



ResponsibleSteel International Production Standard

Version 2.1.1



Date: 1 October 2024

About this document

This document is the ResponsibleSteel International Production Standard Version 2.1, effective from 21 May 2024. It has improvements in several areas from the previous Version 2.0, including the outcomes of the Principle 10 public consultation following a 12-month test phase on certain requirements.

Version 2.0, released in September 2022, was updated from Version 1.1 to incorporate additional requirements on responsible sourcing and greenhouse gas (GHG) emissions, under Principle 3 and Principle 10, respectively.

Version 1.1 was published in June 2021 with updates after the first audits of the Production Standard. Version 1.0 was drafted in accordance with the ResponsibleSteel Standards Development Procedures from February 2017 through to October 2019, approved by a ballot of the ResponsibleSteel membership and formally ratified by the ResponsibleSteel Board of Directors in November 2019.

For further information about the standard development procedure, its timeline and decision-making process, please refer to the ResponsibleSteel [website](#).

Please visit www.responsiblesteel.org/certification/ for information on the audit and certification process.

Version history

No.	Date	Description
Version 1.0	5 November 2019	First published version of the ratified ResponsibleSteel International Production Standard (as the ResponsibleSteel Standard).
Version 1.1	23 June 2021	<p>Included urgent revisions to 8.4.5 and 8.5.1.</p> <p>Added interpretations to 4.9.1. / 4.9.3. and 9.1.</p> <p>Added guidance to 1.1 / 1.2 / 7.3 / 8.4.2. and 9.1.2.</p> <p>Corrected typographical errors found in Version 1.0.</p> <p>Changed some terms to reflect further development of the ResponsibleSteel programme:</p> <ul style="list-style-type: none"> Renamed auditing bodies to certification bodies Renamed Review Panel to Assurance Panel Noted that additional responsible sourcing and GHG requirements will be finalised in 2021. Version 1.1 is for immediate use and supersedes Version 1.0. <p>Version 1.1 is for immediate use and supersedes Version 1.0.</p> <p>Note that the numbering in this paragraph refers to numbering of the Production Standard Version 1.1.</p>
Version 2.0	14 September 2022	<p>Included additional requirements on responsible sourcing (new Principle 3) and GHG emissions (renumbered Principle 10).</p> <p>Renumbered Principles in Version 2.0.</p> <p>ResponsibleSteel Standard renamed as the ResponsibleSteel International Standard.</p>
Version 2.1	21 May 2024	<p>ResponsibleSteel International Standard renamed to ResponsibleSteel International Production Standard.</p> <p>Revisions to Principles 3 and 10 resulting from the 12-month test phase of Version 2.0, including urgent revisions to 3.2 and 3.4 with corresponding edits to 3.1 / 3.3 / 3.5 and 3.10 plus urgent revisions to 10.4.5 / 10.4.7 and 10.6.</p> <p>Included a transition period to Progress Level 1 of Criterion 3.2 with certification initially requiring knowledge of the region of suppliers of input materials and then later the sites of suppliers of input materials.</p> <p>Included a transition period to Progress Level 1 of Criterion 3.4 such that a steelmaker would need to undertake a campaign to increase supplier participation in recognised programmes initially and then later demonstrate that suppliers are committed to, and then implemented, third party audits to recognised programmes.</p>

		<p>A new split between raw and processed mined materials was adopted in order to reflect the more complex supply chains of processed mined materials as well as the ability to use the chemical composition of raw mined materials to establish an assumed region of origin.</p> <p>10.4.5: Revision of the replacement value for non-ferrous metal and ferro-alloy additives.</p> <p>10.4.7: Included credit for the recovery of waste energy for power and steam generation.</p> <p>10.4.7: Inclusion of blast furnace (BF), basic oxygen furnace (BOF) and coke oven gas emission intensities (direct emissions) as in ISO 14044.</p> <p>10.4.7: Update of current International Energy Agency (IEA) global grid intensity.</p> <p>10.6: Revision of Decarbonisation Progress Levels, affecting only the high-scrap end of the sliding scale.</p> <p>10.6: Inclusion of scrap % equation.</p> <p>Removal of non-mandatory guidance and annexes.</p> <p>Alignment of terminology to reflect updates to the ResponsibleSteel Claims and Logo Use Guidelines.</p> <p>Typographical and formatting corrections found in Version 2.0.</p> <p>Addition of various informative figures.</p>
Version 2.1.1	2 September 2024	<p>Included urgent revision to 6.8.2.</p> <p>Added guidance to 6.8.2.</p> <p>6.8.2: Adjustment made to the condition to allow wage deduction as disciplinary practices. The guidance clarifies the conditions in detail.</p>

Disclaimer

The official language of this Standard is English. The definitive version is held on the ResponsibleSteel [website](#). Any discrepancy between copies, versions or translations shall be resolved by reference to the definitive English version.

Table of Contents

About this document	2
Background on ResponsibleSteel	8
The ResponsibleSteel Theory of Change	9
Overview of the ResponsibleSteel International Production Standard	10
1. The Production Standard	10
2. The Principles	10
3. Scope of Application	12
4. Certification	13
5. Certification Types	14
6. Review and Revision	17
Principles, Criteria and Requirements	18
Principle 1. Corporate Leadership	19
Criterion 1.1: Corporate values and commitments	19
Criterion 1.2: Leadership and accountability	20
Principle 2. Environmental, Social and Governance Management Systems	20
Criterion 2.1: Management system	21
Criterion 2.2: Responsible sourcing	22
Criterion 2.3: Legal compliance and signatory obligations	22
Criterion 2.4: Anti-corruption and transparency	23
Criterion 2.5: Competence and awareness	24
Principle 3. Responsible Sourcing of Input Materials	24
Criterion 3.1: Commit to responsible sourcing and incorporate it in key functions and processes	29
Criterion 3.2: Know your upstream supply chains	31
Criterion 3.3: Understand ESG risks and impacts of supply chains and promote improvement	34
Criterion 3.4: Strengthen and account for responsible sourcing	36
Criterion 3.5: Report publicly on responsible sourcing	41
• Background on scrap	42
• Introduction to the scrap requirements	44
• Responsible sourcing requirements related to scrap	45

Criterion 3.6: Commit to responsible sourcing and incorporate it in key functions and processes	45
Criterion 3.7: Know your upstream scrap supply chain	46
Criterion 3.8: Understand supplier ESG performance and promote improvement	47
Criterion 3.9: Strengthen and account for responsible sourcing	48
Criterion 3.10: Report publicly on responsible sourcing	49
Principle 4. Decommissioning and Closure	50
Criterion 4.1: Decommissioning and closure	51
Principle 5. Occupational Health and Safety	52
Criterion 5.1: Occupational Health and Safety	53
Criterion 5.2: Occupational Health and Safety management system	53
Criterion 5.3: Leadership and worker engagement on Occupational Health and Safety	54
Criterion 5.4: Support and compensation for work-related injuries or illness	54
Criterion 5.5: Safe and healthy workplaces	55
Criterion 5.6: Occupational Health and Safety performance	56
Criterion 5.7: Emergency preparedness and response	56
Principle 6. Labour Rights	57
Criterion 6.1: Child and juvenile labour	58
Criterion 6.2: Forced or compulsory labour	58
Criterion 6.3: Non-discrimination	59
Criterion 6.4: Association and collective bargaining	60
Criterion 6.5: Disciplinary practices	61
Criterion 6.6: Hearing and addressing workers' concerns	62
Criterion 6.7: Communication of terms of employment	62
Criterion 6.8: Remuneration	63
Criterion 6.9: Working time	64
Criterion 6.10: Worker wellbeing	64
Principle 7. Human Rights	65
Criterion 7.1: Human rights due diligence	65
Criterion 7.2: Security practice	67
Criterion 7.3: Conflict-affected and high-risk areas	67
Principle 8. Stakeholder Engagement and Communication	68
Criterion 8.1: Stakeholder engagement	69
Criterion 8.2: Grievances and remediation of adverse impacts	69
Criterion 8.3: Communicating to the public	70
Principle 9. Local Communities	71
Criterion 9.1: Commitment to local communities	72
Criterion 9.2: Free, Prior and Informed Consent (FPIC)	73
Criterion 9.3: Cultural heritage	73
Criterion 9.4: Displacement and resettlement	74

Principle 10. Climate Change and Greenhouse Gas Emissions	75
Criterion 10.1: Corporate commitment to achieve the goals of the Paris Agreement	78
Criterion 10.2: Corporate Climate-Related Financial Disclosure	79
Criterion 10.3: Determination of GHG emissions for the purpose of site-level GHG emissions reduction targets and planning	79
Criterion 10.4: Determination of site-level GHG emissions for the purpose of reporting GHG emissions intensity when producing crude steel	80
Criterion 10.5: Site-level GHG emissions reduction targets and planning	89
Criterion 10.6: Requirements to market or sell products as ResponsibleSteel certified	90
Criterion 10.7: GHG emissions disclosure and reporting	95
Principle 11. Noise, Emissions, Effluents and Waste	99
Criterion 11.1: Noise and vibration	99
Criterion 11.2: Emissions to air	100
Criterion 11.3: Spills and leaks	101
Criterion 11.4: Waste, by-product and production residue management	101
Principle 12. Water Stewardship	102
Criterion 12.1: Water-related context	103
Criterion 12.2: Water balance and emissions	103
Criterion 12.3: Water-related adverse impact	104
Criterion 12.4: Managing water issues	104
Principle 13. Biodiversity	105
Criterion 13.1: Biodiversity commitment and management	106
Annex 1 (mandatory): The steel sector's core raw materials	108
Annex 2 (mandatory for Principle 3): Input materials covered, not covered and excluded	109
Annex 3 (mandatory for Principle 3): Principles for the Responsible Management of Scrap	113
Annex 4 (mandatory for 10.3.3): Materials for which the upstream GHG emissions must be considered under requirement 10.3.3.	115
Annex 5 (mandatory for 10.4): ResponsibleSteel default embodied GHG values	116
Guidance	119

Background on ResponsibleSteel

Steel is essential to almost every aspect of modern life and is, today, the **world's largest materials industry. But its versatility comes with unique** sustainability challenges. ResponsibleSteel was established in 2016 as a direct result of discussions to address these challenges.

ResponsibleSteel is an international, non-profit multi-stakeholder membership organisation. Businesses from every part of the steel supply chain, civil society groups, associations, and other organisations with an interest in a sustainable steel industry from anywhere in the world are welcome to join.

ResponsibleSteel's purpose is to maximise steel's contribution to a sustainable society. Its mission is to be a driving force in the socially and environmentally responsible production of net-zero steel, globally, by:

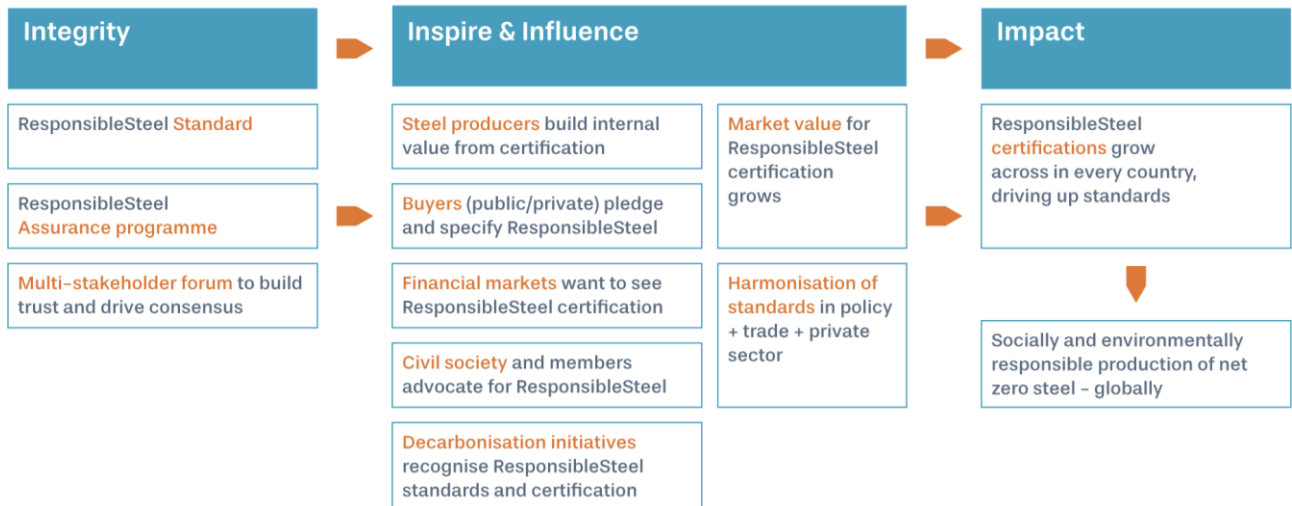
- Providing a multi-stakeholder forum to build trust and achieve consensus
- Developing standards, certification and related tools
- Driving positive change through the recognition and use of responsible steel.

The ResponsibleSteel International Production Standard is designed to support the responsible sourcing and production of steel, as a tool for achieving ResponsibleSteel's vision.

For further information, please see www.responsiblesteel.org/.

The ResponsibleSteel Theory of Change

Figure 1 – ResponsibleSteel Theory of Change



ResponsibleSteel has developed its own Theory of Change, which can [be found here](#). It outlines the vision and mission of the organisation, and the assumptions, outputs, and intermediate and long-term results to achieve them.

Overview of the ResponsibleSteel International Production Standard

1. The Production Standard

The objective of the ResponsibleSteel International Production Standard is to support the responsible sourcing and production of steel, as a tool for achieving ResponsibleSteel's purpose: to maximise steel's contribution to a sustainable society.

In order to achieve this objective, the Production Standard aims to:

- a) Define the fundamental elements that characterise the responsible sourcing and production of steel, to the satisfaction of customers, users, investors and civil society;
- b) Define levels of performance within these fundamental elements that:
 - I. Encourage broad participation of steelmakers in both developed and developing countries in the ResponsibleSteel programme;
 - II. Merit recognition and endorsement of the programme by civil society members;
 - III. Maximise steel's contribution to a sustainable society through responsible sourcing of input materials and managing the impact of its production.

2. The Principles

The ResponsibleSteel International Production Standard consists of thirteen Principles for the responsible sourcing and production of steel:



Principle 1. Corporate Leadership

ResponsibleSteel certified sites are led responsibly.



Principle 2. Environmental, Social and Governance Management Systems

ResponsibleSteel certified sites have an effective management system in place to achieve the environmental, social and governance (ESG) objectives to which they are committed.



Principle 3. Responsible Sourcing of Input Materials

ResponsibleSteel certified sites increasingly source input materials from suppliers that are working to improve their ESG performance and address ESG risks.



Principle 4. Decommissioning and Closure

ResponsibleSteel certified sites minimise the adverse social, economic and environmental impacts of full or partial site decommissioning and closure.



Principle 5. Occupational Health and Safety

ResponsibleSteel certified sites protect the health and safety of workers.



Principle 6. Labour Rights

ResponsibleSteel certified sites respect the rights of workers and support worker wellbeing.



Principle 7. Human Rights

ResponsibleSteel certified sites respect human rights wherever they operate, irrespective of their size or structure.



Principle 8. Stakeholder Engagement and Communication

ResponsibleSteel certified sites engage effectively with stakeholders, report openly on issues of importance to stakeholders, and remediate adverse impacts that they have caused or contributed to.



Principle 9. Local Communities

ResponsibleSteel certified sites respect the rights and interests of local communities, avoid and minimise adverse impacts and support community wellbeing.



Principle 10. Climate Change and Greenhouse Gas Emissions

The corporate owners of ResponsibleSteel certified sites are committed to the global goals of the Paris Agreement, and both certified sites and their owners are taking the necessary action to demonstrate this commitment.



Principle 11. Noise, Emissions, Effluents and Waste

ResponsibleSteel certified sites prevent and reduce emissions and effluents that have adverse effects on communities or the environment, manage waste according to the waste management hierarchy and take account of the full life cycle impacts of waste management options.



Principle 12. Water Stewardship

ResponsibleSteel certified sites demonstrate good water stewardship.



Principle 13. Biodiversity

ResponsibleSteel certified sites protect and conserve biodiversity.

Key terms and concepts are defined in the ResponsibleSteel Glossary, which can be found on the ResponsibleSteel [website](#). Glossary definitions are intended to ensure consistent understanding and interpretation, and are normative.

3. Scope of application

This Production Standard may be applied to operational steelmaking sites and to related sites that process input materials for steelmaking, or that produce steel products. It does not apply to service providers, mine sites, or to sites producing products made with multiple components.

'Site' refers to the physical site under management or control. A single site may consist of multiple processing facilities and related plants for the integrated production of steel, including, for example, coke ovens, sinter or pellet plants, furnaces, rolling mills and coating facilities, or may consist of freestanding facilities that produce specific input materials for steelmaking, such as coke or pig iron, or a freestanding rolling mill. In all cases, the specific scope and boundaries for auditing will be defined at the time of applying for certification, and the requirements of the Production Standard will be applicable to all the facilities within the site. Additional detail on the scope of application is provided in the ResponsibleSteel Assurance Manual.

This version of the Production Standard does not specify ESG requirements that apply to the **transportation of the site's input materials or its products.**

Some of the Production Standard's requirements specify actions or reporting that are implemented by the site's corporate owners. A site's commitment to achieve ResponsibleSteel certification also has implications for its input material suppliers, through procurement, and for some service providers. For example, recruitment and employment agencies under Principles 5 (Occupational Health and Safety) and 6 (Labour Rights), and energy and water suppliers under Principles 10 (Climate Change and Greenhouse Gas Emissions) and 12 (Water Stewardship).

Overarching policies, procedures, codes of conduct, etc. may be set at the corporate owner or **'group' level, rather than separately by the individual sites seeking certification.** In such cases, auditors will evaluate whether the policy, procedure, code of conduct, etc. is accessible, known, understood and effectively implemented at the site. Sites must be able to demonstrate to their auditors that this is the case, but are not required to develop their own policies, etc. Where data is collected or records are **kept at the corporate owner or 'group' level, the site must be able to** provide the auditors with access to that data or the records.

In principle, all requirements of the Production Standard apply to all sites unless otherwise specified. In some cases, though, specific requirements, Criteria or an entire Principle might not be relevant at a particular site. This might apply, for example, in the case of Principle 4 if no site decommissioning or closure has been announced. Criterion 2.1 specifies that sites must review all ResponsibleSteel requirements to identify those that they do not consider to be relevant, and to explain their reasoning. **The justifications will be reviewed by the site's auditors and will** be included in the final audit report submitted to ResponsibleSteel. If a requirement has been wrongly excluded, a certificate will not be issued.

4. Certification

Each of the thirteen ResponsibleSteel Principles is underpinned by a number of Criteria and underlying requirements. Conformity with the ResponsibleSteel International Production Standard is audited at the level of the requirements specified for each Criterion. For a site to achieve and maintain certification there must be no major non-conformities with any requirement. Minor non-conformities do not preclude certification but must be corrected.

The resources on ResponsibleSteel's [website](#) provide guidance on the Production Standard's requirements to site managers, auditors and other stakeholders. They help to correctly interpret the intent of the requirements and contain expectations related to conformity and its demonstration. These resources clarify where a site must follow the guidance if it is to achieve conformity with a specified requirement. They also include examples of good practice so that sites that follow the provided guidance can be confident that they are implementing the Production Standard correctly. These resources are working documents and will be added to as experience with auditing against the Production Standard builds up over time.

Audits are carried out by independent third-party certification bodies approved by ResponsibleSteel and contracted by the site applying for certification. Certification bodies submit a formal audit report to ResponsibleSteel. An independent Assurance Panel, appointed by ResponsibleSteel, reviews the audit report and recommendation to certify a site before any decision can be made by the certification body, and a certificate issued where applicable.

The Production Standard sets a benchmark for the responsible sourcing and production of steel that has been agreed through a perennial multi-stakeholder process involving business and civil society. While the Production Standard adopts elements from other relevant standards, guidelines and conventions, it goes beyond them in places where stakeholders agreed that a higher standard was needed to drive good practice within the steel sector globally. At the same time, the Production Standard is not as detailed as some of the single-issue standards, guidelines and conventions that it draws from because it covers thirteen overarching Principles and is tailored to the steel sector.

Where sites are certified as conforming with other standards (for example ISO 9001, 14001 or 45001) that have overlapping requirements, auditors may use the findings from these other audits to support their assessment of conformity with the relevant ResponsibleSteel requirement, as described in the ResponsibleSteel Assurance Manual.

The Production Standard is a standard that is applied and recognised globally and its specified requirements go beyond minimum legal requirements in many countries. Conformity with the Production Standard is **voluntary and is intended to identify and reward steelmakers'** contributions to a sustainable society. The Production Standard does not take priority over a **site's legal obligations**. If there is a direct conflict between ResponsibleSteel requirements and a site's legal obligations, those obligations must prevail, although this may preclude a site from achieving certification.

Further details of the ResponsibleSteel assurance system and procedures are specified in the ResponsibleSteel Assurance Manual.

The Production Standard brings the requirements and mandatory guidance together, which means it is binding and has to be followed to interpret the requirements in this document. Other guidance is presented in a separate document named "Guidance and Annexes from Standard" that can be found on ResponsibleSteel's [website](#). Similarly, the Production Standard presents mandatory annexes (1 to 5) here and other non-mandatory annexes in the same "Guidance and Annexes from Standard" document available on the ResponsibleSteel [website](#).

Definitions can be found in the standalone Glossary document, also available on the ResponsibleSteel [website](#).

