SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

SBTi's STEEL GUIDANCE IN BRIEF

June 2024

The Importance of Decarbonizing the Steel Industry

Steel accounts for 7% of total energy sector emissions and 25% of all industrial emissions worldwide. Demand for steel is projected to continue rising. If the global industry does not reduce its environmental impact, 14% of the potential value of steel companies could be at risk by 2040. Given its influence on industries like infrastructure, construction, transportation and renewable energy, the steel sector is key to unlocking the transformation needed to enable a net-zero future.

The Science Based Targets initiative (SBTi) Steel Science-Based Target-Setting Guidance provides a clear roadmap for companies in this industry to set near-term and/or net-zero emissions reduction targets, taking into account the unique context of the sector. This guidance outlines how much and how quickly a steel value chain company needs to cut emissions to limit global temperature increase to 1.5°C.

Who Can Use the SBTi's Steel Guidance

Steel companies and those in the value chain setting science-based targets can use either the iron & steel Sectoral Decarbonization Approach (SDA) or the cross-sector approach (Absolute Contraction Approach), as long as the emissions covered are aligned with the iron & steel core boundary.

The iron & steel guidance may be used by companies with emissions that fall within the iron & steel core boundary where the final product is steel. The guidance may be of interest for others in the steel and iron value chain, such as iron ore suppliers, scrap producers and users of steel, including automotive or construction companies, to help inform their scope 3 targets. Financial institutions (FIs) that invest in steel companies can use the Steel Target-Setting Tool to set scope 3 category 15 investments targets, enabling them to set intensity targets per tonne of steel.

Any direct emissions related to the production of iron and steel must be included in the targets set using the SBTi Steel Guidance. Upstream emissions from purchased products and downstream emissions from processing of sold products that fall within the core boundary (as shown in Figure 1) must also be included.

How Businesses Can Use the SBTi's Steel Guidance

Companies should consider the following criteria in Figure 2 when setting science-based targets.

