trajectories, they do so only for a limited group of companies today;¹² and the results often remain hotly contested between companies, investors, and other stakeholders.

Getting to Grips with Corporate Carbon Targets

The Transition Pathway Initiative (TPI) is an asset owner-led group developed in partnership with the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and FTSE Russell. TPI currently publishes Carbon Performance scores for about 300 companies across 10 sectors, measuring how their current and targeted targets align with the UN Paris Agreement goals. Benchmarking is sector-specific and based on emissions intensity. In August 2021, TPI updated its three benchmark scenarios: National Pledges, Below 2 Degrees and 1.5 Degrees.

Climate Action 100 plus (CA100+) is an initiative backed by more than 600 investors with over US\$55 trillion in assets under management. CA100+ publishes the Net-Zero Company Benchmark, which assesses the world's largest corporate greenhouse gas emitters on their progress in the transition to net zero. As part of this benchmark, the long, medium and short-term emissions targets of 167 companies undergo a detailed analysis based on TPI data.

The Science-Based Targets Initiative (SBTi) is a partnership between the Carbon Disclosure Project, United Nations Global Compact, World Resources Institute and the World Wide Fund for Nature. The SBTi considers company submissions, including information unavailable in the public domain, to validate targets on several characteristics including scope coverage, entity coverage, GHG gas coverage and ambition relative to at least a 2 degrees scenario.

¹² CA100+ and TPI approach this by focusing on the most emissions intensive sectors and companies, while SBTi charges a fee to issuers for its 'accreditation service'.

Closing the gap to investment-quality targets

The LSEG Carbon targets disclosure template

More granular, comprehensive, and standardised disclosures are key to overcoming the challenges outlined in this report. Guiding companies to better disclosures is therefore essential to furnish investors with robust carbon targets data, which can provide a critical input into analytical tools and investment products that help investors to address climate risk.

Based on discussions with experts from a variety of initiatives such as the TCFD, the Transition Pathway Initiative, and Climate Action 100+, FTSE Russell has developed the following TCFD-aligned disclosure template to promote concise and unambiguous disclosures of corporate GHG emissions reduction targets. The template is detailed below, and completed with fictional details for an example target.

The template is deliberately agnostic on the type, scope or ambition level of the emissions reduction target, and provides a standardised format for companies to disclose information on their targets and the methodology. It also is designed to minimize the reporting burden for companies.

The template is intended to be completed separately for individual targets where companies disclose multiple targets (e.g. for different emissions scopes or different timeframes). It is structured in three sections – Target ID, Target Information and Target Methodology, and contains a total of 20 fields to be completed for each GHG target (see the Appendix for detailed guidance for disclosures in each field).

Target ID

This section helps investors ensure that they identify all individual emissions targets a company has set, irrespective of how or where they are disclosed. The information also supports the tracking of targets over time, particularly as targets are now frequently updated or revised by companies.

Target Information

This section allows a company to disclose the main parameters that describe a GHG emissions target: the base year, the target year, the target reduction from base year, and the emissions scopes covered.

Additional information – such as the calculation method for Scope 2 emissions and category of Scope 3 emissions, together with a disclosure of percentage of emissions covered – conveys the boundaries of the emissions target.

Target Methodology

This section provides a qualitative context and important methodological details for the target. To keep the structure simple, companies can reference publicly available documents and page numbers where the relevant information is available.

GHG emissions reduction target disclosure template

Target ID

Overall number of active GHG emissions targets:	4	Include interim targets in the count.	
Target number:	1 (of 4)		
Target type:	Absolute (interim target)	Indicate whether this is an interim target (e.g. a short-term milestone between the organisation's mid- or long-term target and current period).	
Date the target was set:	08/02/2019	Date that the target was last revised:	14/01/2021

Target Information

Scope(s) covered	Scope 1 & 2 (market-based) + 3 (cat 11: use of sold product)	For scope 2 emissions, indicate if calculations are location- or market-based. For scope 3 emissions, indicate the GHG protocol categories that are covered.	
Percentage of in-scope emissions covered by the target:	99%		
Base year:	2015	Base year emissions:	75 000 tCO2e
Target year:	2030	Target year projected emissions:	30 000 tCO2e
Targeted reduction from base year (%)	60%		
Targeted reduction from current year (%)	50%	Current emissions:	60 000 tCO2e (2020)
		Please indicate the most current year for which emissions data is available.	