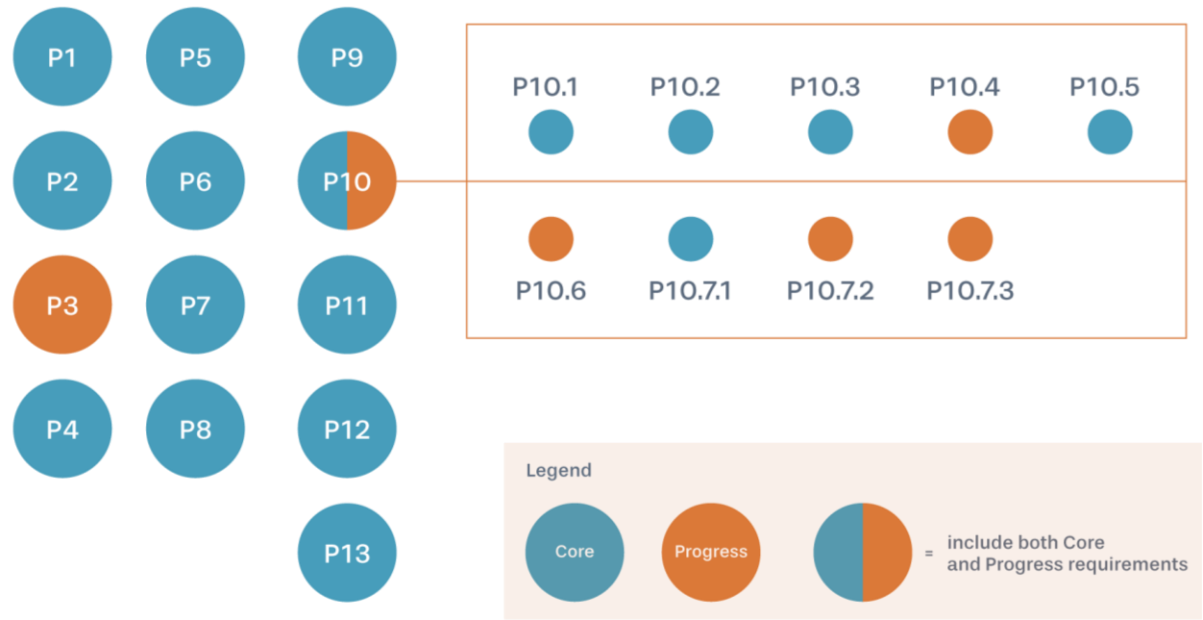
5. Certification Types

The ResponsibleSteel International Production Standard Version 2.1 is the basis for:

- (i) Core Site Certification, which requires conformance with all Core criteria (Principles 1, 2, 4 to 9, 11 to 13, and the Core criteria of Principle 10)
- (ii) Steel Certification, which requires conformance with all Progress criteria (Principle 3 and Progress criteria of Principle 10) in addition to all Core criteria. Progress criteria are in relation to the responsible sourcing of input materials (Principle 3) and site-level decarbonisation (Principle 10) where four levels of progress are defined for each.

The expectation is that steelmakers strive to advance from Core Site Certification (Core criteria compliance) to Steel Certification (Core and Progress criteria compliance), and then advance from Progress Level 1 (entry level) to Progress Level 4 (hardest to obtain) for both responsible sourcing and decarbonisation.

Figure 2 - Principles containing Core and/or Progress requirements



Under Core Site Certification, companies may use the ResponsibleSteel Core Certified Site mark to promote a site's conformance with Core criteria (see figure 1). Under Steel Certification, where steelmaking sites that have achieved at least Progress Level 1 in relation to both materials sourcing and decarbonisation, sites may use additional versions of the ResponsibleSteel Certified Site mark, which shows the Progress Level that the site has achieved (see figure 2). They may also market and sell their steel products, co-products and by-products as ResponsibleSteel certified, and can apply the ResponsibleSteel Certified Steel mark to their certified products (see figure 3).



Figure 1:
Core Certified Site mark

Figure 2:
Certified Site mark with Progress Levels

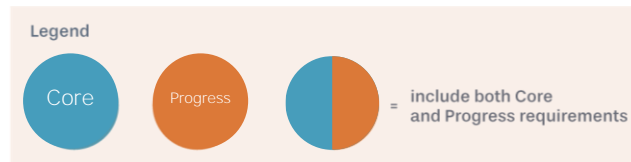


Figure 3:
Certified Steel mark with Progress Levels




















All sites that are issued with ResponsibleSteel certificates must follow the requirements regarding claims, logos and labels as specified in the [ResponsibleSteel Claims and Logo Guidelines](#).

ResponsibleSteel is currently developing an International Chain of Custody Standard to allow ResponsibleSteel certified steel to be tracked through the different manufacturing stages and through to steel end-users. The Chain of Custody Standard is expected to be published by the end of 2024 and will allow downstream manufacturers and end-users to make appropriate, verifiable claims about their use of ResponsibleSteel certified steel. Until then, only certified steelmaking sites are permitted to label, or make claims about, ResponsibleSteel certified steel or steel products. Please refer to the ResponsibleSteel [website](#) for the latest developments on the Chain of Custody Standard.

Table 1 – Principles containing Core and/or Progress Requirements



Production Standard requirement		
Principle 1 	Principle 1. Corporate Leadership	
Principle 2 	Principle 2. Social, Environmental and Governance Management Systems	
Principle 3 	Principle 3. Responsible Sourcing of Input Materials	
Principle 4 	Principle 4. Decommissioning and closure	
Principle 5 	Principle 5. Occupational Health and Safety	
Principle 6 	Principle 6. Labour Rights	
Principle 7 	Principle 7. Human Rights	
Principle 8 	Principle 8. Stakeholder Engagement and Communication	
Principle 9 	Principle 9. Local Communities	
Principle 10 	10.1	

Principle 10	10.1	
Principle 10	10.2	
Principle 10	10.3	
Principle 10	10.4	
Principle 10	10.5	
Principle 10	10.5	
Principle 10	10.5	
Principle 10	10.5	
Principle 10	10.5	
Principle 10	10.6	
Principle 10	10.7.1	
Principle 10	10.7.2	
Principle 10	10.7.3	
Principle 11 	Principle 11. Noise, Emissions, Effluents and Waste	
Principle 12 	Principle 12. Water Stewardship	
Principle 13 	Principle 13. Biodiversity	

6. Review and Revision

ResponsibleSteel international standards are reviewed and considered for revision within a maximum of five years from the date of approval, in accordance with the ResponsibleSteel International Standards Development Procedures.

The review and revision for the Production Standard is scheduled to start in 2024. The process will take into account all comments received in the Issues Log after the Production Standard is adopted and will involve the full consultation process outlined in Section 3 of the International Standards Development Procedures.

For further details, please see the ResponsibleSteel Standards Development Procedures at www.responsiblesteel.org/resources/.

ResponsibleSteel International Production Standard

Version 2.1

Principles, Criteria and
Requirements

Principle 1. Corporate Leadership

Objective:


ResponsibleSteel certified sites are led responsibly.

Background:

Customers, investors, employees and other stakeholders increasingly expect companies to demonstrate that they are responsible corporate citizens, avoiding undesired impacts on **society and the environment in their areas of influence**. ResponsibleSteel's first Principle lays the foundation for responsible business conduct. It focuses on the need for clear, consistent corporate leadership: the corporate values, policies and commitments that are made at the highest level of an organisation, that define its culture, and then drive adoption of responsible **practices throughout the organisation's management and operations**. Compliance with applicable laws and regulations and combatting corruption are also key elements of that foundation and are covered in the Corporate Leadership Principle. The ResponsibleSteel International Production Standard then requires that the board and senior management of the site seeking certification take responsibility for the implementation of these commitments and foundational elements.

	Criterion 1.1: Corporate values and commitments The site's corporate owners have defined and documented the values and policies for responsible business conduct to which they are committed.	Core
1.1.1.	<p>The site's corporate owners have defined and documented the values, policies and commitments that they require sites under their control to implement, including at least the following:</p> <ul style="list-style-type: none">a) A commitment to help achieve the ResponsibleSteel purpose and mission (2022)b) A code of ethical conduct or similar instrumentc) A commitment to comply with all applicable laws, regulations and formal agreements in the countries where they operated) An anti-corruption policy that:<ul style="list-style-type: none">• Addresses the management of conflicts of interest and political and charitable contributions• Prohibits extortion, embezzlement, bribery, facilitation payments and money laundering• Grants protection to employees from demotion, penalty or other adverse consequences for refusing to participate in corruption, even if such refusal may result in the site losing business	

	e) A responsible sourcing policy that includes a commitment to source raw materials from suppliers with policies and practices that support the implementation of the ResponsibleSteel Principles and criteria, as applicable to the sourcing of raw materials.
1.1.2.	The values, policies and commitments that the corporate owners are committed to are effectively communicated to the site's workers and are readily accessible to the public.

 Criterion 1.2: Leadership and accountability Core <p>The site's directors and senior managers are responsible for ensuring that the values, policies and commitments defined by the corporate owners are implemented at their site.</p>	
1.2.1.	Individual members of the site's board of directors, or equivalent oversight body have specific responsibility for ensuring the values, policies and commitments defined by the corporate owner are implemented at their site.
1.2.2.	Specific senior managers are responsible for implementing the values, policies and commitments defined by the corporate owner.
1.2.3.	There is an effective process in place to monitor how well the values, policies and commitments defined by the corporate owner are implemented in practice. Where gaps are found between the values, policies and commitments and actual business practice and behaviour, the site identifies the root causes and defines and implements actions to address them.
1.2.4.	Effective procedures are in place to ensure the site's senior management to report to the site's board of directors or equivalent oversight body on a regular basis on the implementation of the company's values, policies and commitments.
1.2.5.	There is evidence that the members of the site's board of directors or equivalent oversight body exercise effective oversight of the implementation of the values, policies and commitments defined by the corporate owner.

Principle 2. Environmental, Social and Governance Management Systems


Objective:

ResponsibleSteel certified sites have an effective management system in place to achieve the environmental, social and governance (ESG) objectives to which they are committed.

Background:

An effective management system identifies a site's management objectives, ensures that there are policies and procedures in place to achieve them, and requires that performance is measured and monitored over time. Most well-managed steel sites already implement formal management systems covering key ESG objectives, based on recognised international standards. The ResponsibleSteel International Production Standard requires a certified site to have such systems in place and demands that sites ensure their management systems cover all the applicable requirements of the Production Standard. A site's management system may be integrated or consist of various standalone management systems.

The Production Standard aims to avoid repeating the details of internationally recognised management system standards, but includes some requirements to verify their effectiveness, for example in relation to worker training.

	<h2>Criterion 2.1: Management system</h2> <p>The site is operated in accordance with a documented management system that incorporates all applicable ESG requirements of the Production Standard.</p>	<div>Core</div>
2.1.1.	The site has reviewed the Production Standard to determine whether any of its requirements do not apply to the site seeking certification. The site will have a record of any requirements that are deemed not applicable, as well as the basis for such determination.	
2.1.2.	<p>The site has a documented and effective management system or systems in place that:</p> <ul style="list-style-type: none">a) Identify the site's main ESG risks and adverse impacts and includes management provisions to prevent and mitigate themb) Include provisions to monitor and achieve compliance with all applicable requirements of the Production Standardc) Incorporate key performance indicators for the site's main ESG risk and impact areas.	
2.1.3.	The site's system for the management of environmental aspects is certified by a competent third party in compliance with the requirements of ISO 14001: Environmental management systems – requirements with guidance for use.	
<h3>Mandatory guidance:</h3> <p>Sites must take into account stakeholder concerns when identifying ESG risks and impacts, and in defining prevention and mitigation measures.</p> <p>2.1.3. In line with ISO, ResponsibleSteel does not require the third party issuing the ISO 14001 certificate to be accredited by a specific accreditation body. ISO's website says the following on this topic: "Accreditation provides independent confirmation of competence. However, accreditation is not compulsory, and non-accreditation does not necessarily mean the certification body is not reputable."</p>		



Criterion 2.2: Responsible sourcing

Core

There are effective procedures in place to ensure that the site has **implemented its corporate owner's responsible sourcing commitments in its own procurement processes.**

2.2.1.	<p>The site has effective procedures in place to implement the corporate owner's policy commitment to responsible sourcing (see 1.1.1.e). Procedures include at least the following elements:</p> <ul style="list-style-type: none">a) The corporate owner's commitment to responsible sourcing is communicated to the site's tier 1 suppliers of key raw materialsb) There are documented procurement specifications that implement the corporate owner's commitment to responsible sourcing as applicable to the sitec) The site's tier 1 suppliers of key raw materials are required to document their own responsible sourcing commitments (if any) and to make these available to the teams responsible for the site's procurement.
2.2.2.	<p>The site has access to a listing of its tier 1 suppliers and to copies of their commitments to responsible conduct or responsible sourcing. If the supplier does not have such a commitment this is recorded.</p>
2.2.3.	<p>Key performance indicators for the teams responsible for the site's procurement of raw materials have been specified and are aligned with the corporate owner's commitment to responsible sourcing.</p>

Mandatory guidance:

The site's corporate sourcing policy must, as a minimum, cover the sourcing of the key raw materials listed in Annex 1 where these materials are used by the site. The site's corporate sourcing policy may apply beyond the tier 1 suppliers of key raw materials. Where this is the case, the site's procedures should reflect this.



Criterion 2.3: Legal compliance and signatory obligations

Core

The site has effective procedures in place to ensure that it complies with applicable law and operates consistently with formal agreements that it has in place.

2.3.1.	<p>The site implements documented procedures for:</p> <ul style="list-style-type: none">a) Identifying and understanding its legal obligations and, where applicable, its obligations as a signatory to formal agreementsb) Integrating legal and signatory obligations into the site's processes and activitiesc) Monitoring site compliance with legal and signatory obligationsd) Monitoring legal developments and identifying evolving areas of legal risk.
2.3.2.	<p>The site carries out regular legal compliance evaluations. In case of potentially non-complying situations, the site identifies the root causes and defines and implements actions that ensure compliance.</p>


2.3.3.	The site maintains records to demonstrate regulatory compliance and consistency with agreements it has committed to meet.
--------	---

Mandatory guidance:

Legal obligations include:

- Legislation, regulations and legally required codes or standards
- Permits, licences and other forms of authorisation
- Local government legislation
- Decisions, directions, rulings or interpretations issued by relevant courts and tribunals.

Failure to adequately address the cause(s) of identified legal non-compliances would be considered a non-compliance with the Production Standard. Continued failure, evidenced by repeated or longstanding non-compliance with legal obligations, would ultimately result in the withdrawal of the certificate.

<div>  <div> <p>Criterion 2.4: Anti-corruption and transparency</p> <p>The site has effective procedures in place to combat corruption.</p> </div> <div>Core</div> </div>	
2.4.1.	<p>The site:</p> <ul style="list-style-type: none"> a) Has identified and listed those parts of its operations and activities that are at highest risk of corruption b) Has documented procedures to implement and monitor the application of its anti-corruption policy (see 1.1.1.d), including specific procedures that are applicable to the operations and activities that have been identified as high risk c) Investigates incidences of corruption and suspected corruption and imposes sanctions on employees and contractors where corruption or attempted corruption is found.
2.4.2.	The site implements processes to verify the legitimacy of cash transactions, and limits cash transactions to a maximum of US\$10,000 (or the approximate equivalent in local currency), or lower where required by law.
2.4.3.	As part of its anti-corruption procedures, the site sets criteria and approval processes for the offer and acceptance of third-party financial and in-kind gifts, including hospitality and entertainment. It also keeps records of given and accepted gifts that require approval.
2.4.4.	In countries with a high corruption risk, or in cases of public controversy, the effectiveness of the site's anti-corruption procedures is reviewed by a competent party. Root causes of corruption incidents are identified and actions to avoid a recurrence are defined and implemented.
2.4.5.	The site publicly reports the names of political parties, politicians, public officers and other politically exposed persons (PEP) that have received financial or in-kind contributions directly or indirectly from the site, and the total monetary value that they have received.
2.4.6.	The site regularly reports to the public the names of business associations, charities and think tanks that have received financial or in-kind contributions directly or indirectly from the site, citing the total monetary value they have received.

Mandatory guidance:

High corruption risk: a country with a score below 50 on the most recent Transparency International Corruption Perceptions Index is considered to have a high corruption risk.



Criterion 2.5: Competence and awareness

Core

Workers are competent and aware of their roles and responsibilities as specified within the site's management systems.

2.5.1.	The site has determined the competencies its workers need to implement their roles and responsibilities, as specified in its management system. Competency requirements are established for any role that is designated in the management system and the site has an ongoing education and training programme in place to ensure that competency.
2.5.2.	The site regularly reviews the education, experience, received training and performance of workers to identify gaps in competency.
2.5.3.	Where gaps are identified, the site takes actions with workers to acquire and maintain the necessary competency.
2.5.4.	The site retains documented information as evidence of worker competency.
2.5.5.	The site has effective processes in place to ensure that workers are aware of their roles and responsibilities and that workers are competent in the implementation of their roles and responsibilities.

Principle 3. Responsible Sourcing of Input Materials

Objective:

ResponsibleSteel certified sites increasingly source input materials from suppliers that are working to improve their environmental, social and governance (ESG) performance and address ESG risks.

Background:

Principle 3 applies to steel sites wanting to achieve the certification of progress in relation to responsible sourcing as well as Core Site Certification. Stakeholders, especially customers, regulators and civil society organisations, expect companies to understand what is going on in their supply chains and to help manage supplier ESG issues. This expectation goes beyond a company's direct suppliers and encompasses all stages of the supply chain. Our vision is that

steel companies eventually source all input materials, services and goods from responsible direct and indirect suppliers. However, we recognise the challenges of multi-tier and multi-material supplier networks where a buyer's influence diminishes the more distant suppliers are in the value chain and the lower the buyer's purchasing value. Since our responsible sourcing vision will take time to implement, ResponsibleSteel has defined four Progress Levels for the responsible sourcing of materials that are associated with increasing ESG performance expectations.

The Progress Levels are intended to:

- Define discrete steps to help reduce the complexity of responsible sourcing
- Provide a clear roadmap for the responsible sourcing journey for steel companies and their suppliers
- Help drive momentum for the creation of responsible supply chains
- Enable downstream customers and other stakeholders to specify which level of ESG performance they expect from steel companies and their suppliers.

The steel sector relies heavily on extracted minerals, scrap and, in some cases, wood for the production, processing and finishing of steel products. Mining, forestry and related processing activities can be important contributors to a country's economy and to regional development. However, they can also be associated with complex environmental and social impacts. Rather than developing our own standards for the responsible conduct of these activities, we [recognise programmes](#) that credibly define and promote responsible mining, forestry and processing and integrate them into our own requirements. Agricultural residues and waste materials such as plastics are used to a small extent in the steel sector as a replacement for coal-based input materials and steel sites are expected to manage ESG risks associated with suppliers of these input materials. Annex 2 lists all input materials that are covered or not covered by the responsible sourcing requirements, as well as those that are excluded – currently energy crops and wood from forests (as opposed to wood from plantations).

While there are several programmes for responsible mining, forestry and related processing that the ResponsibleSteel International Production Standard can build on, there are no comparable programmes for the collection and processing of scrap at the time of publishing these requirements. Being a recycled material, scrap supports sustainable production. However, scrap supply chains are significantly diversified, with many more players of different sizes and levels of formalisation and maturity than other supply chains. For these reasons, this document contains a separate set of requirements for scrap.

We have defined two sets of Criteria (3.1–3.5 and 3.6–3.10) with underlying requirements for the responsible sourcing of input materials used in steel production and processing.

The Criteria apply to the respective input materials where they are highlighted in blue in the following table:

Table 2 – Applicability of respective input materials to Principle 3 criteria

Input material	Criterion									
	3.1	3.2 Levels	3.3	3.4 Levels	3.5	3.6	3.7 Levels	3.8	3.9 Levels	3.10
Raw materials, originating from mining or quarrying										
Processed materials, originating from mining or quarrying										
Wood from plantations										
Agricultural residues										
Waste materials										
Scrap										

The structure of each set of Criteria is similar and can be summarised under the following five headings:

- Commit to responsible sourcing and incorporate it in key functions and processes (Criteria 3.1 and 3.6)
- Know your upstream supply chains (Criteria 3.2 and 3.7)
- Understand ESG risks and impacts of supply chains and promote improvement (Criteria 3.3 and 3.8)
- Strengthen and account for responsible sourcing (Criteria 3.4 and 3.9)
- Report publicly on responsible sourcing (Criteria 3.5 and 3.10)

Criterion 3.1 requires steel companies to commit to increasing the quantity of input materials they source from suppliers that operate in a responsible manner. Companies are also expected to embed their responsible sourcing commitment in key functions and processes to aid its implementation.

Under Criterion 3.2, steel companies are asked to increase their knowledge of their supply chain, as defined in the different Progress Levels of the Criterion. Steel is made using a variety of input materials that might be raw or processed, that pass through different suppliers and are

mixed and melted at various stages of production and processing. It is only by understanding these complex supply networks that steel companies can start to understand supplier ESG performance and support improvements where needed.

Criterion 3.3 requires steel companies to review and assess the ESG risks and impacts associated with their suppliers and promote recognised ESG standards within their supply chains. Steel companies must have a strategy in place to avoid and reduce ESG risks and impacts in their supply chains and must monitor progress on implementing that strategy.

Criterion 3.4 describes a progression. Initially, steel sites are expected to help drive demand for recognised programmes. To achieve the higher Progress Levels, they must increasingly source from suppliers that can offer independent proof of how they perform on ESG issues. We rely on **recognised input material programmes to deliver such proof. To achieve ResponsibleSteel's** mission, supplier ESG performance must progress over time.

Under Criterion 3.4, we have also defined 'chain of custody' requirements to monitor and record input material quantities as they move through supply chains. An intact chain of custody provides reassurance that input materials are indeed from responsible suppliers, making it an important tool in establishing credibility. However, the chain of custody model we describe, **called 'mass balance', does not expect steel companies to trace material back to the sites of origin**, because it allows blending and mixing of material throughout the chain. A proven, unbroken chain of custody is only required from level 2 onwards to give steel companies time to build market demand and work with their suppliers on establishing a chain of custody.

Finally, under Criterion 3.5, steel companies are requested to publicly report key information and developments in relation to responsible sourcing. Transparent reporting on what has been achieved and where progress is yet to be made is important for creating trust in the work that is being done to source input materials responsibly.

Steelmakers who wish to market or sell their steel products, co-products or by-products as ResponsibleSteel certified must meet the requirements of Criteria 3.1 to 3.10 and of criteria 10.4, 10.6, and 10.7 of Principle 10.

Where the requirements include Progress Levels, a steel company must reach Progress Level 1 as a minimum for both responsible sourcing, as specified in this Principle 3, and decarbonisation, as specified in Principle 10 (Climate Change and Greenhouse Gas Emissions).

The intention of the different Progress Levels in Criteria 3.2 and 3.4 is as follows:

- Progress Level 1 requires steel companies to have good visibility of their supply regions and supply chain links. They must also understand if their suppliers are participating in one of the recognised programmes. The aim of Level 1 is to generate market demand to support the creation of responsible supply chains. Level 1 must be met as a minimum for sites that wish **to sell or market their products as 'ResponsibleSteel certified'**.
- Progress Levels 2 to 4 build on Level 1 and steel companies can choose to work towards these higher levels. In line with our Theory of Change, growing expectations from downstream customers, investors, regulators, civil society and other stakeholders will encourage steel companies to continue past Level 1. Levels 2 to 4 cannot currently be made

mandatory since participation by suppliers in recognised input material programmes is too low. This emphasises the importance of Level 1 for building market demand.