Figure 1. Emissions covered by the iron & steel core boundary

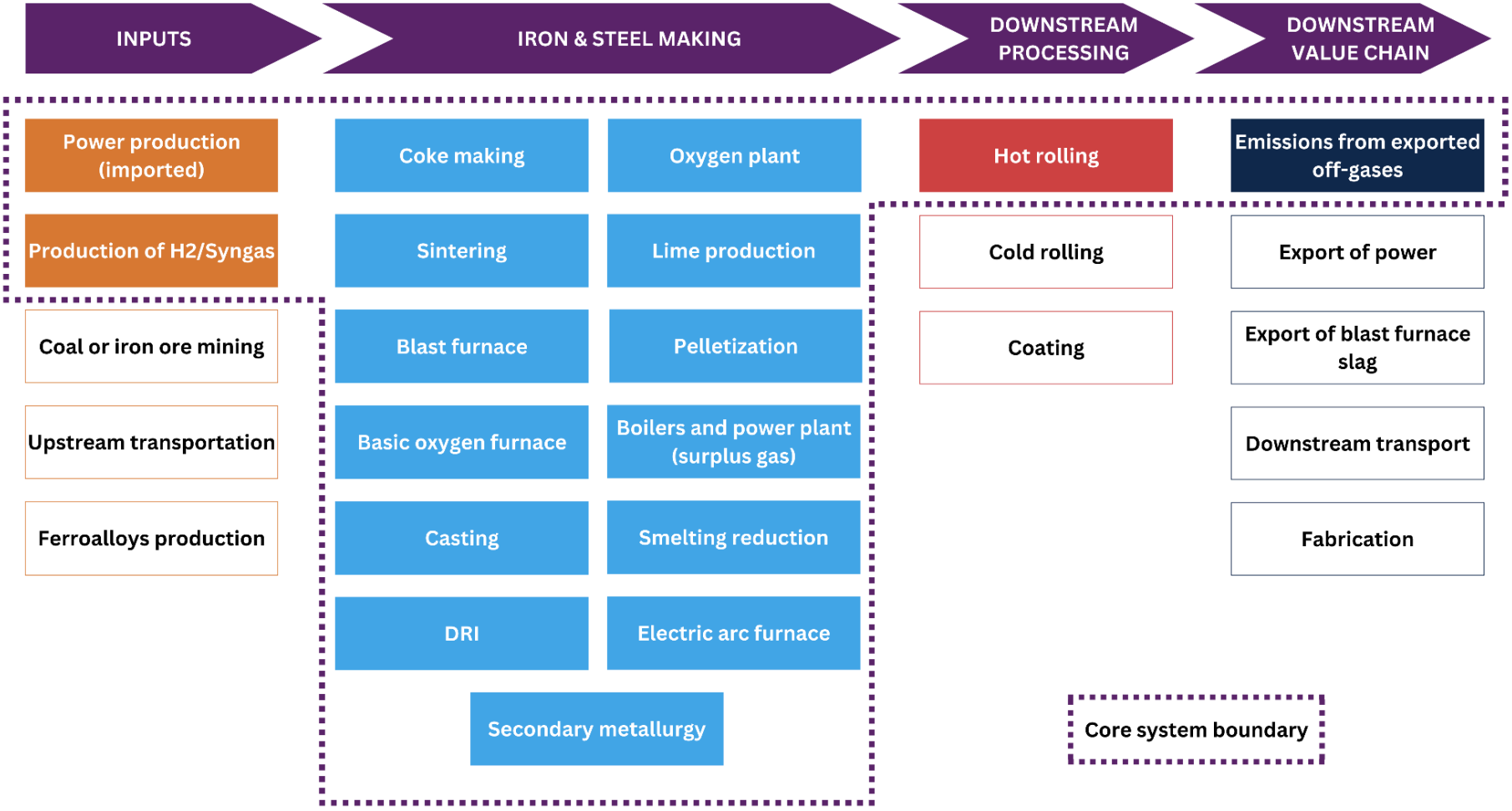
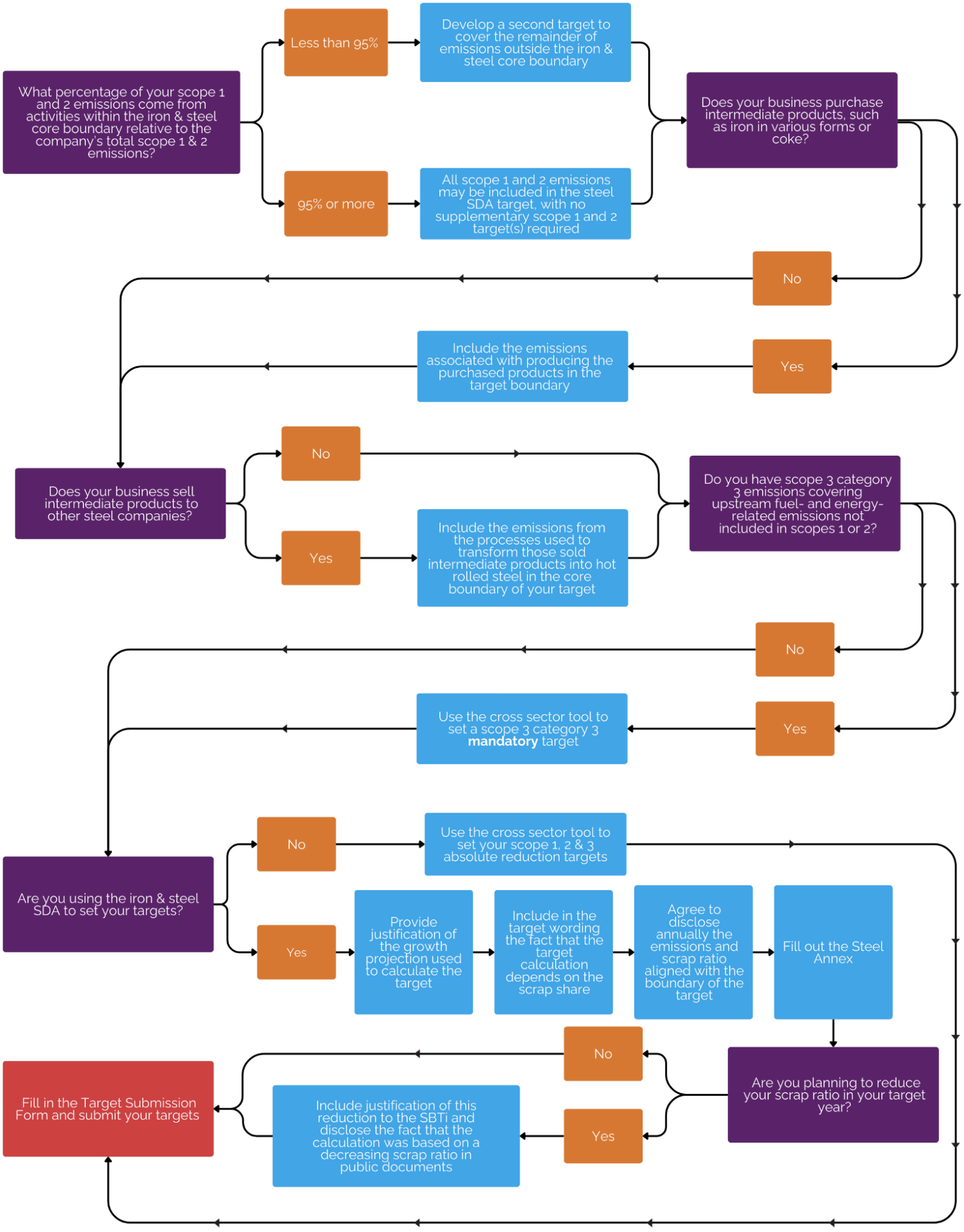