Target Methodology

Verified by an independent third party.	Yes. SBTi	Please indicate the name of the independent third party that verified the target.	
Source that describes how the percentage of in-scope emissions covered by the target has been calculated.	Sustainability Report 2020 (p.8, p.12)	Please indicate the title(s) of publicly available documents and relevant page numbers where information can be found.	
Source that describes transition plan outlining how this target will be met.	Roadmap to Net-zero 2050 (p.1 -10)	Please indicate the title(s) of publicly available documents and relevant page numbers where information can be found.	
For Scope 3 targets, source that describes the methodology used to calculate the Scope 3 emissions covered by the target.	GHG Emissions Methodology (p.15-16)		
Indicate the % of the target to be achieved through offsets and provide a source that specifies their type and the offset provider.	20% will be achieved through CCS. Roadmap to Net-zero 2050 (p. 8)		
For intensity targets, source that describes the methodology used to calculate the carbon intensity.	Sustainability Report 2020 (p.89)		

Appendix – Detailed guidance for the GHG target disclosure template

Target ID	
Overall number of active GHG emissions targets	Specify the total number of active carbon emissions targets within the company. Those that have expired or been met should not be counted unless this occurred in the latest financial year.
Target number	Specify a number for each target. This helps investors to differentiate between targets.
Target type	Specify if the target is an ‘absolute’ (total GHG emissions) or ‘intensity’ target (normalized GHG emissions) and whether it is an ‘interim’ target on a decarbonisation pathway or an ‘end-state’ target for long-term, steady-state GHG emissions of the company.
Date the target was set	Specify the date at which management or the board adopted the target as a company objective.
Date the target was last revised	If the target has been revised, indicate when the updates were adopted by management or the board.
Target information	
Scopes covered	Indicate which emissions scopes are covered by the target. If scope 2 is included, indicate if this is measured using market- or location-based methods. If scope 3 is included, specify the categories included. Categorizations used should align with the GHG Protocol.
Percentage of in-scope emissions covered by the target	Provide the percentage of in-scope GHG emissions covered by the target. Details about how this was calculated should be provided in the target methodology section.
Base year	Specify the financial year of emissions against which progress is being measured.
Base year emissions	Specify the GHG emissions against which progress is being measured. Indicate the unit of measurement.
Target year	Specify the financial year in which the company is targeting its intended emissions.
Target year emissions	Specify the quantity of emissions that should be achieved in the targeted year. Indicate the unit of measurement.
Targeted reduction from base year (%)	The percentage reduction that is targeted, relative to the base year.
Targeted reduction from current year (%)	The percentage reduction that is targeted, relative to the latest financial year. This should match the financial year in the ‘current emissions’ field.
Current emissions	Indicate the latest year of emissions using the same units and scopes as above. Indicate the financial year to which these emissions relate. Indicate the unit of measurement.
Target methodology	
Verified by an independent third party	Indicate the name of the independent third party that has verified the target and its constituent data, if applicable.
Source that describes how the percentage of in-scope emissions covered by the target has been calculated	Describe, or provide a link to a source that describes the boundaries to which the target applies. Generally, the main emissions targets should cover the same boundaries as adopted in the consolidated financial statements of the company, described in IFRS 10 or similar document.
For scope 3 targets, source that describes the methodology used to calculate the Scope 3 emissions covered by the target	Describe, or provide a link to a source that describes the methodology used to calculate the scope 3 emissions covered by the target.
Indicate the percentage of the target to be achieved through offsets and provide a source that specifies their type and the offset provider	Describe, or provide a link to a source that describes the proportion of the target to be achieved through carbon offsetting programs, and provide a source that specifies their type and the offset provider.
For intensity targets, source that describes the methodology used to calculate the carbon intensity	Describe, or provide a link to a source that describes the methodology used to calculate carbon intensity metrics. Intensity targets can vary greatly in their measurement, and investors may not always be familiar with abbreviations used in any units –avoiding the use of abbreviations can help to avoid misinterpretation.

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