- To meet Progress Level 2, steel companies must have high visibility of their supply chains links. They must also source a large proportion of their input materials from direct (tier 1) and indirect (tier 2, 3, etc.) suppliers that have achieved a pre-determined minimum ESG performance under an input material programme that is recognised by ResponsibleSteel (see the ResponsibleSteel [website](#) for more information).
- Progress Levels 3 and 4 can only be achieved where steel companies have even higher visibility of their upstream supply chain links, and where direct and indirect suppliers **participate in input material programmes that stakeholders consider 'best-in-class' in the relevant sector**, and have demonstrated high levels of ESG performance, as described in Criterion 3.4.

It should be noted that at Progress Level 1, we require 90% Forest Stewardship Council (FSC) forest management and chain of custody certification for wood from plantations, rising to 100% from Progress Level 2. FSC is a well-established and recognised certification programme that has seen strong take-up over the last 30 years. This is different to mined and quarried input material, where only a small number of companies are currently signed up to recognised programmes.

We aim to achieve two things with our sourcing requirements: recognise well-performing suppliers and help improve ESG performance across supply chains. For Progress Level 1, we have deliberately defined requirements that get steel companies and suppliers started on their responsible sourcing journey. Progress level 2 is a stepping stone to responsibility. Progress levels 3 and 4 require ESG performance that is currently aspirational in the mining sector. These higher Progress Levels recognise steel companies and suppliers that commit to and **implement input material programmes that are considered to be 'best-in-class' in their sector** in the views of stakeholders.

Through these levels we intend to incentivise a race to the top when it comes to responsible sourcing. In future, we expect to introduce a fifth level and eventually phase out level 1 to help us all, over time, achieve fully responsible supply chains. We will **communicate each steel site's** current Progress Level via the ResponsibleSteel [website](#), together with key information, to create greater transparency on the status of responsible sourcing at specific steel sites.

The requirements do not currently consider the responsible sourcing impacts of transportation, **although carbon dioxide (CO) emissions from transport are part of a steel company's Scope 3** emissions and, therefore, covered by the greenhouse gas (GHG) requirements. When the responsible sourcing requirements come up for revision, we expect to include transport and hope to build on recognised ESG programmes within the transport sector, as we already do for mined and quarried material and wood from plantations. The requirements cover all the input materials that are listed in Annex 2. These are thought to account for 80-90% of the input materials used in iron and steel production, processing and finishing. Additional input materials, consumables and services may be added when the requirements are revised.

In terms of the practical implementation of the sourcing requirements, the following should be noted: input materials for steel production, processing and finishing are often sourced at the corporate level or for groups of sites rather than at individual steel sites. Because of this, the corporate owner of a steel site is expected to engage in ResponsibleSteel audits to demonstrate that the sourcing requirements have been achieved. For ease of reading, we have written the responsible sourcing requirements to address steel sites, but it is understood that the corporate owners of the sites will be heavily involved in meeting the requirements.

	Criterion 3.1: Commit to responsible sourcing and incorporate it in key functions and processes	
	<p>There is a public commitment to source increasing quantities of input materials from suppliers that operate responsibly and that the commitment is incorporated in key purchasing functions and processes.</p>	
3.1.1.	<p>The responsible sourcing policy is readily accessible to the public and contains commitments to:</p> <ul style="list-style-type: none"> a) Strive to reach full visibility of input material supply chains over time b) Promote recognised input material programmes to direct and indirect input material suppliers c) Establish a chain of custody in upstream supply chains for input materials that are from responsible sources d) Report publicly and regularly on efforts to source input materials responsibly. 	
3.1.2.	<p>At least one specified member of senior management is accountable for implementing the site's responsible sourcing policy.</p>	
3.1.3.	<p>An effective training programme on responsible sourcing, chain of custody and company-specific procedures to implement the responsible sourcing policy is delivered for relevant teams.</p>	
3.1.4.	<p>Direct suppliers of input materials are required to implement a code of conduct or similar document that covers at least the following issues:</p> <ul style="list-style-type: none"> a) Compliance with applicable laws and regulations b) Prevention of corruption, bribery, extortion and money laundering c) Adherence to human rights and labour rights d) Protection of worker and local community health and safety e) Environmental stewardship f) Responsible sourcing g) Transparency on ESG-related issues h) Collaboration between supplier and customer to improve ESG performance i) Monitoring supplier adherence to the code of conduct j) Expectation that suppliers demand similar ESG practices from their own suppliers. 	

3.1.5.	New direct suppliers of input materials are assessed for their adherence to the code of conduct in line with a documented approval procedure.
3.1.6.	Adherence of existing direct suppliers of input materials to the code of conduct is regularly assessed. Where gaps become apparent, measures are taken to ensure the supplier acts in line with the code of conduct.

Mandatory guidance:

Approval procedure: A procedure that describes the conditions for new suppliers to be added to the supplier pool, how fulfilment of the conditions is checked and who signs off on new suppliers. The conditions must reflect the issues covered by the code of conduct.

Direct and indirect suppliers: Direct suppliers are often referred to as tier 1 suppliers. Indirect suppliers refer to all other subsequent suppliers (tier 2, tier 3, tier 4, etc.).

Sites of direct suppliers: Where the direct supplier is a trader or broker, they should supply information on the sites the scrap comes from prior to arriving at the steel producer. Where they are not willing to share this information, the steel company should refer to the auditable mechanism.

Sourcing policy: at a minimum, the responsible sourcing policy must cover the input materials listed in Annex 2 of the Production Standard in [Guidance and Annexes – Production Standard V2.1](#), which is mandatory for sites that aim to achieve Steel Certification.

Specified member of senior management: a named senior executive that is in charge of procurement, for example a chief procurement officer or head of sourcing.

Supply chains: Can be described using different terms, including tiers, levels and networks. In the context of the ResponsibleSteel responsible sourcing requirements, supply chain refers to upstream supplier activities, i.e. activities that take place prior to iron and steelmaking, processing and finishing, up to the sites of origin.

Chain of custody: process by which inputs and outputs and associated information are transferred, monitored and controlled as they move through each part of the supply chain. See Annex 10 of the Production Standard in [Guidance and Annexes – Production Standard V2.1](#) for more information about the chain of custody model that we have defined for upstream supply chains that participate in recognised input material programmes.

Human and labour rights: internationally recognised human and labour rights are laid out in the Universal Declaration of Human Rights and in the [ILO Declaration on Fundamental Principles and Rights at Work](#). The core labour standards covered by the Declaration are laid out in eight conventions (see below on page 54).

Environmental stewardship: refers to the efficient use of energy, water and other resources, the prevention of GHG emissions, air, water and land pollution, the use of a mitigation hierarchy for biodiversity and waste, minimal use of toxic materials, and increased recycling.

Recognised input material programmes: the definitive list of recognised programmes can be found on the ResponsibleSteel website. The methodology used to assess programmes for recognition, as well as the results of recognition assessments and any conditions and minimum ESG performance expected from suppliers are also available on the website.

Suppliers are required to implement a code of conduct or similar document: this can either be a code of conduct, or similar document, that a supplier has developed and that applies to all individuals working for it, or it can be a steel company's supplier code of conduct. A code of conduct can be made mandatory by linking it to supply contracts, terms and conditions, or similar. In either case, the code of

conduct must cover all the issues listed in 3.1.4. Note the definition of 'worker' in the [mandatory ResponsibleSteel Glossary](#).



Criterion 3.2: Know your upstream supply chains

Progress

The upstream supply chain links for the input materials used at the site are increasingly known and key information on direct and indirect suppliers is recorded.

3.2.1.	The site is implementing a documented procedure for collecting and verifying information on upstream input material supply chain links and regions of origin and processing. The procedure requires a site to keep this data for at least five years or for the legally required time, whichever is greater.										
3.2.2.	<p>The procedure specifies the following:</p> <ul style="list-style-type: none"> a) The primary and secondary data sources the site uses to collect information on upstream input material supply chain links and regions of origin and processing b) Operating names and addresses (or geo-locations in latitude/longitude) of sites of origin and upstream processing and of other types of suppliers are internally recorded for each input material, and on an annual basis c) Where direct or indirect suppliers are opposed disclosing operating names and addresses to the site, the site requests the supplier to share this information with the ResponsibleSteel auditors for the purpose of verification via an auditable mechanism d) How the site has tried to determine the identity of any sites of origin and upstream processing that are not known and are not shared via an auditable mechanism, and why it has been unable to do so e) The site determines at least the regions of origin and upstream processing where sites of origin and upstream processing cannot be identified for at least the percentages shown in the table in 3.2.3 f) How the site records the types, forms and tonnes of input material that each direct supplier has provided and from which site or sites, as well as how much of the respective input material the provided quantities account for. 										
3.2.3.	<p>To become certified to Progress Level 1: of the total tonnes received by the site in the last calendar or financial year, the regions of origin and processing are known for the following percentages. There is data to verify the achieved percentages:</p> <table> <tr> <th></th><th>Progress Level 1</th></tr> <tr> <td>a) Raw input material, originating from mining or quarrying</td><td>≥ 80%</td></tr> <tr> <td>b) Processed input material, originating from mining or quarrying</td><td>≥ 60%</td></tr> <tr> <td>c) Plantation wood with FSC forest management and chain of custody certification, or equivalent</td><td>≥ 90%</td></tr> <tr> <td>d) Agricultural residues</td><td>≥ 60%</td></tr> </table>		Progress Level 1	a) Raw input material, originating from mining or quarrying	≥ 80%	b) Processed input material, originating from mining or quarrying	≥ 60%	c) Plantation wood with FSC forest management and chain of custody certification, or equivalent	≥ 90%	d) Agricultural residues	≥ 60%
	Progress Level 1										
a) Raw input material, originating from mining or quarrying	≥ 80%										
b) Processed input material, originating from mining or quarrying	≥ 60%										
c) Plantation wood with FSC forest management and chain of custody certification, or equivalent	≥ 90%										
d) Agricultural residues	≥ 60%										

	e) Waste materials	≥ 60%		
3.2.4.	To remain certified to Progress Level 1, the following is met at the first surveillance audit: The site demonstrates that it is on track for achieving 3.2.5. Where progress is lacking, the site reviews and amends its campaign.			
3.2.5.	To remain certified to Progress Level 1, the following is met at the re-certification audit: of the total tonnes received by the site in the last calendar or financial year, at least the following percentages are from upstream input material supply chains where all sites of origin and processing are known. There is data to verify the achieved percentages:			
		Progress Level 1		
	a) Raw input material, originating from mining or quarrying	≥ 80%		
	b) Processed input material, originating from mining or quarrying	≥ 60%		
	c) Plantation wood with FSC forest management and chain of custody certification, or equivalent	≥ 90%		
	d) Agricultural residues	≥ 60%		
	e) Waste materials	≥ 60%		
3.2.6.	To become certified to Progress Levels 2 to 4: of the total tonnes received by the site in the last calendar or financial year, at least the following percentage is from upstream input material supply chains where all sites of origin and processing are known. There is evidence to verify the achieved percentage:			
		Progress Level 2	Progress Level 3	Progress Level 4
	a) Raw input material, originating from mining or quarrying	≥ 90%	≥ 95%	≥ 98%
	b) Processed input material, originating from mining or quarrying	≥ 70%	≥ 80%	≥ 90%
	c) Plantation wood with FSC forest management and chain of custody certification, or equivalent	≥ 100%		
	d) Agricultural residues	≥ 70%	≥ 80%	≥ 90%
	e) Waste materials	≥ 70%	≥ 80%	≥ 90%

Mandatory guidance:

Origin: refers to the mining or quarrying site or harvesting site. For waste materials, it refers to the first point of waste consolidation (not collection) after the plastic item became waste and was reclaimed, whether from industrial, residential or municipal sources, thereby marking the starting point within the supply chain for waste material. The same upstream supply chain boundaries apply to the scrap requirements.

Region: a region within a country, ideally a municipality in a country. The region is intended to give clues about potential risks to nature and people stemming from suppliers (see Criterion 3.3). It should be as granular as possible given that risk can vary greatly within a country. For example, for countries the size of Brazil, determining a state such as Minas Gerais to be the region of origin or processing would not be considered meaningful as Minas Gerais is too large to do a sensible analysis of risk to nature and people. Where the steel site does not know the region of origin or processing for sure, it should make its best-informed guess. In case the input material comes from artisanal, small-scale mining, the region might be the concession area.

Raw input material: material that has not undergone chemical transformation. See more information in Annex 2.

Processed input material: material that has been chemically transformed. See more information in Annex 2.

On track: The first surveillance audit should be completed 18 months after the certificate has been issued. At this time, the steel site should know the upstream sites of origin and processing for about half the tonnes given in the table in 3.2.5. However, convincing suppliers to share information about their own suppliers might require considerable effort, meaning the requested supplier information might be slower to come in at first. It is left to the professional judgement of the ResponsibleSteel auditors **to decide whether the steel site's progress seems sufficient for it to meet the percentages** given in the table in 3.2.5 at the time of its re-certification audit, which is expected to be completed three years after the initial certificate has been issued.

Other types of suppliers: traders or brokers.

In the last calendar or financial year: for the initial certification against the responsible sourcing requirements, as part of Steel Certification, the evidence demonstrating that the required percentages have been achieved may cover a period that is shorter than twelve months, but no less than six months. At the next regular audit (which can be a surveillance audit or a re-certification audit, depending on when a site achieved Steel Certification in its certification cycle), the site must present evidence for the full previous calendar or financial year to uphold certification.

Site of upstream processing: These include smelting, roasting and refining sites, as well as sites where plantation wood is turned into charcoal and where agricultural crops are processed.

The tables in Criterion 3.2 and in 3.4 are to be understood as follows:

- A site has achieved Progress Level 1 for responsible sourcing if it meets all the percentages shown in the Progress Level 1 column. It has achieved Progress Level 2 if all the percentages of the Progress Level 2 column are met, and so on.
- The overall Progress Level that a site achieves will be the lowest that is achieved for any material category. To give an example: if the site achieves Progress Level 2 for some requirements and Progress Level 1 for others, it will be certified to Progress Level 1 overall.

See the mandatory Annex 2 for a list of input materials that are covered and not covered by the responsible sourcing requirements, as well as those that are excluded from Steel Certification.

FSC forest management and chain of custody certification, or equivalent: this means wood and wood-based products from plantations that are covered by valid FSC forest management certificates and FSC chain of custody certificates. 'Controlled Wood', meaning wood and wood-based products labelled as 'FSC MIX' are excluded and cannot be used by steel sites that wish to market or sell their products as 'ResponsibleSteel certified'. 'Or equivalent' means that ResponsibleSteel is open to assessing whether there are other responsible forestry programmes in some regions that can be

recognised. For further information on permissible biomass-based input materials, see the mandatory Annex 2.



Criterion 3.3: Understand ESG risks and impacts of supply chains and promote improvement

Progress

The ESG risks and impacts associated with upstream input material supply chains are understood and an effective strategy for improvement is being implemented.

3.3.1.	A documented procedure to collect, analyse and classify information on the ESG risks and impacts of direct and indirect input material suppliers is being implemented.
3.3.2.	<p>The procedure establishes the following information hierarchy:</p> <ul style="list-style-type: none"> a) Site-level information is preferred, meaning information on those sites of direct and indirect suppliers that are engaged in the respective input material supply chain b) Where site-level information is not available, information is collected on the corporate owner of the sites c) Where this is not available, information on the respective input material and on the regions of origin and upstream processing is collected d) A list of the primary and secondary data sources that are used to understand and assess the ESG risks and impacts of direct and indirect suppliers or, where these are not known, of the regions of origin and upstream processing e) A definition of how a site determines whether the ESG risks and impacts of direct and indirect suppliers and of regions of origin and processing are high, medium or low, based on their likelihood and severity of damage to people and nature f) A list of input materials, or relevant shares thereof that are classified as high risk where all of the following are unknown: supplier sites, their corporate owners, and regions of origin and upstream processing g) A definition of regular frequencies for updating risk classifications and a description of unforeseen events that trigger unscheduled updates.
3.3.3.	In line with the procedure, the ESG risks and impacts of all direct and indirect input material suppliers, up to the origin of the concerned material, have been analysed and classified. In cases where the ESG risks and impacts up to the origin are not known, they are known for all regions of origin and upstream processing. The results have been documented and are updated as required by the procedure.
3.3.4.	An analysis of the governance structures, business strategies and practices of the site's corporate owner has been carried out to understand how they might evolve to avoid and reduce ESG risks and impacts in upstream input material supply chains. The results of the analysis have been documented.
3.3.5.	There is a documented strategy to help avoid and reduce ESG risks and impacts in upstream input material supply chains. The strategy:

	<p>a) Specifies how the governance structures, business strategies and practices of the site's corporate owner are evolving to avoid and reduce ESG risks and impacts in upstream supply chains, reflecting the results of the analysis discussed in 3.3.4</p> <p>b) Outlines how unknown supply chain links might be turned into known ones over time</p> <p>c) Describes how information gaps on the ESG risks and impacts of direct and indirect suppliers as well as regions of origin and processing are addressed</p> <p>d) Describes which ESG risks and impacts of direct and indirect suppliers, as well as regions of origin and processing, are given priority to help avoid or reduce negative impact on people and nature</p> <p>e) Defines measures that are taken to help avoid or reduce negative impact of direct and indirect suppliers, as well as regions of origin and processing, on nature and people</p> <p>f) Describes how recognised input material programmes are promoted to direct and indirect suppliers</p> <p>g) Contains time-bound targets and objectives to increase the quantity of input material sourced from sites of origin and upstream processing that participate in a recognised input material programme.</p>
3.3.6.	The site regularly reviews the implementation of the strategy to avoid and reduce ESG risks and impacts from upstream input material supply chains. The site documents the results of the review and progress against the targets and objectives and updates the strategy to reflect the review's findings.

Mandatory guidance:

ESG risks that are given priority: companies should follow the [United Nations Guiding Principles on Business and Human Rights](#). They state that where it's necessary to prioritise risks, because there are too many to address all at once, companies should first seek to avoid and reduce risks that may be the most severe from the perspective of affected stakeholders. This means that risks that are low likelihood but high severity have to be prioritised, just like risks that are high likelihood but low severity. **The severity of the (likely) impact should drive the company's approach to risk management.** This is reflected in the risk matrix in Annex 7 When assessing risk, companies should also focus on the (likely) impact on the affected stakeholders rather than on the (likely) impact on business. This is distinct from traditional business risk prioritisation.

In some cases, it will be clear whether a risk is severe. In others, it will be important to engage with potentially affected stakeholders to better understand the likely severity.

Some examples of circumstances that should always be prioritised:

- Where risk of child, forced or compulsory labour is identified, that risk should be immediately addressed, while ensuring the wellbeing of the child or person affected.
- Where mine sites, harvesting or processing sites threaten World Heritage sites and other types of protected areas and the values for which the sites were granted protection, this should also be considered a high risk and addressed immediately.
- Likewise, the risk of contaminating rivers, streams or lakes, destroying natural forests, mine sites with high-risk tailings dams, or suppliers that are party to legal or tribunal disputes regarding land tenure should be prioritised.

Where the steel site does not know the regions of origin and processing, let alone the sites of origin and processing, closing these knowledge gaps should also be prioritised.

Information hierarchy: Where input material suppliers operate more than one site, ESG performance can differ from site to site, especially when they are located in different countries. Steel companies should seek to get site-level information on direct and indirect input material suppliers. Where this is not obtainable, company-level information is the next best choice. Where steel companies cannot get company-level information, they should at least seek to understand potential ESG risks in supply chains by reviewing how strongly specific input materials are associated with ESG issues, and whether countries of origin and upstream processing are associated with ESG issues. See the mandatory Annex 2 of the Production Standard Version 2.1 for a list of input materials that are covered and not covered by the responsible sourcing requirements, or that are excluded for 'Certified Steel' certification.



Criterion 3.4: Strengthen and account for responsible sourcing

Progress

Input material suppliers are urged to participate in a recognised programme to strengthen their ESG performance and to establish an accounting system to support chain of custody.

