



APPAREL AND FOOTWEAR SECTOR

SCIENCE-BASED TARGETS GUIDANCE



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This guidance was developed by World Resources Institute (WRI) on behalf of the Science Based Targets initiative (SBTi).

WRI is a global research organization that spans more than 60 countries, with offices in Brazil, China, Europe, Ethiopia, India, Indonesia, Mexico, the United States and more. Our more than 800 experts and staff work closely with leaders to turn big ideas into action at the nexus of environment, economic opportunity and human well-being.

The SBTi is a collaboration between CDP, the United Nations Global Compact, World Resources Institute and the World Wide Fund for Nature (WWF). The SBTi defines and promotes best practices in science-based target setting and independently assesses companies' targets.

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EXECUTIVE SUMMARY

HIGHLIGHTS

- The greenhouse gas (GHG) emissions of the global apparel and footwear sector are significant and have the potential to increase considerably given trends such as fast fashion and growing consumption in emerging middle-income economies.
- Given the environmental and business implications of increasing global emissions, the sector should actively mitigate GHG emissions to ensure that they are in line with what climate science says is needed to limit global warming to 1.5 degrees Celsius (°C) above pre-industrial temperatures.
- This guidance supports companies across the apparel and footwear sector value chain to set ambitious, science-based GHG emissions reduction targets (SBTs). The guidance refines existing corporate guidance by clarifying which target-setting methods are applicable for this sector, including case studies on best practices in target-setting and emissions reductions.
- Value chain (scope 3) emissions are significant for this sector, and companies face numerous barriers to address them. This guidance identifies emissions hot spots for this sector and provides guidance on measuring and reducing these emissions.
- Collaboration is key for this sector to tackle emissions, and ample opportunities exist. This guidance highlights potential areas of collaboration across the value chain and the variety of organizations, tools, and initiatives that companies can leverage to develop and work toward their SBTs.
- To ensure relevance and credibility, this guidance was developed in close consultation with leading industry experts representing apparel and footwear companies, consultancies, and nongovernmental organizations (NGOs) with relevant expertise.

CONTEXT

Under the 2015 Paris Agreement, national governments have committed to limit global temperature increase to well below 2°C and pursue efforts to limit temperature increase to 1.5°C (UNFCCC 2015). Companies will play a key role in meeting these commitments, and as of June

2019, more than 550 companies, including over 20 in the apparel and footwear sector, have approved SBTs or have committed to setting such targets.¹

Over the last several years, there has been increasing interest from apparel and footwear companies in setting science-based emissions reduction targets. This is because many companies understand that GHG emissions are significant for the sector across the value chain and will likely increase given industry growth—unless the sector changes course.

GUIDANCE OBJECTIVES AND AUDIENCE

The Science Based Targets initiative (SBTi) aims to mobilize companies across the apparel and footwear value chain to set ambitious SBTs. The objectives of this document are to

- provide clarity on credible approaches to setting SBTs;
- increase consistency across companies' targets in the sector;
- identify sector-specific barriers for setting SBTs and recommend ways to address these barriers;
- define and provide examples of good practices; and
- highlight opportunities for companies to collaborate in reducing GHG emissions.

This guidance is intended for companies across the apparel and footwear value chain—retailers, brands, finished goods manufacturers, mills, etc.—that are primarily engaged in activities that contribute to the production, sale, and transportation of apparel and footwear products.² The guidance includes general depictions of the sector value chain (see Figures 3 and 4) to help companies determine how the different scopes of GHG emissions pertain to them based on their business activities. We also include several examples of companies' GHG inventories in section 2.4 to help readers understand how emissions generally break down across scopes.

SUMMARY OF SCOPE 1, 2, AND 3 REQUIREMENTS

In section 3, we include SBTi criteria and recommendations (Version 4.0, published in April 2019) for obtaining SBTi approval for scope 1 and 2 targets (SBTi 2019b).³ As defined in the GHG Protocol Corporate

Accounting and Reporting Standard, scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy (WRI and WBCSD 2004). Such targets are required to be consistent with a well below 2°C climate stabilization pathway, with greater efforts encouraged toward limiting warming to 1.5°C. In general, the scope 1 and 2 portion of total emissions is higher for finished goods and material suppliers than it is for brands and retailers.