Figure 2. Steps for iron & steel companies to consider



Common Misconceptions About the Steel SDA

Misconception: Targets get more strict when a company's scrap ratio increases during the target timeframe.
Fact: The SBTi split the steel pathways to differentiate the two major production processes: ore-based (primary) and scrap-based (secondary) steel. This is because they have very different emissions profiles. Both pathways accommodate for the overall increase in scrap steel availability (global volumes), so if scrap-based volumes increase, the target for all steel companies adjusts. Because the sector pathway is responsive in this way, companies cannot double count the impact of increasing scrap consumption at the company-level. We understand this is being misunderstood to be a penalty on the companies increasing scrap consumption, but in fact their target ambition will reflect this increase.

Misconception: Having two different pathways allow primary steelmakers to continue to have much higher emissions and maintain the status quo.
Fact: The scrap-input-dependent pathways means that primary producers cannot meet their targets solely by using more scrap, ensuring they also work on ways to reduce the carbon intensity of primary steelmaking, which is the really challenging part. The system incentivizes steep emission reductions for both primary and secondary producers. A generalized shift towards greater circularity is also incentivized, as targets get easier to meet as one moves towards the scrap-based pathway.

Misconception: Carbon Capture, Utilization and Storage (CCUS) technologies don't count towards science-based targets.
Fact: All decarbonization levers that lead to an emissions reduction in scope 1, 2 and/or 3 according to the SBTi Criteria and GHG Protocol accounting rules are valid. These may include "traditional" levers such as energy efficiency, fuel switching, as well as breakthrough technologies such as carbon capture and permanent geological storage (CCS) and bioenergy with carbon capture and storage (BECCS).

Take Action Today

Companies involved in the production of steel can set targets today using the SBTi's Steel Target-Setting Guidance, or can commit to set targets in the near future. Learn more on the SBTi website. Stay up to date on the latest developments by following the SBTi on LinkedIn, X (formerly known as Twitter) and signing up for our newsletter.