3.4.1.	To become certified to Progress Level 1: The site runs a documented campaign aimed at increasing participation in a recognised programme by direct and indirect suppliers. The campaign: a) Has the support of the site's senior management b) Describes the range of activities and channels used to engage with suppliers c) Describes how the steel site collaborates with other stakeholders to engage suppliers on ESG issues and increase their participation in recognised programmes d) Specifies time-bound milestones that, if reached, will allow for continued Steel Certification e) Defines how the site is tracking progress to meet the milestones.	
3.4.2.	To remain certified to Progress Level 1, the following is met at the first surveillance audit: The site can demonstrate that its input material suppliers are increasingly scheduling third-party audits under one of the recognised programmes, meaning the site is on track for achieving 3.4.3. Where progress is lacking, the site reviews and amends its campaign.	
3.4.3.	To remain certified to Progress Level 1, the following is met at the re-certification audit: Suppliers accounting for the below percentages of input material compared to the total tonnes of the respective input material have scheduled a third-party audit under one of the recognised programmes:	
		Progress Level 1
		Third-party audit under a recognised programme has been scheduled
	a) Raw input material, originating from mining or quarrying	≥ 60%
	b) Processed input material, originating from mining or quarrying	≥ 40%

	c) Plantation wood with FSC forest management and chain of custody certification, or equivalent	≥ 90%		
3.4.4.	To become certified to Progress Levels 2 to 4: In the last calendar or financial year, suppliers accounting for the percentages of input material shown in the table below, compared with the total tonnes of the respective input material, met the following:			
		Progress Level 2	Progress Level 3	Progress Level 4
		Minimum ESG performance achieved under a recognised programme	IRMA 50, or equivalent	IRMA 75, or equivalent
	a) Raw input material, originating from mining or quarrying	≥ 80%	≥ 80%	≥ 80%
	b) Processed input material, originating from mining or quarrying	≥ 60%	≥ 60%	≥ 60%
	c) Plantation wood with FSC forest management and chain of custody certification, or equivalent	≥ 100%		
3.4.5.	At least one specified member of staff is responsible for implementing the site's chain of custody requirements, as defined below.			
3.4.6.	<p>Direct suppliers of input materials are required to contribute to an unbroken upstream chain of custody (CoC) as follows:</p> <p>a) Direct suppliers record shipments they receive, or specified shares thereof, as 'CoC Input Material' where documentation provided by their own suppliers confirms that the input material comes from a supply chain with an unbroken chain of custody</p> <p>b) The following information is recorded by direct suppliers for any shipment of 'CoC Input Material' they receive:</p> <ul style="list-style-type: none">• Supplier that delivered the input material• Date shipment was received• Types, forms and tonnes of received 'CoC Input Material'• ESG performance levels achieved by the sites of origin and upstream processing, and the names of the recognised programmes they participate in. <p>c) Direct suppliers retain documentation they receive from their own suppliers confirming the status and tonnes of received 'CoC Input Material' for at least five years</p> <p>d) Direct suppliers ensure that they only sell as many tonnes of 'CoC Input Material' as they have received from their own suppliers</p>			

	<p>e) Direct suppliers provide the site with documentation that identifies shipments, or relevant shares thereof, as 'CoC Input Material' as follows:</p> <ul style="list-style-type: none"> • Date shipment was dispatched • Types, forms and tonnes of shipped 'CoC Input Material' • ESG performance levels achieved by the sites of origin and upstream processing, and the names of the recognised programmes they participate in. <p>f) Direct suppliers require from their own suppliers that they contribute to an intact chain of custody as outlined in a) to e) above.</p>
3.4.7.	<p>The site records received shipments of 'CoC Input Material', or relevant shares thereof, as follows:</p> <p>a) Date shipment was received</p> <p>b) Types, forms and tonnes of received 'CoC Input Material'</p> <p>c) ESG performance levels achieved by the sites of origin and upstream processing, and the names of the recognised programmes they participate in.</p>
3.4.8.	<p>Documentation provided by direct suppliers on 'CoC Input Material', and on the received tonnes thereof, is retained for at least five years.</p>
3.4.9.	<p>Where input materials are purchased for a portfolio of sites:</p> <p>a) The portfolio is clearly defined, including names and locations of individual sites</p> <p>b) The received tonnes of 'CoC Input Material' and total tonnes of received input materials have been calculated for the portfolio of sites for the last calendar or financial year</p> <p>c) The received tonnes of 'CoC Input Material' and total tonnes of received input materials have been calculated for the site seeking ResponsibleSteel certification, based on its share of the total tonnes of input materials received by the portfolio of sites</p> <p>d) The share of 'CoC Input Material' calculated for the site seeking ResponsibleSteel certification meets at least the percentages provided in 3.4.1</p> <p>e) Evidence to verify that the percentages provided in 3.4.1. have been met and how the calculations have been done are kept for at least five years.</p>
3.4.10.	<p>Once a site is certified, and if it sells any of its steel as ResponsibleSteel certified, a documented procedure is in place to capture how much of the produced or processed steel was sold as certified (in tonnes), as well as the customers it was sold to, and in which forms, in the last calendar or financial year.</p>
3.4.11.	<p>Where steel products are imported to the site from other steel sites, a documented procedure is in place to ensure that:</p> <p>a) The imported steel products are only sold as ResponsibleSteel certified if they are from sites that have themselves achieved Steel Certification or</p> <p>b) The imported steel products are kept physically separate from the site's own steel products and, after processing or finishing, are not sold as ResponsibleSteel certified if they are imported from sites that have not themselves achieved Steel Certification.</p>
<p>Mandatory guidance:</p>	

Campaign: A set of activities that is carried out over a period of time with the aim of achieving the percentages required for continued Steel Certification. Ways to campaign for recognised programmes are, for example, steel site letters to suppliers, joint letters with other ResponsibleSteel members, the inclusion of a commitment to a recognised programme in a supplier code of conduct or in terms and conditions, offering rewards to suppliers that participate in a recognised programme, communication on the steel site's website, in its sustainability report, on social media, etc. The expectation is that the steel site uses different measures and channels to reach out to suppliers and does so over a period of time. A one-off exercise will not be considered sufficient. Evidence that a planned set of activities is underway and carried out over a period of time with the aim of achieving the percentages required for continued Steel Certification.

CoC Input Material: Input material from different suppliers can be blended and mixed throughout the upstream supply chain, but the share of input material from sites of origin and upstream processing that participate in a recognised input material programme is recorded at each supply chain stage and related information and documentation is transferred to the next stage in the chain. 'Participate' means that sites of origin and upstream processing have achieved at least the minimum ESG performance under that programme. Suppliers may sell this share as 'CoC Input Material'. See the mandatory Annex 2 of the Production Standard Version 2.1 for a list of input materials that are covered and not covered by the responsible sourcing requirements, or that are excluded for 'Certified Steel' certification.

Collaborates with other stakeholders: Campaigns can be more effective when suppliers hear the same messages from different customers and stakeholders. Examples of collaborative activities are joint letters to suppliers on ESG expectations, joint training and capacity building on ESG issues, joint ESG risk and impact assessments of suppliers and joint support for measures to improve supplier ESG performance. The Climate Group's 'SteelZero' initiative and 'Drive Sustainability' are case studies for how companies may work together on ESG risks and impacts in supply chains. Efforts to set up initiatives like SteelZero or Drive Sustainability, hosted by ResponsibleSteel or another organisation, would also contribute to meeting this requirement.

On track: The first surveillance audit is supposed to be completed 18 months after the certificate has been issued. At this time, the steel site should have evidence to show that suppliers accounting for about half of the tonnes given in the table in 3.4.3. have scheduled an audit under one of the recognised programmes. However, convincing suppliers to undergo a third-party audit might require considerable effort, meaning suppliers might initially be slow to respond to the steel site's demand. It is left to the professional judgement of the ResponsibleSteel auditors to decide whether the steel site's progress seems sufficient for it to meet the percentages given in the table in 3.4.3. at the time of its re-certification audit, which is expected to be completed three years after the initial certificate has been issued.

Minimum ESG performance: see the ResponsibleSteel website for the [minimum ESG performance](#) required under recognised programmes. Where suppliers are in fact processing sites that have achieved ResponsibleSteel Core Site Certification, this is considered achievement under a recognised programme for Progress Levels 2, 3 and 4.

Recognised input material programme: see the ResponsibleSteel website for [information on recognition](#) of other programmes and for an up-to-date list of programmes that are currently recognised. Note that ResponsibleSteel considers its own programme to be a 'recognised programme' where a supplier to a steel site is a producer of pre-processed input materials, such as direct reduced iron (DRI), hot briquetted iron (HBI) or pig iron, or where a steel plant supplies another steel plant. Where a site is a steel processing site that receives input materials such as slabs, billets or blooms, the

crude steel production sites that it sources from must have achieved Steel Certification for the steel processing site to demonstrate it has achieved the responsible sourcing requirements.

'CoC Input Material': input material from different suppliers can be blended and mixed throughout the upstream supply chain, but the share of input material from sites of origin and upstream processing that participate in a recognised input material programme must be recorded at each supply chain stage. Related information and documentation is then transferred to the next stage in the chain.

'Participate' means that sites of origin and upstream processing have achieved at least the minimum ESG performance under that programme. Suppliers may sell this share as 'CoC Input Material'.

Share of 'CoC Input Material': this is calculated using the following simple formula. The result is expressed as a percentage:

Total tonnes of 'CoC Input Material' x 100

Total tonnes of input material

Accounts for at least: the tables in 3.4.3. and 3.4.4. have to be read as follows:

- To achieve Progress Level 1, the site has to meet all the percentages shown in the Progress Level 1 columns. To achieve Progress Level 2, all the percentages of the Progress Level 2 column have to be met, and so on
- **The site's overall Progress Level** will be the lowest that is achieved for any material category. To give an example: if the site achieves Progress Level 2 for some requirements and Progress Level 1 for others, it will be certified to Progress Level 1 overall.

Progress Level 2: the required ESG performance level is different for each recognised input material programme because they all use different scales of performance and because they are not equivalent.

Progress Levels 3 and 4: these Progress Levels serve to reward steel companies and suppliers that commit to, and are implementing, recognised input material programmes that are considered to be **'best-in-class' in their sector by stakeholders. They are frontrunners in terms of the depth and breadth** of their standard, the quality of their assurance and oversight mechanisms, the inclusion of different relevant actors (i.e. civil society, affected communities, etc.) of their governance structure, and transparency in their processes, operations and participants. See the ResponsibleSteel website for more [information on recognised programmes](#).

FSC forest management and chain of custody certification, or equivalent: see the mandatory guidance to Criterion 3.2.

Input materials purchased for a portfolio of sites: only those sites in the portfolio that meet the requirements for Core Site Certification and achieve at least Progress Level 1 for both materials sourcing and decarbonisation (Principle 10 – Climate Change and Greenhouse Gas Emissions) can market or sell their steel products, co-products or by-products as ResponsibleSteel certified and make claims following the ResponsibleSteel claims rules.

Sells any of its products as ResponsibleSteel certified products: sites that have achieved at least Progress Level 1 for both decarbonisation (Principle 10) and materials sourcing can label all their outgoing steel products as ResponsibleSteel certified. Key information has to be published on the ResponsibleSteel website to provide transparency on the extent to which input material comes from responsible suppliers, see Criterion 3.5 for more information. In addition, recording how much steel was sold as ResponsibleSteel certified will help establish a downstream chain of custody between steel sites and end-user sites, such as car makers or construction companies. Downstream chain of custody requirements will be developed in due course.

Steel products imported to the site: if imported steel products are re-melted as part of a steelmaking process, they are treated as any other input material and the requirements of Criteria 3.1 to 3.5 apply.

Supply chain with an unbroken Chain of Custody: where sites of origin or processing do not participate in a recognised input material programme or do not meet the required minimum ESG performance under that programme, the Chain of Custody is broken and suppliers cannot sell the respective input material as 'CoC Input Material'. The Chain of Custody is also broken if suppliers do not record 'CoC Input Material' or do not transfer related information to their customers.



Criterion 3.5: Report publicly on responsible sourcing

Progress

Key information and developments regarding responsible sourcing are regularly reported to ResponsibleSteel for publication on its website.

3.5.1.	<p>The following information is regularly reported for publication on the ResponsibleSteel website:</p> <ol style="list-style-type: none"> The site's responsible sourcing policy Description of how the responsible sourcing policy is incorporated in key purchasing functions and processes A summary of the site's strategy to avoid and reduce ESG risks and impacts in upstream input material supply chains, including any time-bound targets A summary of progress made in implementing the strategy and reaching defined targets The criteria used to prioritise ESG risks and impacts found at direct and indirect suppliers and in regions of origin and processing A description of the site's grievance mechanism (see 8.2.1).
3.5.2.	<p>The following site-specific information is regularly reported for publication on the ResponsibleSteel website. The information is reported separately for individual raw and processed input materials. Where sourcing is done for a portfolio of sites, the information is reported for the same portfolio that has been specified in 3.4.9.:</p> <ol style="list-style-type: none"> Percentage of raw and processed input material sourced for the site that is from: <ul style="list-style-type: none"> supply chains where the regions of origin and upstream processing are known supply chains where the sites of origin and upstream processing are known regions of origin or upstream processing with high, medium and low risk or impact sites of origin or upstream processing with high, medium and low risk or impact. Description of the high and medium ESG risks and impacts that have been identified for regions of origin and upstream processing Description of the site's campaign to increase supplier participation in a recognised programme, the campaign's time-bound milestones and progress against those milestones Description of key measures taken to avoid and reduce ESG risks and impacts in upstream supply chains, and the outcome of those measures For Progress Level 1:

- Description of the site campaign's time-bound milestones to increase supplier participation in a recognised programme and progress against those milestones
- Key measures taken to avoid and reduce ESG risks and impacts in upstream supply chains, and the outcomes of those measures
- By the time of the re-certification audit: percentage of raw and processed mined input material that the site sources from supply chains where the sites of origin and upstream processing have scheduled a third-party audit and are committed to a recognised input material programme

In addition, for Progress Levels 2, 3 and 4: percentage of raw and processed input material that the site sources from supply chains where the sites of origin and upstream processing met the required ESG performance.

Mandatory guidance:

ResponsibleSteel provides an audit report template that must be used to submit the information required in 3.5 for publication on the ResponsibleSteel website.

Reported for the same portfolio: the names and locations of the individual sites of the portfolio must be provided in the audit report and will be disclosed on the ResponsibleSteel website.

Background on scrap

Scrap is an important input material for the steel sector. In primary steel production, 10-25% of material input is scrap. It is used in basic oxygen furnaces (BOF) to help control temperatures when pig iron is refined into steel and, in some cases, scrap is used in blast furnaces (BF) to add iron units. In secondary steel production, scrap steel can represent up to 100% of material inputs in electric arc furnaces (EAF). According to [worldsteel data](#), around 650 million tonnes of scrap are used every year for steel production, compared with a total crude steel production volume of 1,869 million tonnes per year.

Over time, steel scrap stocks are expected to grow as standards of living rise around the world. On average, developed countries have eight to twelve tonnes of stock per person and less developed countries between one and two tonnes. Depending on its strength, durability and intended use, the life cycle of steel varies before it becomes scrap. From a few months for a food can, to fifteen to twenty years for vehicles, up to one hundred years or more for constructional steels used in buildings and infrastructure. As steel is typically magnetic and can be recycled indefinitely without losing its properties, it can be more easily sorted than many other materials and is the most recycled material in the world. This supports societal moves towards a more circular economy. Only a small fraction of steel is lost when used in unrecoverable applications like deep pile foundations or seabed pipelines.

Scrap plays a key role in suppressing industry emissions and primary resource consumption.

[Example data](#) from May 2021 suggests that every tonne of scrap used for steel production avoids 1.5 tonnes of CO₂ emissions and the consumption of 1.4 tonnes of iron ore, 740 kilograms of coal and 120 kilograms of limestone. As the world transitions towards a circular economy and production methods with lower GHG emissions, scrap-based secondary steel production is expected to increase.

Scrap supply chains are very diversified, with many players of different sizes, levels of formalisation and maturity. At the base of the scrap supply chain, when looking at post-consumer scrap globally, there are hundreds of thousands, if not millions, of scrap collectors. Scrap trade is also very dynamic, with daily changing market conditions and prices.

Like any other sector, the recycling industry has its own ESG challenges. Consultation with stakeholders and research commissioned by ResponsibleSteel and others, including the World Resources Forum, indicate that there can be hazardous working conditions, labour exploitation, pollution associated with recovering metals from products like tyres, cables and electronic equipment, and from mismanagement of fluids and wastes. Cash purchases can be widespread in parts of the scrap market and there are documented cases of money laundering and corruption.

There can also be significant barriers to transparency and understanding the potential ESG risks in global supply chains. Scrap is no exception, with some scrap companies, predominantly traders and agents, building their business models on the back of exclusive knowledge of scrap provenance, with mixing and blending of material adding additional challenges. Where there is a break in the chain of provenance and evidence, potential ESG risks cannot be assessed and ESG performance cannot be monitored at source or shared with customers. Although the full extent of good and poor practices in scrap supply chains and their impact on people and nature are unclear, due to the limited availability of well-founded research and data at sufficiently granular levels, the uncertainty has the potential to damage the reputation of companies in the scrap supply chain, including steel companies and steel end-users. Pre-consumer scrap is often of higher quality and its manufacturing origin is easier to verify.

To date, when scrap sourcing, steel companies primarily focus on availability, quality and price of scrap. In line with the ResponsibleSteel vision and mission, steel sites and their owners have a duty of care over their input materials, including scrap. ResponsibleSteel requires that steel companies broaden their horizon and start looking into ESG issues for scrap, just like they do for other input materials. Our requirements for scrap sourcing differ from that for other input materials. While there are several programmes, either in place or under development, for third-party assurance of responsible mining and minerals processing that we recognise and can build on, there is nothing directly comparable for scrap. As a result, ResponsibleSteel must define alternative ways to provide confidence that scrap supply chains are managed responsibly.

Our approach to scrap acknowledges that scrap contributes to sustainable production since it is a recycled material, but also that scrap supply chains are more diversified, with many more players of different sizes, levels of formalisation and maturity than other materials supply chains. In developing the requirements for sourcing scrap, ResponsibleSteel took account of the complexity of the steel recycling sector and focused on breaking down barriers to understand and enable action in relation to ESG risks that are potentially associated with sources of scrap.

Introduction to the scrap requirements

The objective of the scrap requirements is that steel companies start to understand ESG performance in scrap supply chains and assess progress in the responsible sourcing of scrap. The scrap requirements must be met by steel companies for any of their sites that seek Steel Certification. They apply in addition to the requirements for Core Site Certification and in addition to the responsible sourcing requirements laid out in Criteria 3.1 to 3.5. The scrap requirements are informed by ResponsibleSteel-commissioned research, stakeholder input and other relevant guidance, such as the Bureau of International Recycling (BIR) publications and ISO/IWA 19: 2017 'Guidance principles for the sustainable management of secondary metals' by the International Organization for Standardization.

Like Criteria 3.1 to 3.5, the scrap requirements introduce four Progress Levels. The Progress Levels and the relatively soft requirements reflect the structural characteristics of scrap supply chains described above. The requirements are specified in five criteria that repeat the headings of the other responsible sourcing criteria and thus follow the same logic:

- Criterion 3.6: Commit to responsible sourcing and incorporate it in key functions and processes
- Criterion 3.7: Know your upstream supply chain
- Criterion 3.8: Understand supplier ESG performance and promote improvement
- Criterion 3.9: Strengthen and account for responsible sourcing
- Criterion 3.10: Report publicly on responsible sourcing.

The Progress Level 1 requirements have been fully worked out. They provide a framework for steel companies, scrap suppliers and industry associations to work together to advance responsible sourcing and responsible management commitments and to increase the potential for positive impact on people and nature through scrap supply chains. We intend to further develop and define the requirements for Progress Levels 2, 3 and 4 by collaborating with scrap suppliers, industry associations and other relevant stakeholders. Initial requirements and targets for Progress Levels 2, 3 and 4 are provided below to indicate the potential direction of travel.

The requirements recognise the range of visibility and influence steel companies have over their scrap sources. They may have better visibility to some sources (typically pre-consumer scrap) and poor visibility and little influence over others (typically towards the origin of post-consumer scrap). For these harder-to-reach-and-influence parts of the supply chain, the focus is on engagement and collaboration to identify and address areas with higher risks and more significant potential impacts.

We have defined a set of 'Principles for the Responsible Management of Scrap' (see Annex 3), which represent good practices to be communicated throughout the whole scrap value chain. The Principles can supplement and help inform existing guidance, codes of conduct, training, procurement due diligence and appraisals that are carried out with the scrap supply chain. They are intended to help steel companies send a consistent message through the supply

chain about their expectations, as well as raising awareness of ESG issues and recognising and supporting good practices.

Responsible sourcing requirements related to scrap



Criterion 3.6: Commit to responsible sourcing and incorporate it in key functions and processes

Progress

There is a public commitment to increasingly source input materials from suppliers that operate responsibly, where the commitment is incorporated in key purchasing functions and processes.

Note that Criterion 3.6 is the same as Criterion 3.1, but no chain of custody commitment is required for scrap and 3.6.4.h is unique to scrap.

3.6.1.	The responsible sourcing policy is readily accessible to the public and contains commitments to: <ul style="list-style-type: none"> a) Strive for full visibility of input material supply chains over time b) Promote recognised input material programmes to direct and indirect input material suppliers c) Report publicly and regularly on efforts to source input materials responsibly.
3.6.2.	At least one specified member of senior management is accountable for implementing the site's responsible sourcing policy.
3.6.3.	A training programme on responsible sourcing and company-specific procedures to implement the responsible sourcing policy is delivered for relevant teams.
3.6.4.	Direct suppliers of input materials are required to implement a code of conduct or similar document that covers at least the following issues: <ul style="list-style-type: none"> a) Compliance with applicable laws and regulations b) Adherence to human rights and labour rights c) Protection of worker and local community health and safety d) Environmental stewardship e) Collaboration between suppliers and customers to improve ESG performance f) Monitoring of supplier adherence to the code of conduct g) Expectation that suppliers demand similar ESG practices from their own suppliers h) And, specifically for scrap suppliers, help drive the intent of the 'Principles for the Responsible Management of Scrap' through the full supply chain.
3.6.5.	New direct suppliers of input materials are assessed for their adherence to the code of conduct in line with a documented approval procedure.
3.6.6.	The site regularly assesses adherence of existing direct suppliers of input materials to the code of conduct. Where gaps become apparent, the site takes measures to ensure the supplier acts in line with the code of conduct.



Criterion 3.7: Know your upstream scrap supply chain

Progress

The supply chains for scrap steel used at the site are increasingly known and key information on suppliers is recorded.

3.7.1.	<p>The following details on a site's direct scrap suppliers are internally recorded on an annual basis:</p> <ul style="list-style-type: none">a) Operating names and addresses of all direct suppliers' sites that provide scrap to the steel siteb) The quantity of scrap, in tonnes, that each direct supplier provided to the sitec) The percentage split between pre- and post-consumer scrap received by the site. Where accurate numbers are not available, the split is estimated.														
3.7.2.	<p>Working with direct suppliers and other actors in the supply chain, the following information is requested and documented for the site's scrap supply chain:</p> <ul style="list-style-type: none">a) Countries of origin for the site's scrap supplyb) Where the country of origin is not known: the boundary of supply chain knowledge, gaps and reasons for being unable to identify source countries further up the chainc) Steps taken to seek additional country of origin information and plans to improve data over timed) Where suppliers are not sharing the countries of origin of their scrap: whether they are willing or not willing to share this information with the ResponsibleSteel auditors for the purpose of verification via an 'auditable mechanism'.														
3.7.3.	<p>Of the total tonnes of scrap received by the site in the last calendar or financial year, the countries of origin are known for at least the following percentage:</p> <table><tr><td></td><td>Progress Level 1</td><td>Progress Level 2</td><td>Progress Level 3</td><td>Progress Level 4</td></tr><tr><td>Countries of scrap origin</td><td>40%</td><td>60%</td><td>70%</td><td>80%</td></tr></table>						Progress Level 1	Progress Level 2	Progress Level 3	Progress Level 4	Countries of scrap origin	40%	60%	70%	80%
	Progress Level 1	Progress Level 2	Progress Level 3	Progress Level 4											
Countries of scrap origin	40%	60%	70%	80%											

Mandatory guidance:

Country of scrap origin: Country where the steel or the steel-containing item becomes scrap and is aggregated and processed before export, or before domestic use in the steelmaking and recycling process. In cases where the scrap contained in a container or in a bulk shipment might come from several locations, the 'country of origin' is likely to represent the country of loading of the container or bulk shipment. Where suppliers make the country of origin known to the auditors through the auditable mechanism, the tonnes of scrap that are supplied to the steel site by the respective supplier count towards the percentages in 3.7.3

Pre-consumer scrap: Scrap arising during the production or manufacture of steel or steel products (i.e. internal, home and manufacturing scrap).