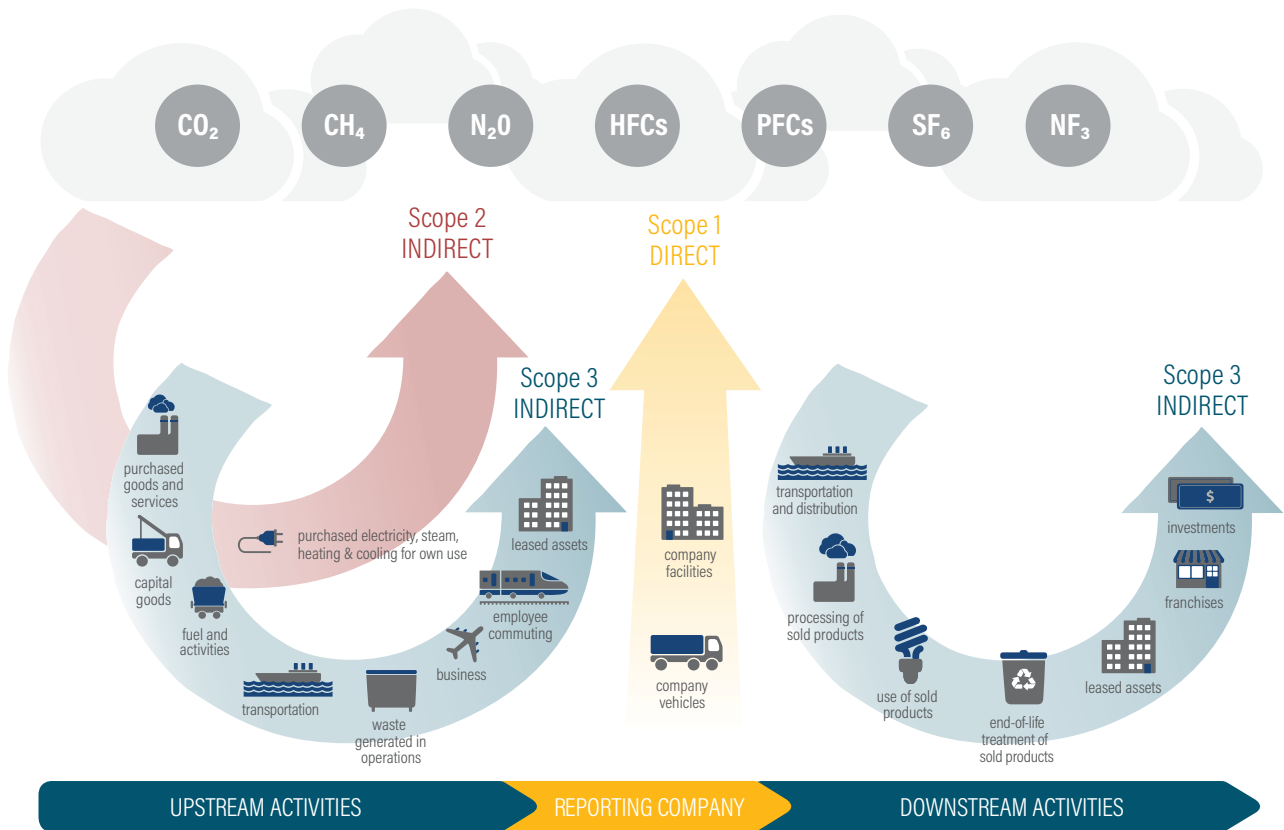
Apparel and footwear companies have three methods for setting scope 1 and 2 targets (for details of these methods, see section 3.2, "Methods for Setting SBTs for Scopes 1 and 2 for Apparel and Footwear Companies"):

- Absolute contraction:** Reduce absolute emissions by the same percentage to keep global temperature increase within well below 2°C (minimum 2.5 percent annual linear reduction) or 1.5°C (minimum 4.2 percent annual linear reduction).

- Physical intensity:** Reduce emissions intensity per physical production output with a unit that's representative of a company's portfolio (e.g., per pair of shoes for a footwear company), which, when translated to absolute emissions reduction terms, is in line with the absolute contraction approach.⁴
- Economic intensity:** Reduce emissions intensity per economic value with a unit that's representative of a company's portfolio (e.g., revenue or value added), which, when translated to absolute emissions reduction terms, is in line with the absolute contraction approach.