Post-consumer scrap: Scrap arising when steel products reach the end of their useful life (i.e. end-of-life scrap).

Pre- and post-consumer scrap sources typically have different ESG risk profiles. To build information on the relative ESG risks of different sources, ResponsibleSteel is requesting the pre- / post-consumer breakdown for scrap.

Scrap supply chain: Can be described using different terms, including tiers, levels and networks. In the context of the ResponsibleSteel responsible sourcing requirements, supply chain refers to upstream supplier activities, i.e. activities that take place prior to steelmaking, processing and finishing, up to the sites of origin. For scrap, 'origin' refers to the first point of consolidation (not collection) after the scrap was diverted from the waste stream from industrial, residential or municipal sources and reclaimed, thereby constituting the starting point within the scrap supply chain.



Criterion 3.8: Understand supplier ESG performance and promote improvement

Progress

The ESG performance of direct scrap suppliers and the risks related to the countries of scrap origin are increasingly understood and an effective strategy to help improve performance is being implemented.

3.8.1.	<p>A documented procedure is implemented to collect information on the ESG risks associated with direct scrap suppliers and countries of scrap origin, and to analyse and classify that information:</p> <ol style="list-style-type: none"> The procedure requests that direct suppliers inform the steel site whether they have any of the following: <ul style="list-style-type: none"> Third-party certification to relevant, recognised international management system standards Second-party assessments to relevant standards First-party assessments to relevant standards If so, the names of the applied standards, the validity date of each certification or assessment, which of the 'Principles for the Responsible Management of Scrap' each certification or assessment covers, and whether the supplier meets these Principles. The procedure defines the method and sources used to determine whether the ESG performance of direct scrap suppliers and countries of origin pose low, medium or high risk to people and nature, based on the likelihood and severity of negative impact as a result of that performance Where the countries of origin are not known, the procedure specifies that the respective share of received scrap is classified as high risk The procedure defines regular frequencies for updating risk classifications and describes unforeseen events that trigger unscheduled updates.
3.8.2.	<p>Direct scrap suppliers and all known countries of scrap origin have been analysed and classified in line with the procedure. Where high ESG risks have been identified, further investigation and assessment has been conducted to understand any negative impacts on people and nature and their extent.</p>
3.8.3.	<p>An analysis of the site's business practices has been carried out by the corporate owner to understand how they might evolve to enable good ESG performance of scrap suppliers, and the results documented.</p>
3.8.4.	<p>There is a documented strategy to strengthen ESG performance in scrap supply chains. The strategy:</p>

	<p>a) Specifies how the business practices of the site's corporate owner are evolving to enable good ESG performance of scrap suppliers, reflecting the results of the analysis discussed in 3.8.3.</p> <p>b) Outlines how unknown scrap supply chain links might be turned into known ones over time</p> <p>c) Defines measures that are taken to help reduce high ESG risks and impacts of direct scrap suppliers</p> <p>d) Describes how the steel company or its site are involved in initiatives and recognised input material programmes that aim to advance ESG performance in scrap supply chains and how these initiatives and programmes are promoted to supply chain partners</p> <p>e) Includes objectives and time-bound targets to deliver the strategy.</p>
3.8.5.	Implementation of the strategy to strengthen ESG performance in scrap supply chains is regularly reviewed. The results of the review and progress against the targets and objectives are documented, and the strategy is updated to reflect the review's findings.

Mandatory guidance:

Relevant, recognised international standards: These include but are not limited to:

- Environmental management system certification to ISO 14001 or equivalent
- Health and Safety management system certification to ISO 45001 or equivalent
- Labour and Human Rights management system certification to SA8000 or equivalent

Management system requirements should be appropriate to the size and resources of the supplier, i.e. expectations of micro and smaller enterprises should be less onerous, and some elements may be managed informally.

Second-party assessment: Means an assessment carried out by a person or an organisation that has an interest in the scrap supplier. For example, a scrap industry association or a customer of the scrap supplier.

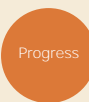
Where no certifications or assessments have been completed, the direct supplier should be deemed high risk. In the case of very small suppliers with an informal management system, steel companies should expect at least a self-assessment against the 'Principles for the Responsible Management of Scrap', supported by some evidence to substantiate the suppliers' assessment. A small scrap supplier is one that produces less than 10,000 gross tonnes of ferrous scrap per month. This means 10,000 gross tonnes for the supplier as a whole, not for an individual site of the supplier.

Where there is a gap in the scope of the assessment in relation to the 'Principles for the Responsible Management of Scrap', this should be documented, and the risk associated with the direct supplier should be classified accordingly.



Criterion 3.9: Strengthen and account for responsible sourcing

Supplier performance is monitored and sourcing from suppliers who meet accepted ESG benchmarks increases over time.



Note that we anticipate that one or more comprehensive ESG standards or frameworks suitable for the scrap industry will become available soon. For example, there is an ISO process to develop a standard

called '[Secondary materials — Principles, sustainability and traceability requirements](#)' that ResponsibleSteel might recognise.

3.9.1.	In the last calendar or financial year, the share of scrap received from direct suppliers accounted for at least the percentages shown in the table below, compared to the total tonnes of scrap received from direct suppliers:				
		Progress Level 1	Progress Level 2	Progress Level 3	Progress Level 4
	Sites of direct scrap suppliers that have been subject to a third-party audit	-	30%	50%	60%
	Sites of small scrap suppliers that have self-assessed against the 'Principles for the Responsible Management of Scrap'	-	30%	50%	60%
	Sites of direct scrap suppliers that have achieved at least the minimum ESG performance in a third-party audit under a recognised input material programme	-	-	30%	50%
	Sites of small scrap suppliers that can demonstrate that they meet the 'Principles for the Responsible Management of Scrap'	-	-	30%	50%

Mandatory guidance:

Small scrap suppliers: A small scrap supplier is one that produces less than 10,000 gross tonnes of ferrous scrap per month (being 11,200 metric tonnes and 11,200,000 kilograms). This means 10,000 gross tonnes for the supplier as a whole, not for an individual site of the supplier.

Small suppliers: See definition of small scrap suppliers



Criterion 3.10: Report publicly on responsible sourcing

Key information regarding the responsible sourcing of scrap is regularly reported to ResponsibleSteel.

Progress

Note that the public reporting requirements can be found in 3.5. There is considerable overlap with 3.10 and steel companies are not expected to report identical information twice.

3.10.1.	<p>The following site-specific information is regularly reported for publication on the ResponsibleSteel website. Where sourcing is done for a portfolio of sites, the information is reported for the same portfolio specified in 3.4.6.:</p> <p>a) The site's responsible sourcing policy</p>
---------	---

	<ul style="list-style-type: none"> b) Description of how the responsible sourcing policy is incorporated in key purchasing functions and processes c) A summary of the site's strategy to help strengthen ESG performance in upstream input material supply chains, including any time-bound targets d) A summary of progress made in implementing the strategy and reaching defined targets e) The criteria used to prioritise ESG risks found at suppliers f) A description of the site's grievance mechanism (see 8.2.1).
3.10.2.	<p>The following site-specific information is regularly reported for publication on the ResponsibleSteel website. Where sourcing is done for a portfolio of sites, the information is reported for the same portfolio specified in 3.4.6.:</p> <ul style="list-style-type: none"> a) Percentage of scrap sourced from direct suppliers with a relevant third-party certification b) Percentage of scrap sourced from direct suppliers with a relevant second-party assessment c) Percentage of scrap sourced from high, medium and low risk countries of origin and changes since the last reporting period d) Description of the high and medium ESG risks that scrap suppliers are linked to e) Description of the high and medium ESG risks that the countries of scrap origin are linked to f) Description of the key measures taken to help reduce high and medium ESG risks in scrap supply chains and the outcomes of those measures g) Description of good practices found in the site's scrap supply chains h) Description of initiatives or recognised input material programmes that the site or its corporate owner engages in and what that engagement looks like i) For Progress Levels 2 to 4: percentage of scrap sourced from direct suppliers that have been subject to a third-party audit, and percentage of those direct suppliers that have achieved at least the minimum ESG performance in a third-party audit under a recognised input material programme j) For Progress Levels 2 to 4, small suppliers: percentage of scrap sourced from small direct suppliers that have self-assessed against the 'Principles for the Responsible Management of Scrap', and percentage of those small direct suppliers that can demonstrate that they meet the 'Principles for the Responsible Management of Scrap'.

Principle 4. Decommissioning and closure

Objective:

ResponsibleSteel certified sites minimise the adverse social, economic and environmental impacts of full or partial site decommissioning and closure.

Background:

The full or partial decommissioning and closure of an industrial site can span many years and have major adverse social and economic effects on local communities. There are also environmental risks relating to structural wear and tear, fire or water damage where facilities and infrastructure are left idle, and water and soil contamination when they are dismantled. The ResponsibleSteel International Production Standard requires that sites anticipate these effects, ensure the most affected stakeholders are aware of mitigation measures, and put in place mechanisms to manage these impacts. **Third-party reviews of the site's provisions for decommissioning, closure and post-closure** are meant to ensure that certified sites leave a positive legacy, while transparent decommissioning and closure plans help workers and local communities cope with the effects of these events.

This Principle is only applicable to sites where full or partial decommissioning or closure is announced while a site is certified. Compliance would allow such a site to maintain certification while the site is still operational.

	<h3>Criterion 4.1: Decommissioning and closure</h3> <p>The site takes action to minimise short - and long - term social, economic and environmental implications of decommissioning and closure.</p> <div data-bbox="1334 846 1431 947">Core</div>
4.1.1.	When decommissioning or closure of a site, or of parts of a site, is announced, the site consults with workers, affected communities and local authorities on decommissioning, closure and post-closure plans, as applicable.
4.1.2.	<p>The decommissioning or closure and post-closure plans are approved by the site's senior management and:</p> <ul style="list-style-type: none">• Include estimates of costs and timelines• Include steps to mitigate adverse social and economic impacts on workers and local communities affected by site decommissioning or closure• Ensure that ecosystems and habitats are not degraded due to decommissioning and closure• Contain mechanisms for contingency and response planning and implementation.
4.1.3.	<p>In the case of closure, the plans:</p> <ul style="list-style-type: none">• Take account of community preferences• Describe the future use of facilities and infrastructure, where these are known• Include provisions for post-closure monitoring and maintenance of plan implementation.
4.1.4.	In the case of decommissioning, the plan describes measures to maintain idle facilities and infrastructure and protect them from risk.
4.1.5.	<p>There are financial arrangements in place that:</p> <ul style="list-style-type: none">• Cover the full cost of implementing the decommissioning, closure and post-closure plans• Guarantee that the full cost will be covered irrespective of the site's finances at the time of decommissioning or closure

	<ul style="list-style-type: none"> Are approved by the site's senior management and are reviewed by them to ensure their continued adequacy in case of major changes to operations.
4.1.6.	A competent third party confirms that the site's decommissioning, closure, post-closure plans, financial assurance arrangements and any subsequent revisions are adequate and feasible.
4.1.7.	The site makes a summary of its decommissioning, closure and post-closure plans, financial assurance arrangements and any subsequent revisions available to the public at no cost and provides stakeholders with contact details for more information.

Principle 5. Occupational Health and Safety

Objective:

ResponsibleSteel certified sites protect the health and safety of workers.

Background:

Industrial processes can be inherently hazardous, and when accidents or occupational illnesses occur, they may have serious or fatal consequences. Health and safety is, therefore, the top priority at any responsible industrial site. The ResponsibleSteel International Production Standard requires that a site implements an occupational health and safety (OH&S) management system, in line with a recognised standard, to provide a framework for identifying OH&S hazards and managing OH&S risks and opportunities. However, ResponsibleSteel is not intending to duplicate existing management system standards. Instead, the Production Standard focuses on success factors that allow a site to achieve high levels of health and safety performance: senior management leadership and accountability; engagement with workers and – where needed – local communities and other stakeholders; education and training for workers; effective processes for identifying hazards and controlling risks; and performance evaluation and monitoring. Recognising that eliminating accidents and illnesses is a continuous journey, the Production Standard also requires that sites care for and look after their workers.

The Occupational Health and Safety Principle fully aligns with the ILO Convention C155. It also links with other Principles of the Production Standard, most notably Principle 11 (Noise, Emissions, Effluents and Waste), since the health and safety of workers and local communities can be affected by the issues covered in those Principles. Criterion 5.7 applies to workers and local communities alike since both would be the main affected parties in an emergency.



Criterion 5.1: Occupational Health and Safety

Core

The site has an Occupational Health and Safety (OH&S) policy that recognises the rights of workers and acknowledges the obligations of employers to protect the health and safety of workers.

5.1.1.	<p>The site has a public, formal OH&S policy that:</p> <ul style="list-style-type: none">• Provides a framework for the setting of objectives for OH&S• Is applicable to all workers• Has been formally endorsed by the site's senior management and workers are consulted when changes are made to the policy• Is communicated to workers using languages, methods and channels that are understood and are easily accessible to them.
5.1.2.	<p>The OH&S policy includes the following commitments:</p> <ul style="list-style-type: none">a) Aiming to eliminate OH&S risks, by identifying, eliminating or controlling hazards, and to reduce risksb) Providing a healthy and safe working environment.



Criterion 5.2: Occupational Health and Safety management system

Core

The site establishes, implements, maintains and continually improves its OH&S management system.

5.2.1.	<p>The site implements a documented OH&S management system that:</p> <ul style="list-style-type: none">a) Assigns accountability for OH&S to senior management and documents OH&S responsibilitiesb) Covers the full scope of the site's processes, activities, products and servicesc) Shows that the site has taken account of the needs and expectations of workers, local communities and other parties that are affected by its activitiesd) Aligns with a recognised national or international OH&S management system standard or guidelines.
5.2.2.	<p>The OH&S management system includes effective documented procedures to:</p> <ul style="list-style-type: none">a) Identify all applicable OH&S laws and regulations and ensure that relevant requirements are effectively implementedb) Identify and assess potential hazards and associated OH&S risks, including health and wellbeing risks, using competent persons, and consider emerging and critical OH&S risksc) Determine and implement preventive and protective control measures aimed at eliminating hazards and reducing risks to levels that are as low as reasonably practicable, giving due consideration to industry best practice in determining and implementing control measuresd) Consult with workers to ensure they are informed about - and participate in - OH&S matters and decisions that affect them

	<ul style="list-style-type: none"> e) Determine and implement OH&S education and training programmes for workers f) Report incidents, including near -misses and occurrences of occupational disease on an ongoing basis, carry out investigations, including reviewing absent or failed control measures, and implement effective actions to prevent similar incidents re-occurring in the future.
--	---



Criterion 5.3: Leadership and worker engagement on Occupational Health and Safety

Core

The site demonstrates leadership and commitment with respect to OH&S, trains and educates workers on OH&S-related matters on an ongoing basis and has an effective mechanism for worker engagement and participation in key OH&S decisions.

5.3.1.	<p>The site's senior management has processes in place to demonstrate personal OH&S leadership and commitment, including:</p> <ul style="list-style-type: none"> a) Setting OH&S objectives and targets b) Engaging workers in key OH&S-related decisions c) Regular and effective management review of OH&S risks, opportunities and performance (see Criterion 5.6).
5.3.2.	<p>The site has an effective mechanism to bring together site management and workers to discuss OH&S-related issues and engage workers in key OH&S decisions:</p> <ul style="list-style-type: none"> a) The mechanism's purpose, structure, scope and formal rules of procedure, as well as the roles and responsibilities of those participating in the mechanism are documented b) Individual workers participating in the mechanism have been freely chosen by workers c) The mechanism has a balanced composition where neither site management nor worker interests dominate d) There are processes to build and ensure the competence of individuals participating in the mechanism e) There are processes to ensure the timely provision of comprehensive and accurate information to enable effective discussion and decision-making by participants.
5.3.3.	<p>Beyond the worker-management mechanism, the site implements processes to encourage workers to participate in efforts to improve OH&S outcomes, and provides a mechanism for workers to raise, discuss and participate in the resolution of OH&S concerns with senior management.</p>



Criterion 5.4: Support and compensation for work-related injuries or illness

Core

The site provides workers with support and compensation for work-related injuries or illness and cares for their dependants in case of work-related death.

5.4.1.	The site has processes in place to provide care and support to injured or ill workers and support rehabilitation, including health and wellbeing.
5.4.2.	In countries where a government scheme, collective bargaining agreement or mandatory benefits by law do not provide compensation for work-related injury, illness or death, the site has a commitment to cover the costs and losses associated with work-related injury, illness or death.
5.4.3.	To implement 5.4.2., the site has documented procedures for: <ul style="list-style-type: none"> a) Determining and providing compensation to workers for work-related injury or illness, considering medical expenses, wages during the recovery and rehabilitation period, suitable duties during recovery and rehabilitation and, where recovery is not possible, lost future earnings b) Determining and providing compensation to workers if an occupational illness connected to the worker's duties occurs after a worker has retired c) Determining and providing compensation to a worker's dependants in the event of a work-related death.
5.4.4.	The site keeps records on: <ul style="list-style-type: none"> • Incidents of work-related injury, illness or death • Received claims to compensate for work-related injury, illness or death and how they have been dealt with • Compensation paid and how the amount was determined.



Criterion 5.5: Safe and healthy workplaces

Core

The site's facilities, plants, infrastructure, workplaces, equipment and tools are safe and maintained in good working order

5.5.1.	The site provides facilities, plants, infrastructure, equipment, materials and tools that do not pose a risk to health and risk of incidents, and ensures they are maintained in safe working order.
5.5.2.	The site ensures that workers are provided with a safe and healthy working environment, which includes, but is not limited to: <ul style="list-style-type: none"> a) Clean and hygienic workplaces, including factories, offices, sanitation areas, food storage and meal break areas with seating b) Safe and accessible drinking water, free of charge c) Sanitation facilities commensurate with the number of workers and adequate for the gender of workers.
5.5.3.	If workers are provided with on-site housing, the site ensures that the housing is maintained to a reasonable standard of safety, security, repair and hygiene, and is provided with sufficient and proper sanitation facilities, drinking water, and access to an adequate power supply.

Mandatory guidance:

Housing provided for workers: housing provided for workers (note the 'workers' definition in the mandatory Glossary) must adhere to the Production Standard requirement 5.5.3, regardless of its location or provider. Where housing is provided by a third party, the site must take reasonable steps to ensure that the condition of the housing described in requirement 5.5.3 is met. Auditors must incorporate inspections of worker accommodations within the scope of the audits, subject to the site's right to conduct such inspection.



Criterion 5.6: Occupational Health and Safety performance

Core

The site monitors and discloses key aspects of its OH&S performance and works to improve it over time.

- | | |
|--------|---|
| 5.6.1. | The site monitors OH&S performance through a combination of leading and lagging indicators and keeps performance records. Performance is regularly reviewed by senior management and by the worker-management mechanism and action is taken, where necessary, to improve OH&S outcomes. |
| 5.6.2. | The site has a process to verify its performance data and regularly discloses key aspects of its OH&S performance to the public. |



Criterion 5.7: Emergency preparedness and response

Core

The site has identified and assessed emergency situations and has tested emergency preparedness and response processes in place to avoid and minimise the impact of accidental and emergency situations.

- | | |
|--------|---|
| 5.7.1. | The site has processes in place to identify and assess emergency situations on a regular basis. |
| 5.7.2. | The site has documented emergency preparedness and response procedures in place to avoid and minimise loss of life, injuries and damage to property, protect health and social wellbeing of its workers and local communities, and protect the environment in the event of accidental and emergency situations. |
| 5.7.3. | The documented emergency preparedness and response procedures are developed and regularly tested with workers. Where potential emergency situations might affect local communities or neighbouring organisations, local authorities and emergency responders are engaged in developing and testing the processes. |
| 5.7.4. | The emergency preparedness and response procedures are included in worker and emergency responder training programmes and communication plans. Where relevant, the emergency preparedness and response processes are communicated to local authorities, local communities and neighbouring organisations. |
| 5.7.5. | The site tests the effectiveness of its emergency preparedness and response procedures. Where necessary, the site defines and implements actions to ensure the processes are effective. |

5.7.6.	The site anticipates and insures against the cost of reparation for accidents and emergency situations to ensure that funds are available to implement an effective emergency response, pay compensation for damages, injury or loss of life, and fund recovery and reconstruction in a timely and efficient manner.
--------	--

Principle 6. Labour Rights

Objective:

ResponsibleSteel certified sites respect the rights of workers and support worker wellbeing.

Background:

The 'Declaration on Fundamental Principles and Rights at Work' was adopted by the International Labour Organization (ILO) in 1998. In the Declaration, ILO member states agreed that they should all respect, promote, and realise core labour standards. These core labour standards are laid out in eight conventions:

- Freedom of association and the effective recognition of the right to collective bargaining (C087 and C098)
- The elimination of all forms of forced and compulsory labour (C029 and C105)
- The effective abolition of child labour (C138 and C182)
- The elimination of discrimination in respect of employment and occupation (C100 and C111).

While it is the member states that ratify ILO conventions, the provisions of the Declaration apply directly to sites in these member states.

The Production **Standard aligns with the ILO's core labour standards. It applies a risk-based** approach to child and forced labour, meaning it asks sites to analyse whether they face any risk in relation to child and forced labour and, where this is the case, to take action to address those risks. This approach acknowledges that child and forced labour still exist in many places around the world, even in places where one might not expect them to occur. The Production Standard further requires that workers, including contracted workers, are treated with respect and dignity, are paid fairly and in a timely manner, and requires sites to make efforts to reconcile work and private life, support the health of workers and advance their qualifications.

The Labour Rights Principle has strong links with the Human Rights and the Health and Safety Principles.



Criterion 6.1: Child and juvenile labour

Core

The site does not use or tolerate child labour, effectively addresses any detected incidents of child labour, and cares for juvenile workers.

6.1.1.	The site has a public policy declaring that it does not use or tolerate child labour.
6.1.2.	The site has effective procedures in place to: a) Assess the risk of using or tolerating the use of child labour b) Analyse if there are children working at its site and document the results.
6.1.3.	Where there is a risk of child labour being used or tolerated at the site, there are effective procedures in place to: a) Address these risks b) Record, investigate and address any identified concerns related to child labour c) Take action to remove child labour where it is detected, with provisions to ensure the continued welfare of the child and, where the child is a primary provider, its family.
6.1.4.	The site's contracts with employment and recruitment agencies and with other external providers of workers explicitly prohibit the use of child labour.
6.1.5.	In relation to juveniles, the site has an effective procedure in place to: a) Identify and document the types of work that juveniles should not perform, such as work that requires significant experience or specialist training, to ensure they are not exposed to activities that might be hazardous or harmful to their health or safety b) Ensure that juveniles do not perform the work outlined in 6.1.5.a.

Mandatory guidance:

Child labour: the site shall only employ or accept people who are at least 15 years old, have reached the applicable minimum legal age for employment, or who have passed the applicable age for compulsory education, whichever is highest.

Child labour at the site: **the site's risk analysis should cover both workers employed directly by the site and workers employed by contractors, agencies, etc. who perform activities at the site.**



Criterion 6.2: Forced or compulsory labour

Core

The site does not use or tolerate forced or compulsory labour and effectively addresses any detected incidents of forced or compulsory labour.

6.2.1.	The site has a public policy declaring that it does not use or tolerate forced or compulsory labour.
6.2.2.	The site has effective procedures in place to: a) Analyse if there is forced or compulsory labour at its site, and document the results b) Identify and document the risk of forced or compulsory labour at the site.
6.2.3.	Where there is a risk of forced or compulsory labour at the site, there are effective procedures to:

	<ul style="list-style-type: none"> a) Address these risks b) Record, investigate and address any allegations related to forced or compulsory labour c) Take action to remove forced and compulsory labour where it is detected, with provisions to ensure the continued welfare of the workers in question.
6.2.4.	The site's contracts with employment and recruitment agencies and other external providers of workers explicitly prohibit the use of forced and compulsory labour.

Mandatory guidance:

Analyse if there is forced or compulsory labour: **the site's risk analysis should cover both workers employed directly by the site and workers employed by contractors, agencies, etc. that perform activities at the site.** Indications of forced and compulsory labour are:

- **Unreasonable restrictions on workers' freedom of movement in the workplace, either in on-site housing or entering and exiting site facilities**
- **Retention of workers' original government-issued identification and travel documents, such as identity papers**
- Workers having to bear costs related to recruitment, or have to lodge deposits, security payments or pay fees for work equipment
- Workers being prevented from terminating their employment after reasonable notice or as established by applicable law.

Costs related to recruitment: any fees or costs incurred in the recruitment process in order for workers to secure employment or placement, regardless of the manner, timing or location of their imposition or collection (adopted from: General principles and operational guidelines for fair recruitment & Definition of recruitment fees and related costs. International Labour Office - Fundamental Principles and Rights at Work Branch, Labour Migration Branch - Geneva: ILO, 2019).

Examples of recruitment-related costs: agency service fees; recruitment or placement service fees; airfare or fare for other mode of international transportation; terminal fees and travel taxes; costs or fees for passport, visa, work and/or residence permits (including renewals); pre-deployment skills tests, certifications, medical exams or other requirements for employment; training or orientation; transportation to and from airport to facility or provided accommodations; security deposits or bonds, etc.



Criterion 6.3: Non-discrimination

Core

The site's hiring decisions and employment relationships are based on the principle of equal opportunity, and actively prevent all forms of discrimination and promote workforce diversity and inclusion.

6.3.1.	<p>The site has a public policy stating that it:</p> <ul style="list-style-type: none"> a) Prohibits discrimination in its hiring and other employment practices b) Provides equal pay for work of equal value c) Ensures, where relevant, that migrant workers are engaged on equivalent terms and conditions as non-migrant workers carrying out similar work.
--------	---

6.3.2.	The site has effective procedures in place to analyse the risk of workers being affected by discrimination and documents the results.
6.3.3.	Where there is a risk that workers are affected by discrimination, the site has effective procedures to: a) Address these risks b) Document, investigate and address any incidents or allegations of discrimination.
6.3.4.	The site's contracts with employment and recruitment agencies and other external providers of workers explicitly prohibit discrimination.
6.3.5.	The site implements a programme to promote inclusion, workforce diversity, gender equality, and to create a culture of non-discrimination among workers.
6.3.6.	The site collects data demonstrating that it provides equal pay for work of equal value.



Criterion 6.4: Association and collective bargaining

Core

The site respects and supports workers' rights to freedom of association and collective bargaining

6.4.1.	The site has a public policy stating that it allows workers to associate freely with others, form or join organisations of their choice and bargain collectively, without interference, opposition, discrimination, retaliation or harassment.
6.4.2.	Where national law restricts workers' organisations, the site has evidence showing that it respects and does not obstruct legal alternative means for workers to associate freely.
6.4.3.	There is a documented process for engaging in collective bargaining processes that shows the site: a) Participates in good faith b) Provides workers' representatives and workers' organisations with the information needed for meaningful negotiation, and does so in a timely manner c) Does not hire replacement workers or use agency workers as a strategy to prevent or break up a legal strike, support a lockout, or avoid negotiating in good faith.
6.4.4.	Where collective bargaining agreements exist, the site has evidence showing that it adheres to their provisions.
6.4.5.	The site: a) Respects the right for employment and recruitment agency workers to collectively bargain, and their freedom of association b) Provides information on the provisions of any collective bargaining agreements that apply to site workers carrying out similar work, for employment and recruitment agencies to review and consider c) Requires employment and recruitment agencies to comply with 6.4.1 of this Standard d) Requires employment and recruitment agencies to adhere to collective bargaining agreements that apply to them. In the absence of an applicable collective bargaining

	<p>agreement, the legal minimum wage or prevailing industry standard conditions, whichever is greater, will apply</p> <p>e) Ensures that when using employment and recruitment agencies, the site has demonstrable processes in place to ensure it protects workers' health and safety.</p>
6.4.6.	Workers' representatives have access to suitable facilities to carry out their functions, such as designated non-work areas for communicating with workers.

Mandatory guidance:

Policy on association and collective bargaining: this shall be in line with ILO Conventions C087 and C098.

Replacement workers: the site may hire replacement workers to ensure that critical maintenance (including work to prevent serious damage to plant), health and safety, and environmental control measures are maintained during a legal strike.

The intent of Criterion 6.4 is that workers have ways to collectively engage with the employer in meaningful discussions on working conditions and there can be different mechanisms to achieve this. So, the Production Standard does not ask a site to have a workers' union in place to comply with requirements under Criterion 6.4 of the Production Standard. Instead, the Production Standard lists several issues that the site needs to establish in order to comply with the requirements.



Criterion 6.5: Disciplinary practices

Core

The site does not use, threaten to use or tolerate disciplinary practices that **undermine workers' dignity and effectively addresses any detected incidents of** such disciplinary practices.

6.5.1.	The site has a public policy that prohibits threats or use of disciplinary practices that undermine workers' dignity (called 'undignified disciplinary practices', hereafter).
6.5.2.	The site has effective procedures in place, developed together with workers and their legitimate representatives, to analyse the risk of undignified disciplinary practices being used or threatened and documents the results.
6.5.3.	<p>Where there is a risk that the site causes or tolerates undignified disciplinary practices, the site has effective procedures to:</p> <p>a) Address these risks</p> <p>b) Document, investigate and address any incidents and allegations of undignified disciplinary practices being used or threatened.</p>
6.5.4.	The site's contracts with employment and recruitment agencies and other external providers of workers explicitly prohibit the use or threat of using undignified disciplinary practices.

Mandatory guidance:

Undignified disciplinary practices at the site: **the site's risk analysis should cover both workers employed directly by the site and workers employed by contractors, agencies, etc. that perform activities at the site.**



Criterion 6.6: Hearing and addressing workers' concerns

Core

The site ensures that workers' concerns are resolved. Workers and their representatives can communicate openly and safely with management regarding working conditions.

6.6.1.	<p>The site has documented and effective procedures in place that can be used by workers and workers' representatives to voice concerns and by the site to investigate those concerns. The procedures:</p> <ul style="list-style-type: none">a) Allow workers and their representatives to report concerns without fear of reprisal, intimidation or harassment. Workers and their representatives can choose to report concerns in an anonymous manner, where this is legally accepted, and via a third-party mechanismb) Ensure that concerns are investigated and resolved in an impartial and timely manner, and that complainants are informed of the outcomes of the investigationc) Require that records of raised concerns, investigation processes and outcomes are maintained, ensuring that the confidentiality of the party or parties who raised the concern is protected.
6.6.2.	<p>Workers and their representatives are made aware of the site's procedures and how to access reporting mechanisms using languages, methods and channels that are understood and easily accessible to them.</p>
6.6.3.	<p>The site provides mechanisms to workers and their representatives for suggesting improvements or changes to the workplace and to working conditions. The site keeps records of received suggestions and how they are considered.</p>

Mandatory guidance:

Concerns: these include worker grievances, allegations of misconduct, allegations of policy breaches in the areas of disciplinary practices, health and safety, etc.



Criterion 6.7: Communication of terms of employment

Core

The site ensures that workers understand their current employment terms with regards to wages, working hours and other employment conditions.

6.7.1.	<p>The terms of employment are laid out in written contracts for all workers. These are communicated to them at the beginning of the working relationship and when changes are made to the terms, using languages, methods and channels that are understood and easily accessible to workers. The terms of employment include:</p> <ul style="list-style-type: none">a) Workers' rights under national labour and employment lawb) Days and hours of work, payment, overtime, compensation and benefitsc) Applicable collective agreementsd) Pay structure and pay periods.
6.7.2.	<p>The site's contracts with employment and recruitment agencies and other external providers of workers explicitly ask for the terms of employment to be communicated to workers at the</p>

	beginning of the working relationship and when changes are made to the terms, using languages, methods and channels that are understood and are easily accessible to workers.
--	---

	Criterion 6.8: Remuneration	
	The site pays workers fairly, regularly and on time, there are no inappropriate deductions from wages and overtime is rewarded.	
6.8.1.	<p>The site has a public remuneration policy that commits the site to:</p> <ul style="list-style-type: none"> a) Pay at least the applicable legal minimum wage to all workers or the wage set through a collective agreement, whichever is higher. Where there is no legal minimum wage and no collective agreement, the site pays the prevailing industry standard. The site also pays any benefits required by law or contract b) Reward workers for overtime hours at a premium c) Pay workers in monetary means only and in full. 	
6.8.2.	<p>The site has an effective procedure in place to ensure that workers are paid accurately and on time and that there are no wage deductions other than deductions permitted by law.</p>	
6.8.3.	<p>For each pay period, workers are provided with a timely and understandable pay statement that includes sufficient information to verify accurate payment for performed work.</p>	
6.8.4.	<p>The site's contracts with employment and recruitment agencies and other external providers of workers require them to pay all workers performing activities at the site:</p> <ul style="list-style-type: none"> a) The applicable legal minimum wage or, where there is no legal minimum wage, the prevailing industry standard, plus any benefits required by law b) In monetary means only, in full and on time. 	
6.8.5.	<p>Where there are on-site shops, the site ensures that goods and services are not offered above the regional market price and that workers are not coerced into buying goods and services from these shops.</p>	
6.8.6.	<p>Where accommodation is provided by the site or on behalf of the site, it is offered at no more than the appropriate market rate.</p>	
6.8.7.	<p>If requested by the workers' representatives, the site commits to introducing a living wage for its workers. The commitment requires the site to:</p> <ul style="list-style-type: none"> a) Work with the regional government, other companies and, where they exist, trade unions to define the regional living wage, unless it has already been defined b) Develop a time-bound plan to implement the living wage over time. 	
Mandatory guidance:		
Deductions permitted by law: these might apply for social insurance and tax provisions. Sites cannot force workers into saving schemes or runaway insurance. Wage deductions as disciplinary practices shall not be made unless the following conditions are met:		
- Wage deductions as disciplinary practices shall be lawful, requiring an appropriate legal basis (e.g., national laws and regulations or collective agreements).		

- Wage deductions as disciplinary practices shall not exceed the amount necessary to ensure workers at least receive a legal minimum wage (See 6.8.1.a).
- Wage deductions as disciplinary practices shall be clearly communicated in writing, in the language that employees understand, in advance, detailing the grounds for wage deductions.



Criterion 6.9: Working time

Core

The site complies with applicable law and industry standards on working time, overtime, public holidays and paid leave.

6.9.1.	<p>The site has a public policy stating that:</p> <ul style="list-style-type: none"> a) Effective fatigue management is key in determining working time, shift patterns and time off for workers b) Activities requiring overtime work are accepted voluntarily by workers c) All workers are provided with appropriate time off for meals and breaks, demonstrating effective processes for fatigue management d) The site provides all workers with paid annual leave of at least three working weeks after the worker reaches one year of service.
6.9.2.	The site's contracts with employment and recruitment agencies and other external providers of workers explicitly bind them to the provisions of the site's public policy on working time.
6.9.3.	The site grants paid maternity leave of at least 12 weeks.
6.9.4.	Where its activities allow this, the site offers flexi-time working and reduction of working time to care for children or other dependants.



Criterion 6.10: Worker wellbeing

Core

The site promotes worker wellbeing through offers to reconcile work and private life, support the health of workers and advance their qualifications.

6.10.1.	The site promotes worker wellbeing through offers to reconcile work and private life, support the health of workers and advance their qualifications.
6.10.2.	The measures to promote worker wellbeing are available to all workers employed directly by the site. Workers are made aware of the measures to promote worker wellbeing and how to access them, using languages, methods and channels that are understood and are easily accessible to them.

Principle 7. Human Rights

Objective:

ResponsibleSteel certified sites respect human rights wherever they operate, irrespective of their size or structure.

Background:

It has long been recognised that companies can have a profound impact on human rights. The United Nations (UN) 'Guiding Principles on Business and Human Rights' recognise this and state:

"The responsibility to respect human rights requires that business enterprises:

- a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur;*
- b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts."*

Internationally recognised human rights are laid out in the International Bill of Human Rights and in the ILO Declaration on Fundamental Principles and Rights at Work. The UN Guiding Principles on Business and Human Rights set guidelines for states and companies to prevent, address and remedy human rights abuses committed in business operations. The ResponsibleSteel International Production Standard is designed to align with these instruments.

Sites wanting to be certified to the Production Standard must understand the risks they face and know what their impacts are in relation to human rights. This will enable them to act, where necessary, to ensure that they do not contribute to human rights violations. In line with this, the Production Standard takes a due diligence approach to human rights, which can be summarised as: identify, assess, act, review. Where sites operate in areas that need extensive measures to ensure security of people, property and assets, the Production Standard requires a similar approach for security workers and public and private security providers.

The ResponsibleSteel Principles on Local Communities, Labour Rights and Health and Safety also support the site's implementation of human rights, even if the term 'human rights' is not contained in their titles or in their Requirements.



Criterion 7.1: Human rights due diligence

The site acts diligently to avoid infringing on the rights of others and to address adverse human rights impacts.

Core

7.1.1.	There is a public policy on the site's commitment to respect human rights.
7.1.2.	In line with a specified procedure, the site has identified and assessed the human rights-related risks and adverse impacts that it causes or contributes to. The identification and assessment of human rights-related risks and impacts is updated on a regular basis and is informed by input from internal and external stakeholders.
7.1.3.	Where it causes or contributes to human rights-related risks or adverse impacts, the site implements effective procedures to identify the root causes and define actions to prevent and mitigate these risks and adverse impacts.
7.1.4.	The actions to prevent and mitigate human rights-related risks and adverse impacts are communicated to workers and local communities using languages, methods and channels that are understood and easily accessible to them.
7.1.5.	A competent party regularly verifies the effectiveness of the site's procedures for preventing and mitigating human rights-related risks and adverse impacts. Where the site has been the subject of controversy in relation to human rights impacts, verification is conducted by a competent third party.

Mandatory guidance:

Human rights: covers a wide range of impacts on people. There are civil and political human rights, such as the right to life, equality before the law, and freedom of expression. Economic, social and cultural rights, such as the rights to work, social security and education, are also part of human rights, as are collective rights, such as the rights to development and self-determination. (Adapted from the United Nations Office of the High Commissioner for Human Rights and from United for Human Rights.)

An authoritative list of the core internationally recognised human rights is contained in the International Bill of Human Rights (which consists of the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Political Rights and its two Optional Protocols), coupled with the principles concerning fundamental rights in the eight ILO core conventions as set out in the Declaration on Fundamental Principles and Rights at Work. These are the benchmarks against which social organisations assess the human rights impacts of companies. The responsibility of companies to respect human rights is distinct from issues of legal liability and enforcement, which remain defined largely by national law provisions in relevant jurisdictions. (Adapted from the UN Guiding Principles on Business and Human Rights).

It should be noted that "the environment is never specifically mentioned in the Universal Declaration of Human Rights, yet if you deliberately dump toxic waste in someone's community or disproportionately exploit their natural resources without adequate consultation and compensation, clearly you are abusing their rights. Over the past 60 years, as our recognition of environmental degradation has grown so has our understanding that changes in the environment can have a significant impact on our ability to enjoy our human rights. In no other area is it so clear that the actions of nations, communities, businesses and individuals can so dramatically affect the rights of others – because damaging the environment can damage the rights of people, near and far, to a secure and healthy life." (Adapted from the [United Nations Office of the High Commissioner for Human Rights](#))

Regular verification by a competent party: the audit conducted to the ResponsibleSteel International Production Standard is not itself sufficient to replace regular verification by a competent party.



Criterion 7.2: Security practice

Core

The site does not support public or private security providers engaged in illegal practices and works to ensure that security providers respect human rights.

7.2.1.	The site has a public policy on security arrangements that commit to respect human rights and public freedoms.
7.2.2.	<p>In areas where there is a need for extensive measures to ensure security of people, property and assets, the site:</p> <ul style="list-style-type: none">a) Analyses the options for managing risk and avoiding threat to life of site workers and visitors and uses armed security only when there is no reasonable alternativeb) Consults with the government and local communities on security arrangementsc) Communicates key aspects of the security arrangements to local communities using languages, methods and channels that are understood and easily accessible to them.
7.2.3.	<p>The site has documented procedures that cover:</p> <ul style="list-style-type: none">a) Screening of security workers and public and private security providers regarding their involvement in human rights abuses and illegal practicesb) Regular training of security workers and providers on their roles and appropriate behaviourc) Deployment of security workers and providers and the individuals working for themd) Monitoring of security workers and provider conducte) Investigation of allegations of human rights abuses by security providers.



Criterion 7.3: Conflict-affected and high-risk areas

Core

The site does not contribute directly or indirectly to armed conflict, human rights abuses or risks for workers and communities in conflict-affected or high-risk areas.

7.3.1.	<p>When operating in conflict-affected or high-risk areas, the site has a public policy confirming that it does not tolerate any direct or indirect support to non-state armed groups or their affiliates who:</p> <ul style="list-style-type: none">a) Illegally control mine sites, transportation routes and/or upstream actors in the supply chainb) Illegally tax or extort money or minerals at point of access to mine sites, along transportation routes or at points where minerals are tradedc) Illegally tax or extort intermediaries, processing companies, export companies or international traders.
7.3.2.	<p>For conflict-affected or high-risk areas, the site has effective procedures in place to:</p> <ul style="list-style-type: none">a) Monitor its transactions, flows of funds and resources to ensure it is not directly or indirectly providing funding or support to non-state armed groups

- | | |
|--|--|
| | b) Immediately suspend or discontinue engagement with business partners where the site has identified a reasonable risk that it is linked to any party providing direct or indirect support to non-state armed groups. |
|--|--|

Principle 8. Stakeholder Engagement and Communication

Objective:

ResponsibleSteel certified sites engage effectively with stakeholders, report openly on issues of importance to those parties, and remediate adverse impacts that they have caused or contributed to.

Background:

Companies increasingly recognise that poor relations with stakeholders can increase business and reputational risk. The Production Standard understands that effective engagement between a site and its stakeholders is an inclusive and continuous process. Engagement is based on openness and fairness and focuses on issues that are most important to the parties concerned. The process of engagement and communication can be viewed as a low priority when there is no current conflict or crisis. However, if a conflict or crisis occurs, the absence of established relationships and channels of communication makes it more difficult for a site to manage the situation. For this reason, the Production Standard emphasises the importance of ongoing engagement.

A stakeholder is a person or organisation that can affect, be affected by, or perceive itself to be **affected by a site's decision or activity (adapted from ISO 14001:2015(en) Environmental management systems - requirements with guidance for use)**. Stakeholders can include local communities and their formal and informal representatives, indigenous peoples, national or local government authorities, politicians, trade and labour unions, civil society organisations, marginalised groups, religious leaders, or the academic community.

They also include suppliers, contractors, distributors and customers, as well as workers and contractors who depend on the site for their health and safety and livelihoods. However, **Principle 8 focuses primarily on the site's engagement and communication** with parties that do not hold a business or contractual relationship with the site, and with whom the site may not otherwise engage in its day-to-day management.



Criterion 8.1: Stakeholder engagement

Core

The site provides stakeholders with the means and opportunities to engage effectively on issues that matter to them.

8.1.1.	The site has identified and maintains a list of stakeholders and their representatives who may be affected by, or take an interest in, the site's activities.
8.1.2.	The site understands the interests and concerns of stakeholders and their representatives and, in particular, the legal and customary rights, interests and concerns of local communities.
8.1.3.	The site consults with stakeholders and their representatives on accessible, culturally appropriate and inclusive methods of engagement. The site takes steps to understand and remove potential barriers to engagement, paying particular attention to marginalised groups.
8.1.4.	<p>The site has a plan in place for the effective stakeholder engagement, scaled to its size and the environmental and social risks and adverse impacts associated with its activities, including provisions to:</p> <ul style="list-style-type: none">a) Engage with stakeholders on a regular basis and on issues that are relevant to themb) Engage in a manner that is free from manipulation, interference, coercion or intimidationc) Take account of stakeholders' concerns in site management, in day-to-day business, in designing operational processes and in taking decisions that may affect themd) Provide information to stakeholders in a manner that is timely, easy to understand and comprehensive enough for them to assess the matter at hande) Provide feedback to stakeholders on how the site has taken into account significant concerns.
8.1.5.	The site keeps records of the key activities it conducts as part of its stakeholder engagement plan, as well as the material inputs it receives and actions taken in response.
8.1.6.	The site's senior management regularly reviews the stakeholder engagement plan and the outcomes of that engagement.



Criterion 8.2: Grievances and remediation of adverse impacts

Core

The site offers a grievance mechanism to address concerns and engages in remediation where it has caused or contributed to adverse impacts.