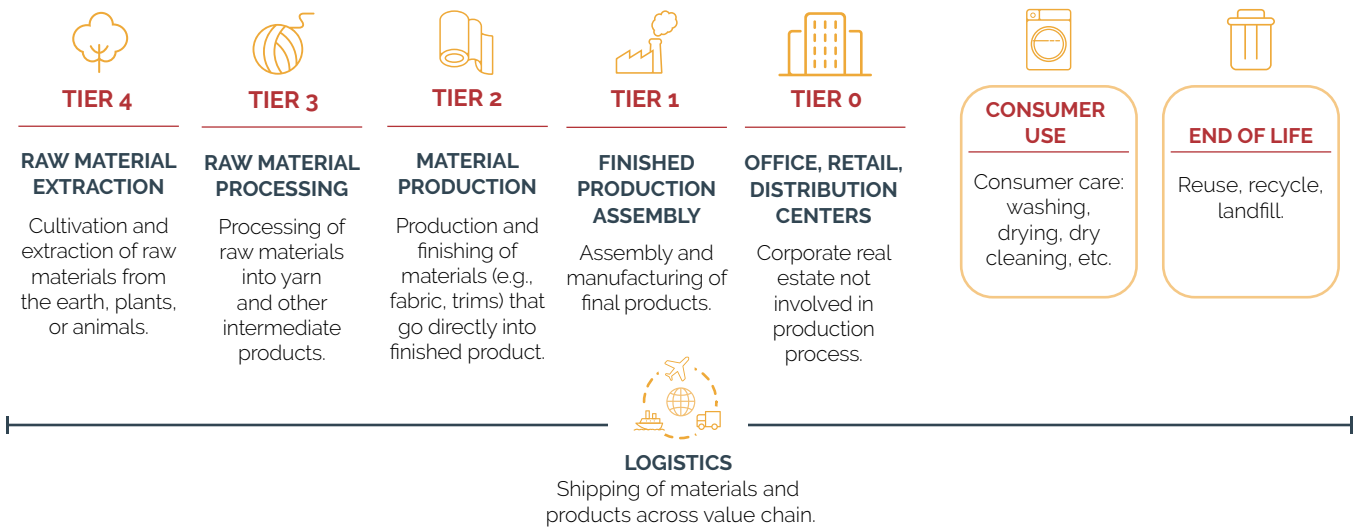
Section 4 includes criteria Version 4.0 for scope 3, while section 5 includes additional detail on purchased goods and services, a scope 3 category that is significant for many apparel and footwear companies. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions (WRI and WBCSD 2004). As the examples throughout

Figure 1 | Overview of Scopes and Emissions across a Value Chain



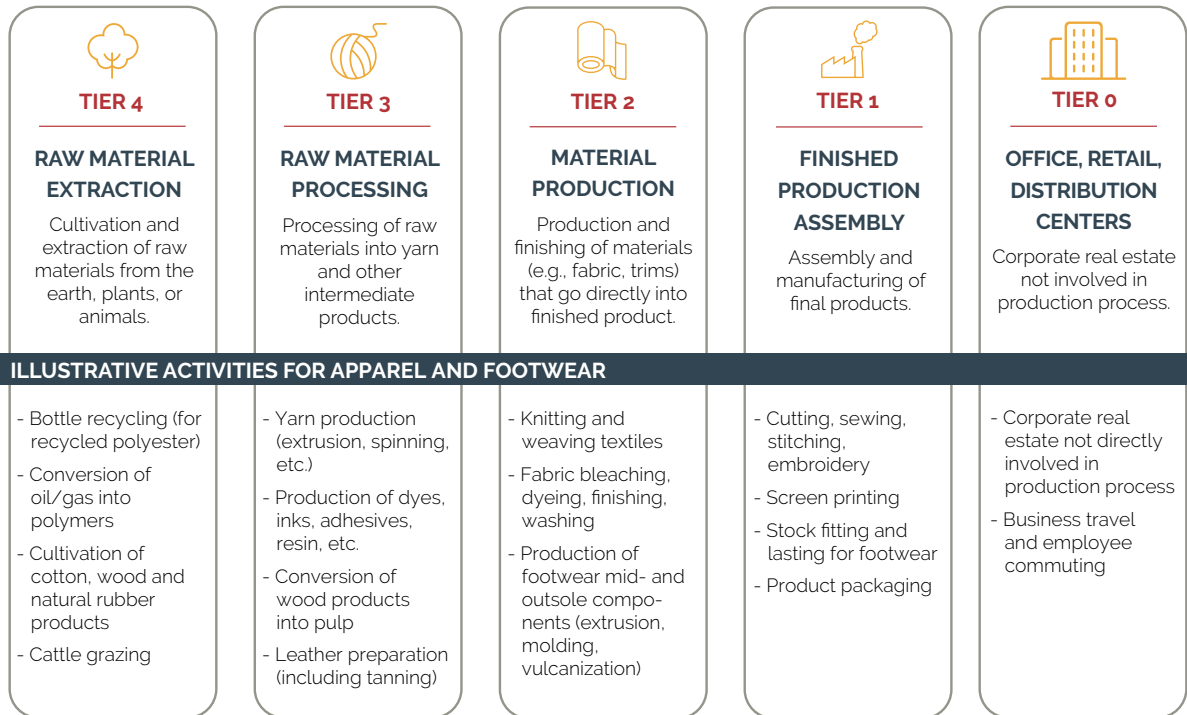
Note: Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), Nitrogen trifluoride (NF₃).
Source: WRI and WBCSD 2004.