8.2.1.	<p>The site has a documented and effective grievance mechanism that:</p> <ul style="list-style-type: none">a) Is easily accessible to all stakeholders at no costb) Includes an explanation of how the site will consider concerns or grievances that are raised, describing the process, responsibilities, contact details, approximate timeframe and how the party raising the issue will be informed of outcomesc) Gives due consideration to local customs, traditions, rules and legal systems
--------	---

	d) Ensures confidentiality and which can be used without fear of retaliation. Where this is legally acceptable, the mechanism can be used to register issues in an anonymous manner.
8.2.2.	The site takes measures to ensure that stakeholders are aware of the grievance mechanism.
8.2.3.	The site has documented procedures to: <ul style="list-style-type: none"> a) Register any issues raised b) Determine a process to evaluate the issue and develop its response, in consultation with the party raising the concern, if that party is known c) Document its response in line with its defined process and provide that response to the party raising the concern, if that party is known.
8.2.4.	Where concerns have been raised that the site has caused or contributed to adverse human rights impacts: <ul style="list-style-type: none"> • The concerns are reviewed to determine if they are indeed related to human rights • Where this is the case, the process for evaluation and response includes the participation of a competent third party.
8.2.5.	The site cooperates in legitimate processes for consideration of remediation and, if it is determined that the site has caused or contributed to adverse human rights, community health or safety impacts, takes action to address the problem and ceases or changes the activity that was responsible for the impact.
8.2.6.	Where a grievance is found to have occurred, the site actively involves local communities in monitoring and verifying that the commitments it has made to address the issue are implemented appropriately.

Mandatory guidance:

As the requirement says, the grievance mechanism has to be accessible to all stakeholders. Where a stakeholder goes to the trouble of accessing and using one of the site's official grievance mechanism channels, their concern is worth considering by the site. This means that the grievance mechanism has to cover all grievances submitted via the site's official channels. However, sites are not expected to respond to every negative post they receive via social media. Where a well-functioning community-based grievance mechanism exists, the site may build on that for its own purposes.



Criterion 8.3: Communicating to the public

Core

The site communicates on material social and environmental issues in a consistent and balanced manner, using methods that are appropriate to its stakeholders.

8.3.1.	In consultation with stakeholders, the site has identified which social and environmental topics are material to them.
8.3.2.	The site collects information on material topics and verifies the accuracy of that information, in line with a documented process.
8.3.3.	The site:

- a) Regularly makes information on material topics available to the public at no cost and at frequent intervals that are timely enough for stakeholders to act on
- b) Uses communication methods that are easily accessible by the public and that reflect prevailing cultural habits
- c) Includes positive and negative aspects of site performance, where relevant, in its communication
- d) Includes actions the site has taken, or plans to take, to address the identified material topics
- e) Ensures information can be easily compared between reporting cycles.

Mandatory guidance:

Reporting should be sufficiently detailed for stakeholders to understand the site's performance and should be done in a manner that is easy to understand, even for individuals with no technical knowledge of the subject at hand.

Easily accessible: for example, in areas with widely available internet access, online reporting is appropriate. In areas where this is not the case, sites should choose more suitable forms of communication and consider whether their forms of communication might disadvantage certain groups. Where this is the case, sites should ensure that these groups can access their information as well.

Principle 9. Local Communities

Objective:

ResponsibleSteel certified sites respect the rights and interests of local communities, avoid and minimise adverse impacts and support community wellbeing.

Background:

Sites have a relationship with the communities that live near their operations. Community involvement helps strengthen civil society and sites that engage with local communities and associated institutions in a respectful manner reflect and reinforce democratic and civic values. Community involvement and development are both integral parts of sustainable development.


The Local Communities Principle is closely related to human rights. It acknowledges the distinct rights of indigenous peoples and requires sites to apply the concept of free, prior and informed consent where they operate in proximity to indigenous peoples, whether they are formally recognised as such or self-declared. The ResponsibleSteel International Production Standard goes beyond community engagement in that it asks sites to support their local communities, recognising that the site is itself a stakeholder in its own community and, therefore, shares common interests. Beyond this empowering element in the Production

Standard, sites must also respect the civil, economic, social and cultural rights that community members possess.

Community issues are also considered under the following Principles:

- Stakeholder Engagement and Communication
- Occupational Health and Safety (Emergency Preparedness and Response, in particular)
- Human Rights.

A site's impact on communities is also covered in Principles 4 (Decommissioning and Closure), 11 (Noise, Emissions, Effluents and Waste), 12 (Water Stewardship) and in the Criterion 5.7 (Emergency preparedness and response).

	<h2>Criterion 9.1: Commitment to local communities</h2>	<div>Core</div>
<p>The site is committed to respecting the health and safety, and the legal and customary rights and interests of local communities and supports their social and economic wellbeing.</p>		
9.1.1.	<p>The site has a public commitment to:</p> <ul style="list-style-type: none">a) Safeguard the legal and customary rights and interests, cultures, customs and values of local communities regarding lands, their use of natural resources and their livelihoodsb) Maintain or improve the social and economic wellbeing of local communities affected by the site's operations.	
9.1.2.	<p>In consultation with local community and local government representatives, the site has developed a plan to deliver its commitment to maintaining or improving the social and economic wellbeing of local communities. The plan:</p> <ul style="list-style-type: none">a) Outlines individual steps that the site's management will take or supportb) Contains timelines and the resources that will be made available to implement the planc) Explains how the site's support will contribute to the self-sustainment of the institutions, initiatives or projects receiving that supportd) Shows that the site has considered marginalised community memberse) Is made public in a clear and understandable manner, using channels that are easily accessible for local communities.	
9.1.3.	<p>Together with local community and local government representatives, the site monitors the implementation of the plan and adjusts it where needed to ensure it continues to support the social and economic wellbeing of the local communities affected by the site's operations.</p>	
<p>Mandatory guidance:</p> <p>Local communities: indigenous peoples are part of local communities. Consequently, this Principle includes consideration of indigenous peoples where they are affected by the site's activities, even if they are not singled out in the wording of the requirements. The term 'indigenous peoples' is understood as described in Article 1 of ILO Convention 169.</p>		



Criterion 9.2: Free, Prior and Informed Consent (FPIC)

Core

Where the site considers activities that might affect the rights of indigenous peoples, the site obtains the peoples' free and informed consent before carrying out such activities.

9.2.1.	Where new activities or changes to existing activities are planned, the site and affected indigenous peoples agree and document a process for obtaining FPIC that is consistent with the indigenous peoples' traditional decision-making processes, while respecting internationally recognised human rights.
9.2.2.	The site achieves FPIC before approving new activities or changes to existing activities that might affect the lands, natural resources or cultural heritage that are subject to traditional ownership or under customary use by indigenous peoples.
9.2.3.	The outcomes of the negotiations and any agreements reached between the site and the affected indigenous peoples are documented and approved by the parties, as outlined in the FPIC process, and are made accessible to the members of the affected indigenous peoples.



Criterion 9.3: Cultural heritage

Core

The site respects and safeguards cultural heritage within its area of influence.

9.3.1.	The site has a documented procedure for identifying and dealing with cultural heritage sites and values in its area of influence that: a) Has been developed in consultation with affected communities b) Follows the mitigation hierarchy of avoiding, minimising, restoring and offsetting adverse impacts from the site's activities c) Ensures continued access rights for affected communities to cultural sites or values.
9.3.2.	Implementing the procedure is a collaborative effort between the site and affected communities.
9.3.3.	Where critical cultural heritage exists in the site's area of influence, the site does not remove, significantly alter or damage it, or instruct another party to do so, unless the affected communities request its removal for the purpose of protection and preservation.
9.3.4.	Where cultural heritage sites or values of indigenous peoples may be affected, the site applies the FPIC process (see Criterion 9.2).
9.3.5.	Where an impact on cultural heritage occurs, the effectiveness of mitigation measures is monitored and actions to address any issues are defined and implemented by the site, in cooperation with affected communities.

Mandatory guidance:

Cultural heritage: refers to (i) tangible forms of cultural heritage, such as tangible moveable or immovable objects, property, sites, structures, or groups of structures, having archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values; (ii) unique natural

features or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and (iii) certain instances of intangible forms of culture that are proposed to be used for commercial purposes, such as cultural knowledge, innovations, and practices of communities embodying traditional lifestyles.

Critical cultural heritage: consists of one or both of the following types of cultural heritage: (i) the internationally recognised heritage of communities who use, or have used within living memory, the cultural heritage for long-standing cultural purposes; or (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation.

The requirements of this Criterion apply to cultural heritage regardless of whether it has been legally protected or previously disturbed. (Adopted from IFC Performance Standard 8, IFC Performance Standards on Environmental and Social Sustainability)



Criterion 9.4: Displacement and resettlement

Core

The site strives to avoid the need for displacement or resettlement but, where unavoidable, minimises its scope and the resulting adverse impacts.

9.4.1.	Where physical and economic displacement of communities is being considered, the site develops a procedure to: <ul style="list-style-type: none"> a) Identify and assess the risks and potential adverse impacts of that displacement on affected community members b) Consider alternative operational set-ups to avoid or minimise physical and economic displacement c) Include affected communities in the process, paying particular attention to marginalised community members.
9.4.2.	When physical displacement is unavoidable, the site develops a Resettlement and Compensation Action Plan, in consultation with the affected communities.
9.4.3.	When economic displacement is unavoidable, the site develops a Livelihood Restoration Plan, in consultation with the affected communities.
9.4.4.	The site applies the compensation standards outlined in the Resettlement and Compensation Action Plan and in the Livelihood Restoration Plan consistently to all affected community members and ensures that compensation is completed by the time of the displacement.
9.4.5.	When indigenous peoples are involved, the site applies the FPIC process (see Criterion 9.2).
9.4.6.	The site monitors implementation of the Resettlement and Compensation Action Plan and the Livelihood Restoration Plan together with affected communities. Where necessary, the site modifies the way it implements the plan to ensure that livelihoods, livelihood security and living standards are improved or restored.
9.4.7.	The site commissions a competent third party to conduct a completion audit of the Resettlement Action Plan and Livelihood Restoration Plan to verify that adequate mitigation measures have been put in place and communicates the audit results to the public.

Mandatory guidance:

Resettlement and Compensation Action Plan and Livelihood Restoration Plan: these should be developed in line with the IFC Performance Standard 5.

Note that the requirements of Criterion 9.4 apply to displacement and resettlement being considered or taking place in the ten years before applying for ResponsibleSteel certification. Where displacement and/or resettlement occurred earlier than that, the site is not expected to meet all the **Criterion's requirements. However, where this is the case**, the site must have evaluated the outcomes of displacement and resettlement activities and, if necessary, takes steps to restore or improve the living conditions and livelihoods of those affected.

Principle 10. Climate Change and Greenhouse Gas Emissions

Objective:

The corporate owners of ResponsibleSteel certified sites are committed to achieving the goals of the Paris Agreement and are taking action to achieve them at both corporate and site level, in line with ambitious greenhouse gas (GHG) emissions reduction targets. Sites measure and disclose their GHG emissions. Sites producing crude steel determine the GHG emissions intensity associated with its production on an internationally consistent basis, including their direct (Scope 1), indirect (Scope 2) and upstream indirect (Scope 3) emissions associated with the extraction, processing, and transportation of input materials. Sites that produce crude steel disclose their GHG emissions intensity performance. This allows those that use or specify the use or procurement of steel, investors, policy makers and other stakeholders to support **steelmakers in their efforts to reduce the sector's GHG emissions through a range of measures**, including product specifications, purchasing commitments, financing and investment decisions and policy instruments.

Background:

The United Nations recognises climate change caused by man-made GHG emissions as the defining issue of our time, and its Sustainable Development Goal 13 urges countries to take urgent action to combat climate change and its impacts.

Significantly, the steel industry is responsible for about 7% of global GHG emissions, considering just direct emissions¹. The industry has a critical responsibility to reduce the GHG emissions associated with steelmaking, and in the supply of steel-containing materials that will be needed to help the world transition to a net-zero-carbon economy (for example, in wind turbines and electric vehicles).

¹ IEA, 2024, Global Energy Review: CO₂ Emissions in 2023, <https://www.iea.org/articles/global-energy-review-co2-emissions-in-2020>; IEA, 2023, Breakthrough Agenda Report, <https://www.iea.org/reports/breakthrough-agenda-report-2023/steel>

The requirements of ResponsibleSteel Principle 10 are written to support the Paris Agreement of the parties to the United Nations Framework Convention on Climate Change. The agreement recognises the need for an effective and progressive response to the urgent threat of climate change, on the basis of the best available scientific knowledge. It also aims to strengthen the global response, in the context of sustainable development and efforts to eradicate poverty, including by:

- a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change
- b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low GHG emissions development, in a manner that does not threaten food production
- c) Making finance flows consistent with a pathway towards low GHG economy and climate-resilient development.

The ResponsibleSteel International Production Standard requires companies that want their sites to benefit from ResponsibleSteel certification to demonstrate their commitment to the goals of the Paris Agreement through the development of science-based targets to reduce their GHG emissions. The public **policy environment is critically important to steelmakers' ability** to achieve this objective and requires that companies identify and then engage with policymakers to achieve the necessary policy changes. Recognising the need for effective corporate leadership, the Production Standard requires companies to implement the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

Long-term, company-level targets must be translated into specific targets and plans to reduce GHG emissions at an individual site level, and GHG emissions must be measured and monitored at site level to determine whether targets are being met.

Sites that wish to market or sell ResponsibleSteel certified steel products, co-products or by-products must achieve a minimum threshold level of GHG emissions intensity performance when producing crude steel. The threshold level of performance is determined in accordance with the internationally consistent GHG accounting rules specified in Criterion 10.4. These require that all significant GHGs must be considered, including methane (CH₄) as well as CO₂. The GHG emissions associated with the extraction, transportation and processing of input materials must be included, as well as **the site's direct emissions and the indirect emissions** associated with its energy use.

Crucially, the Production Standard defines GHG emissions intensity performance having taken account of the proportion of scrap that is used as input material.

Labelling and claims about ResponsibleSteel certified products

The Production Standard defines four levels of progress for the decarbonisation of steelmaking from Progress Level 1, the basic threshold level required to make claims about ResponsibleSteel certified products, through to Progress Level 4, for the production of 'near zero' steel. Providing multiple levels allows steel consumers, procurement professionals, and policy makers to design their own specifications, commitments and incentives which maximise the speed of the steel sector's transition to 'net zero' steel production.

ResponsibleSteel certified steelmaking sites that have achieved at least Progress Level 1 in relation to both decarbonisation and the responsible sourcing of input materials, as specified in Principle 3 (Responsible Sourcing), can market and sell their steel products, co-products and by-products as ResponsibleSteel certified. They may also use the ResponsibleSteel Certified Steel mark on their ResponsibleSteel certified steel products, in accordance with the conditions specified in the ResponsibleSteel Logo Guide.

The Production Standard requires that any ResponsibleSteel certified product must be accompanied with a declaration of its product carbon footprint. This allows downstream users to track the total embodied carbon associated with their use of steel at a project or company level, in line with their own net-zero GHG emissions targets, as well as supporting decarbonisation of the steel sector by specifying ResponsibleSteel Decarbonisation Progress Levels in their procurement.

Table 3 - Summary of Principle 10 requirements

Criterion	Summary of Requirements	Must be met for your Core Site Certification	Must be met to sell ResponsibleSteel certified steel products
10.1	The corporate owner has published a science-based target to reduce the company's GHG emissions in line with the achievement of the goals of the Paris Agreement	✓	✓
10.2	The corporate owner is implementing the recommendations of the Taskforce for Climate-Related Financial Disclosures (TCFD)	✓	✓
10.3	GHG emissions are measured at the site level using a recognised international or regional standard	✓	✓
10.4	Site level GHG emissions are measured from 'cradle-to-crude steel' following internationally consistent scope boundaries and GHG accounting rules		✓
10.5	GHG emissions reduction targets are in place and are being implemented at the site level	✓	✓

10.6	<p>The site has achieved at least ResponsibleSteel Decarbonisation Progress Level 1 for its production of crude steel</p> <p>The GHG emissions intensity performance for the site is disclosed, tracking progress towards 'near zero' GHG emissions</p> <p>The product carbon footprint for all ResponsibleSteel certified products is determined and disclosed in line with a recognised international or regional standard</p>		✓
10.7	<p>Key site level information published on the ResponsibleSteel website, including:</p> <p>Site level GHG emissions data and decarbonisation target (may be averaged)</p> <p>Site level GHG emissions intensity performance data and Decarbonisation Progress Level (may be averaged)</p> <p>Product level carbon footprint data available to customers</p>	<p>Site level emissions & reduction targets only</p> <p>- 10.7.1</p>	<p>✓</p> <p>- 10.7.2 & 10.7.3</p>



Criterion 10.1: Corporate commitment to achieve the goals of the Paris Agreement

Core

The site's corporate owner has defined and is implementing a long- and medium-term strategy to reduce its greenhouse gas (GHG) emissions to levels that are compatible with achieving the goals of the Paris Agreement, with an aspiration to achieve net-zero GHG emissions through work with policymakers and others.

10.1.1.	<p>The site's corporate owner ascribes publicly to a credible, long-term emissions reduction pathway for the steel industry as a whole that is compatible with achieving the goals of the Paris Agreement, and which includes:</p> <ul style="list-style-type: none"> a) Explicit projections of long-term steel consumption b) Explicit projections for the production and use of both primary and scrap steel, and the associated GHG emissions c) Explicit assumptions in relation to the public policy and other key conditions that it is based on.
10.1.2.	<p>The site's corporate owner has defined and made public both a long-term emissions reduction pathway and a medium-term, quantitative, science-based GHG emissions target, or set of targets, for the whole corporation. That pathway and the medium-term target(s) are compatible with the long-term emissions reduction pathway it ascribes to for the steel</p>

	industry, as well as the projections for the production of primary and scrap steel, as applicable to its own portfolio of sites.
10.1.3.	The site's corporate owner has a credible, documented strategy for achieving its corporate-level GHG emissions target(s), outlining the timeline for change across its whole portfolio of sites. The corporate owner has also identified the conditions that would need to be in place to successfully implement the strategy, as well as the specific actions (including policy engagement) that it is committed to taking to help bring these conditions about.
10.1.4.	The corporate owner regularly reviews the implementation of its strategy, documents the findings of its review, and updates the strategy to take account of those findings.
10.1.5.	The review shows that the corporate owner is implementing its strategy effectively over time.



Criterion 10.2: Corporate Climate-Related Financial Disclosure

Core

The site's corporate owner is implementing the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

10.2.1.	The site's corporate owner has allocated responsibility for oversight of climate-related risk and opportunity to at least one board committee, with an understanding that material climate-related risks and opportunities that affect business strategy will need to be discussed at the full board level.
10.2.2.	The site's corporate owner has a documented commitment in place to implement the core TCFD recommendations according to its four pillars - governance, strategy, risk management, and metrics and targets - in accordance with applicable TCFD guidance, within three years of the date of application for the site's certification.



Criterion 10.3: Determination of GHG emissions for the purpose of site-level GHG emissions reduction targets and planning

Core

The site measures and records key aspects of its GHG emissions in accordance with a recognised international or regional standard.

10.3.1.	The total direct GHG (CO ₂ equivalent, or CO ₂ e) or CO ₂ emissions for the site are measured, recorded and verified in accordance with the requirements of an applicable, recognised international and/or regional standard.
10.3.2.	There is a system in place to estimate the total GHG emissions (CO ₂ e) associated with the generation of electricity, heat and steam imported to the site from outside the site boundary.
10.3.3.	There is a system in place to estimate the total GHG emissions (CO ₂ e) associated with materials imported to the site from outside the site boundary.
10.3.4.	For sites that produce crude steel, the associated GHG emissions intensity (metric tonnes of CO ₂ e/metric tonne crude steel) is calculated in accordance with the requirements of an applicable, recognised international and/or regional standard.



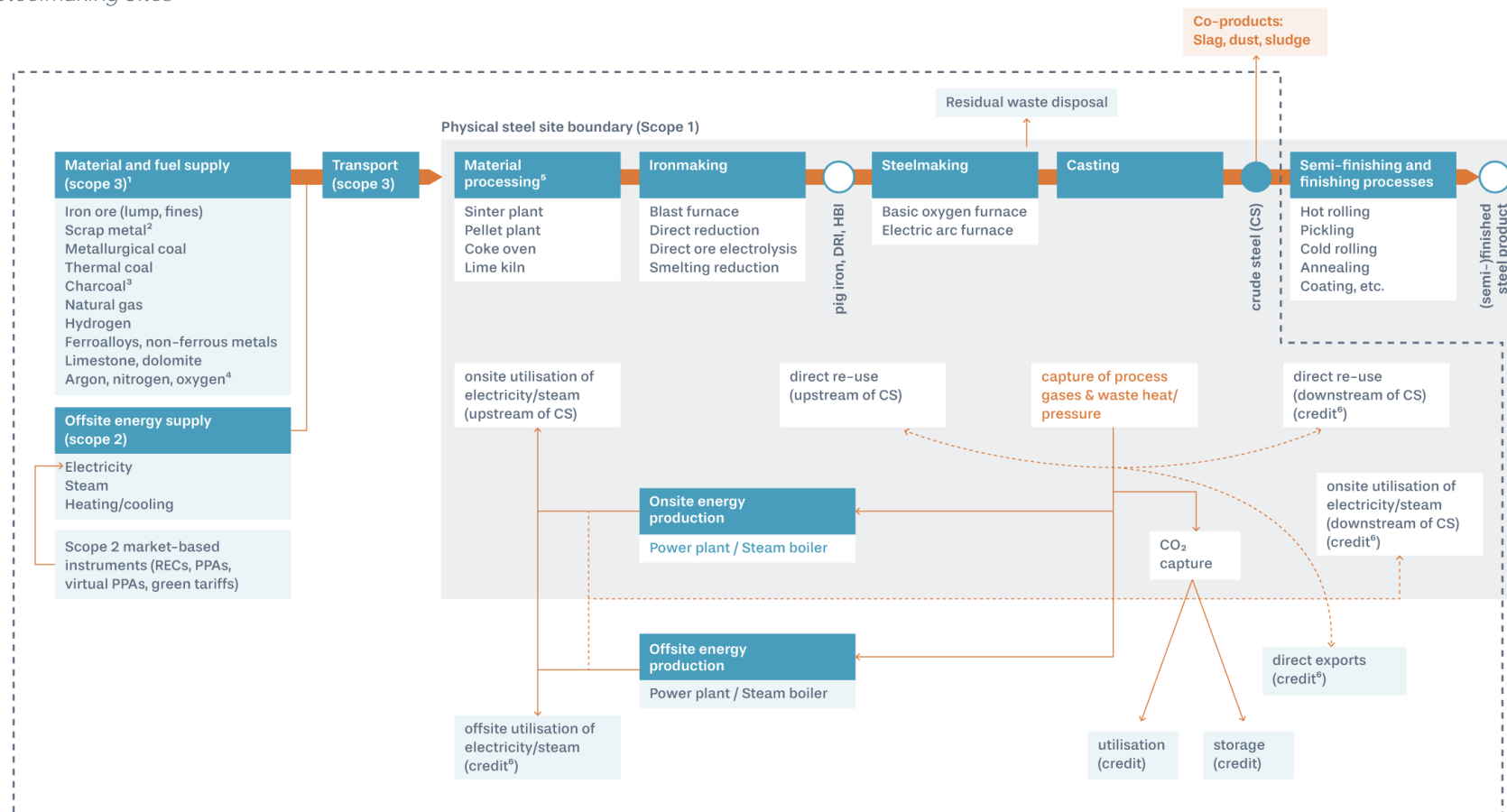
Criterion 10.4: Determination of site-level GHG emissions for the purpose of reporting GHG emissions intensity when producing crude steel

Progress

In order to market or sell its steel products, co-products or by-products as **'ResponsibleSteel certified'** the site measures and records key aspects of its GHG emissions in accordance with the specifications of this Criterion, in addition to the requirements of Criterion 10.3.