Figure 3 | Apparel and Footwear Value Chain



Source: WRI authors.

Figure 4 | Apparel and Footwear Value Chain Tiers



Note: Many companies describe the apparel and footwear value chain according to the above tiers. We did not attempt to capture the nuances across the many materials used in apparel and footwear.

Source: WRI authors.

the document depict, scope 3 emissions are typically the majority of total emissions for brands and retailers, while the significance of scope 3 for suppliers depends on the nature of the suppliers' activities (scope 1 and 2 emissions tend to be more significant for suppliers).

There are four available methods for setting scope 3 targets, and they can be used on one or more scope 3 categories:

- **Absolute contraction:** Reduce absolute emissions by the same percentage to keep global temperature increase within 2°C (minimum 1.23 percent annual linear reduction). While 2°C is the minimum level of ambition for scope 3 targets, companies are encouraged to pursue greater efforts toward a well below 2°C (minimum 2.5 percent annual linear reduction) or a 1.5°C trajectory (minimum 4.2 percent annual linear reduction).
- **Physical intensity:** Reduce emissions intensity per physical production output with a unit that's representative of a company's portfolio, which, when translated to absolute emissions reduction terms, is in line with the absolute contraction approach. Alternatively, companies can drive physical intensity reduction to cap absolute emissions at a base year level and achieve a physical intensity reduction at a minimum rate of 2 percent in annual linear terms.
- **Economic intensity:** Reduce emissions intensity per value added by at least an average of 7 percent year on year.
- **Supplier engagement:** Commit to having a specific percentage of suppliers (as a percentage of spend or GHG emissions) with their own SBTs within five years from the date the company's target is submitted to the SBTi for validation.

CALL TO ACTION AND COLLABORATION

This guidance is intended to provide direction on the mechanics of setting SBTs. It is not meant to show how companies can achieve the required emissions reductions. That said, we have included a framework in section 7 that describes the two primary ways for the sector to reduce emissions in line with science:

- Aggressively deploy energy efficiency and renewable energy across the value chain.
- Substitute materials with lower environmental impacts.

Companies can also reduce emissions by producing and selling fewer items, although they would need to create business models (e.g., rental) that support such an approach.

In section 8, we list key initiatives and organizations that apparel and footwear companies are working with as part of their overall work on climate change to reduce GHG emissions.

REFERENCES

SBTi. 2019b. *SBTi Criteria and Recommendations*. Version 4.0. <https://sciencebasedtargets.org/wp-content/uploads/2019/03/SBTi-criteria.pdf>.

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ENDNOTES

1. Apparel and footwear companies, as defined in this guidance, are listed under "Textiles, Apparel, Luxury Goods" and "Retailing" sectors on SBTi website's "Companies Taking Action" page.
2. Note that suppliers and manufacturers are used interchangeably in this document. See Figures 2 and 3 for more detail on different types of suppliers along the value chain.
3. *SBTi Criteria and Recommendations* (4.0), published in April 2019, offers companies options to set 1.5°C and well below 2°C targets. Until October 2019, companies wishing to set targets in line with below 2°C scenarios can continue to use the *SBTi Criteria and Recommendations* (3.0). From October, companies will have to set targets against Version 4.0.
4. There is currently no pathway in the Sectoral Decarbonization Approach (SDA) specific to this sector for companies to set physical intensity targets. SDA is a method for setting physical intensity targets that uses convergence of emissions intensity. Technical details of the SDA can be found in section 3.2 of the *Foundations of Science-based Target Setting* paper (SBTi 2019e).



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