- | | |
|---------|---|
| 10.4.1. | <p>GHG emissions data – general requirements:</p> <ul style="list-style-type: none">a) When determining GHG emissions, a site must consider the emissions of CO₂, CH₄, nitrogen trifluoride (NF₃), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆), using Global Warming Potential (GWP) values relative to CO₂ (CO₂e) with a 100-year time horizon, as published in the most recently published Intergovernmental Panel on Climate Change Assessment Report.b) The unit of measurement for GHG emissions is tonnes CO₂ equivalent (tCO₂e).c) The data for the determination of the GHG emissions intensity for crude steel production as specified in this Criterion has been verified and independently reviewed in accordance with the requirements of ISO 14064-3:2019, Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements, to either the 'reasonable level of assurance' or the 'limited level of assurance'. |
|---------|---|

Figure 3- ResponsibleSteel's Emissions Boundary (under criterion 10.4) for Representation Iron and Steelmaking Sites



For illustrative purposes only – not all processes are shown.

- For the full list of scope 3 requirements, refer to Annex 10 of the standard. For any non-listed items (e.g., graphite electrodes and refractories), if they are likely to contribute more than 5% of the scope 3 emissions they must also be included. The emissions boundary for each input is determined by materiality in accordance with recognised international standards. Refer to Criterion 10.4.5 for further details.
- Upstream embodied GHG emissions for scrap metal are counted as zero, but emissions for transportation are included.
- CO₂ sequestration associated with production of biomass-based products can be claimed when this is independently verified using a recognised standard. In the absence of independently verified primary data the emissions associated with the growth, harvesting and processing of biological materials are assigned a default net upstream GHG emissions factor of zero.
- Oxygen plant is often located onsite for a BF-BOF plant.
- Material processing can also be carried out offsite, with imports of iron ore sinter, iron ore pellets, coke and/or lime.
- Credit given if re-used processes gases/generated electricity is greater than consumed gases/electricity upstream of crude steel.

10.4.2.	<p>Scope boundaries:</p> <ol style="list-style-type: none"> a) The scope boundary for determining a site's GHG emissions when producing crude steel includes: <ul style="list-style-type: none"> • Direct (Scope 1) GHG emissions (see 10.4.3) • Energy-related indirect (Scope 2) GHG emissions (see 10.4.4) • Upstream indirect (Scope 3) GHG emissions (see 10.4.5), including GHG emissions associated with: <ul style="list-style-type: none"> — Material extraction — Material preparation and processing — Transportation. b) The end point of the scope boundary for determining the total GHG emissions when producing crude steel, and, therefore, determining the ResponsibleSteel crude steel GHG emissions intensity performance, is the point at which crude steel is first produced. GHG emissions associated with further processing of the crude steel after casting (for example, hot rolling, cold rolling, coating) are not included for this purpose. c) The scope boundary for determining the product carbon footprint for steel products, co-products and by-products exported from the site is defined in accordance with the applicable international or regional standard(s) used (see 10.6.4).
---------	--

Figure 4 - Summary of ResponsibleSteel's Emissions Boundary (under criterion 10.4)

Upstream Emissions	Iron and Steelmaking	Downstream Processes	Downstream Value Chain
Inclusions <p>Extraction and processing of input materials and fuels on a 'cradle-to-gate' basis, which may include iron ore, DRI, HBI, coal, coke, natural gas, hydrogen and fluxes (depends on-site configuration).</p> <p>Transport of materials to site.</p> <p>Offsite production of electricity, steam, heating, cooling.</p> <p>Market-based instruments for low emissions electricity procurement (RECs, PPAs, virtual PPAs, green tariffs).</p> <p>Ferroalloys and non-ferrous metals (replacement embodied GHG value applied to enable comparison of steels with <8% alloy content)</p>	Inclusions <p>Flaring of process gases which are caused by on-site combustion processes and iron ore reduction, up to the point of crude steel production, which may include coke oven gas, blast furnace gas, basic oxygen furnace gas, and electric arc furnace gas.</p> <p>Process gases that are captured for on/offsite power production are also considered to be flared, and subsequent credits applied if net electricity production occurs (refer to downstream value chain).</p>	Inclusions <p>Collection and disposal of residual waste.</p>	Inclusions <p>Exported process gases or waste heat (substituting natural gas).</p> <p>On/off-site electricity/steam generation using process gases or waste heat/pressure (substituting grid electricity).</p> <p>Captured CO₂ for permanent storage or utilisation (CCUS).</p>
Exclusions <p>Scrap production and collection (embodied GHG value of zero), although emissions related to transport of scrap to site are included.</p> <p>Scope 3 emissions related to capital goods, business travel, employee commuting and upstream leased assets.</p>	Exclusions <p>Emissions associated with intermediary products (e.g., coke, DRI, pellets) that are produced onsite but sold externally for use by other sites.</p> <p>Electricity generated onsite using renewables (embodied GHG value of zero).</p>	Exclusions <p>All processes downstream of crude steel production, including hot rolling, cold rolling, annealing, galvanising, and coating.</p>	Exclusions <p>Any other co-product credits (slags, dusts, sludge, etc.).</p> <p>All other downstream life cycle phases, including use, demolition, re-use and recycling.</p> <p>Carbon embedded in the final product.</p>

Note: Carbon offsets (e.g., land use, whether on/off-site) are also excluded.

10.4.3.	<p>Direct (Scope 1) GHG emissions</p> <p>a) The site's direct (Scope 1) GHG emissions are measured, recorded and verified in accordance with the requirements of an applicable, recognised, international and/or regional standard, as specified in Criterion 10.3 and in accordance with the requirements of Criterion 10.4.6, for determining the ResponsibleSteel crude steel GHG emissions intensity performance for the site.</p> <p>b) Determining the site's direct (Scope 1) GHG emissions does not include carbon offsets or similar instruments.</p>
10.4.4.	<p>Energy-related indirect (Scope 2) GHG emissions</p> <p>Energy-related indirect (Scope 2) GHG emissions are determined in accordance with the requirements of an applicable, recognised, international and/or regional standard, as specified in Criterion 10.3, and with the following requirements:</p> <p>a) Imported electricity:</p> <ul style="list-style-type: none"> • GHG emissions are quantified in accordance with the requirements of ISO 14064 - 1:2018 Annex E.2 Treatment of imported electricity, using the emission factor that best characterises the pertinent grid, i.e. dedicated transmission line, local, regional or national grid-average emission factor. • Grid-average emission factors are from the emissions year being reported, if available, or the most recent year, if not. Grid-average emission factor for imported consumed electricity are based on the average consumption mix of the grid from which the electricity is consumed. • Determining energy-related indirect (Scope 2) GHG emissions may be based on the use of renewable energy certificates, power purchase agreements, virtual power purchase agreements, or green tariffs paid in relation to the site's sourcing of electricity, where these meet the requirements of ISO 14064 - 1:2018 E.2.2 Additional information. • Imported electricity that is used upstream of crude steel production at the site, and that has been generated from process gases or waste energy while producing crude steel at the site, is excluded when determining the site's energy-related indirect (Scope 2) GHG emissions for the purpose of determining the ResponsibleSteel crude steel GHG emissions intensity for the site. <p>b) Heating, cooling and steam:</p> <ul style="list-style-type: none"> • GHG emissions for imported energy other than electricity are quantified using a source-specific emission factor. • GHG emission factors are from the emissions year being reported, if available, or the most recent year, if not. Average emissions factors for imported energy are based on the average consumption mix of the energy generator.
10.4.5.	<p>Upstream indirect (Scope 3) GHG emissions</p> <p>The site's upstream indirect (Scope 3) GHG emissions are determined in accordance with the following requirements:</p>

- a) **Determining the site's upstream indirect (Scope 3) GHG emissions includes the direct (Scope 1), energy-related indirect (Scope 2), and upstream indirect (Scope 3) GHG emissions from 'cradle-to-gate' for the following input materials, if applicable:**
- Ferrous-containing materials: cold iron, direct reduced iron (DRI), granulated pig iron (GPI), hot briquetted iron (HBI), iron ore, pellets, scrap, sinter, steel slab
 - Auxiliary materials: argon, burnt dolomite, burnt lime, crude dolomite, limestone, nitrogen, oxygen
 - Alloys and metallic additives: aluminium, copper, ferro-chromium, ferro-manganese, ferro-molybdenum, ferro-nickel, ferro-silicon, ferro-vanadium, lead, magnesium, manganese, molybdenum oxide, nickel metal, nickel oxides, nickel pig iron, silico-manganese, silicon metal, tin metal
 - Solid fuels: charcoal, bio-coke, biomass, coal, coke, petroleum coke, used plastic, used tyres
 - Liquid fuels: heavy oil, kerosene, light oil, liquified petroleum gas (LPG)
 - Gas fuels: hydrogen, natural gas, biogas
 - Other input materials for steelmaking: other inputs that are assessed as likely to contribute more than 5% to the total upstream (Scope 3) GHG emissions of steelmaking at the site.
- b) **The determination of the site's upstream indirect (Scope 3) GHG emissions uses either:**
- (i) The current ResponsibleSteel default embodied GHG values as published in Annex 5 or;
 - (ii) Primary data provided by the supplier that meets the requirements specified in 10.4.5.c.
- c) **The site uses primary data, whenever available, to determine the upstream indirect (Scope 3) GHG emissions of input materials provided by the supplier. The supplier must conform with the following specifications for the declaration of the embodied GHG values:**
- It must include an estimate of the direct (Scope 1), energy-related indirect (Scope 2), and upstream indirect (Scope 3) GHG emissions of the supplied input material from **the original source ('cradle') to the point of sale.**
 - It should exclude any carbon offsets.
 - It must conform with any ResponsibleSteel guidance provided for the specific material (see guidance notes).
 - Any declaration should include reference to the ResponsibleSteel-recognised international standard used as the basis for the determination, as well as the date the determination was made, whether it has been independently assured and, if so, the level of assurance achieved.
- d) **The site includes an estimation of the GHG emissions associated with transporting the input materials from the point of purchase to the site.**
- e) **The site's upstream indirect (Scope 3) GHG emissions are reduced pro rata if imported materials with GHG emissions that have been included in the determination of the site's GHG emissions for crude steel production are subsequently exported from the site before such use.**

10.4.6.	<p>The following GHG emissions accounting rules apply for determining the ResponsibleSteel crude steel GHG emissions intensity performance for sites which produce crude steel:</p> <ul style="list-style-type: none"> a) Carbon physically embedded in final products, co-products, and by-products: Carbon that remains physically embedded within steel or other final products, co-products or by-products produced at the site, and that is not emitted to the atmosphere through further processing or use, is not included as a GHG emission when determining the ResponsibleSteel crude steel GHG emissions intensity performance for the site. See 10.4.7 for consideration of carbon capture and use, or storage of process gases. b) Allocation of GHG emissions to co-products and by-products: The GHG emissions associated with steelmaking are allocated in full to the site's production of crude steel. There is no reduction in the ResponsibleSteel crude steel GHG emissions intensity for the site due to the allocation of GHG emissions to steel by-products or co-products at the site (for example, dust, sludge, chemicals, oils). See 10.4.7 for consideration of carbon capture and use, or storage of process gases. c) Allocation of emissions for exported intermediate products ('merchant' production): Where a site produces and exports intermediate products, such as coke, pig iron, GPI or industrial gases, the GHG emissions associated with producing the exported quantity of the intermediate products should be determined and deducted from the total GHG emissions when determining the ResponsibleSteel crude steel GHG emissions intensity performance of the site. d) Energy use for on-site processing of crude steel: GHG emissions associated with the on- or off-site processing of crude steel are not included as emissions for the purpose of determining the ResponsibleSteel crude steel GHG emissions intensity performance of the site. The energy-related indirect (Scope 2) GHG emissions associated with the downstream processing of crude steel should be deducted from the total energy-related indirect (Scope 2) GHG emissions of the site when determining the ResponsibleSteel crude steel GHG emissions intensity performance for the site. e) Emissions associated with waste or residual materials exported from the site: GHG emissions associated with storing or disposing of waste or residual materials, whether on- or off-site, must be estimated and included as an emission when determining the ResponsibleSteel crude steel GHG emissions intensity performance of the site.
10.4.7.	<p>The following GHG emissions accounting rules apply for captured process gases and waste energy for power and steam generation, re-use or recycling, and carbon capture use, or storage (CCU/CCS):</p> <ul style="list-style-type: none"> a) The site determines and records the direct (Scope 1) GHG emissions (CO₂e) associated with process gases, such as coke oven gas, blast furnace (BF) gas, basic oxygen furnace (BOF) gas that are emitted to the atmosphere or flared under 10.4.3. b) The site determines and records the GHG emissions (CO₂e) that would have occurred if process gases that are captured for use, export or storage had been flared instead. This is referred to as the captured process gas baseline GHG emissions for the site.

- c) The captured process gas baseline GHG emissions for the site are included in determining the total GHG emissions of the site for the purpose of reporting the GHG emissions intensity when producing crude steel, minus any credits that are assigned for the subsequent use or storage of the process gases, as specified in 10.4.7.d to 10.4.7.g.
- d) Credit for the use of process gas and waste energy for power and steam generation:
- (i) Where process gases are captured and subsequently used either on - or off-site for power generation, and/or where waste energy is recovered and used either on - or off-site for power generation, e.g. in a top-pressure recovery turbine, which **recovers the blast furnace's top pressure, and coke dry quenching, which recovers coke sensible heat, the site's captured process gas baseline GHG emissions is reduced by the allocation of a GHG emissions credit on the following basis:**
 - (ii) The amount of power generated from the use of process gases is recorded in MWh (= A MWh)*.
 - (iii) The amount of power generated from the use of waste energy (heat and pressure) is recorded in MWh (= B MWh)*.
 - (iv) The amount of power used by the site upstream of crude steel production is recorded in MWh (= C MWh).
 - (v) The amount of power used by the site upstream of crude steel production (C) is deducted from the total amount of power generated from the use of process gases and waste energy (A + B). The site is allocated a GHG emissions credit equal to A + B - C, multiplied by the most recent global grid intensity (CO₂e/MWh) as determined by the International Energy Agency (IEA). If electricity demand exceeds supply from process gases and waste energy, net production within the systems boundary (A + B - C) will be negative and no credit is applied (instead Scope 2 emissions are positive).
- *If primary data for the amount of power generated is not available, it may be estimated using the current worldsteel default value for the amount of waste heat required to generate 1 MWh of power.
- e) Credit for the re-use or recycling of process gas or waste heat:
- Where process gases or waste heat are captured and reused either on - or off-site for purposes other than generating power, the captured process gas baseline GHG emissions for the site is reduced by the allocation of a GHG emissions credit on the following basis:
 - (i) When process gas or waste heat is used on-site, upstream of crude steel **production, its use reduces the site's energy-related indirect (Scope 2) GHG emissions and/or its upstream (Scope 3) GHG emissions associated with producing crude steel, and no further reduction of GHG emissions is applicable.**
 - (ii) When process gas or waste heat is used on - or off-site, downstream of crude steel production, the site is allocated a GHG emissions credit equal to the GHG emissions that would have been generated through the use of natural gas for the same purposes.
- f) Credit for the use of process gas for producing co-products (CCU):


- Where process gases are captured and used either on- or off-site to produce co-products, the captured process gas baseline GHG emissions for the site is reduced by a GHG emissions credit, calculated as the sum of:
 - (i) the net GHG emissions sequestered in the co-product based on a life cycle assessment, which are determined as follows:
 - The full life cycle product carbon footprint for the co-product is determined and verified in accordance with the requirements of a specified international standard**, including any direct (Scope 1) and indirect (Scope 2) GHG emissions associated with further processing, using a zero value for the embodied GHG emissions (i.e. upstream indirect (Scope 3) GHG emissions) for the process gas itself, and including downstream indirect (Scope 3) GHG emissions through to ultimate end-of-life disposal
 - (ii) the difference in GHG emissions between producing the co-product from process gases and producing the same (or similar) product using other production methods, which are determined as follows:
 - The GHG emissions associated with producing the co-product are determined and verified in accordance with the requirements of a specified international standard** for determining the product carbon footprint of the co-product from cradle-to-gate, using a zero value for the embodied GHG emissions for the process gas itself.
 - The global average GHG emissions for producing the same (or similar) product using other production methods has been determined and verified in accordance with the requirements of a specified international standard** for determining the product carbon footprint of a product from cradle-to-gate.
 - (iii) The captured process gas baseline GHG emissions for the site may be reduced by the GHG emissions reduction determined under (i) in addition to the GHG emissions reduction determined under (ii).
- The maximum allowable reduction of the captured process gas baseline GHG emissions from (i) and (ii) combined is equal to the direct (Scope 1) GHG emissions determined in 10.4.7.b.

**Both the product carbon footprint assessment reports for the co-product and the same (or similar) product through other production methods must be publicly available and reference the international standard used.

g) Credit for carbon capture and storage (CCS) of process gas constituents:

- Where constituents of process gases are captured for permanent storage, the captured process gas baseline GHG emissions for the site may be reduced as follows:
 - (i) The GHG emissions associated with operating carbon capture technology must be estimated and included when determining the ResponsibleSteel crude steel GHG emissions intensity performance of the site. This includes direct (Scope 1) and energy-related indirect (Scope 2) GHG emissions associated with the

	<p>energy used to compress process gas constituents, and GHG emissions associated with the capture, transport, and storage.</p> <p>(ii) The captured process gas baseline GHG emissions for the site is reduced by the amount of emissions that are claimed to be permanently captured minus any emissions associated with operating carbon capture technology.</p> <ul style="list-style-type: none"> The site must provide a public report that: <ul style="list-style-type: none"> (i) Describes the technology used for storage (ii) Quantifies the GHG emissions that are claimed to be captured and stored permanently (iii) Justifies the claim that the captured emissions will be stored permanently (iv) Includes an explicit statement confirming that the site will monitor leaks from the stored GHGs, and publicly report any detected leaks. In the event of subsequent leaks from the storage site, the associated GHG emissions (CO₂e) will be attributed to steel production at the certified site in the year when the leak occurs.
10.4.8.	<p>Downstream indirect (Scope 3b) GHG emissions</p> <p>Downstream life cycle considerations, such as product GHG emissions in use and emissions associated with end-of-life disposal of products, except as specified above, are excluded from the calculation of the ResponsibleSteel crude steel GHG emissions intensity performance of the site.</p>

<div>  <div> <p>Criterion 10.5: Site-level GHG emissions reduction targets and planning</p> <p>The site has a medium-term GHG emissions reduction target and plan that is aligned with achieving the corporate owner's corporate-level GHG emissions target(s).</p> </div> <div>Core</div> </div>	
10.5.1.	<p>There is a time-specific, medium-term target to reduce GHG emissions at the site, or defined portfolio of sites, that is at, or below, the trajectory required for the corporate owner to achieve its medium-term GHG emissions reduction target across all of its sites, as specified under 10.1.2.</p> <p>For steelmaking sites, the target is defined in terms of the GHG emissions intensity of crude steel production (metric tonnes of CO₂e/metric tonne crude steel).</p>
10.5.2.	<p>There is a time-specific, medium-term target to reduce the net GHG emissions associated with the site's use of imported electricity, where the associated GHG emissions are significant.</p>
10.5.3.	<p>There are plans in place, approved by senior management, to achieve the site's GHG emissions target(s) within the specified timelines as defined in 10.5.1 and 10.5.2. The plans include:</p>

	<ul style="list-style-type: none"> a) Time-specific milestones for each target, from present day through to achieving the medium-term target levels b) Explicit calculation of the quantity of direct GHG (CO₂e) or CO₂ emissions that the site needs to reduce in order to achieve the target(s) specified under 10.5.1 c) The international or regional standard that will be used to measure progress towards the target, and a description of the elements that are included or excluded from consideration. For example, whether upstream indirect (Scope 3) GHG emissions are considered, and how any emissions associated with the site's products, co-products, by-products or waste will be taken into account d) Details of the technology, equipment, management system changes or other options needed to achieve the targets over time e) An outline of the costs of installing any specified technology or equipment f) An explanation of how the site intends to finance the proposed technology or equipment g) Consideration of the external conditions that will need to be in place to successfully implement the plan, or the conditions that might prevent successful implementation.
10.5.4.	Progress on implementing the plan is monitored and regularly reported to the site's board or equivalent oversight body , including an explanation of relevant issues, such as changes to production in response to market conditions, closures for repairs or other significant factors. Where appropriate, the plans are updated.
10.5.5.	The medium-term targets for the site or defined portfolio of sites, as specified under 10.5.1 and 10.5.2, and progress towards achieving these targets, are reported publicly and on a regular basis.



Criterion 10.6: Requirements to market or sell products as ResponsibleSteel certified

Progress

The site may only market or sell steel products, co-products or by-products as ResponsibleSteel certified when the following requirements are met.

Note: this Criterion is only applicable to sites that produce crude steel and that wish to market or sell their steel products, co-products or by-products as ResponsibleSteel certified.

10.6.1.	<p>Measurement of GHG emissions, crude steel production and scrap use:</p> <ul style="list-style-type: none"> a) The site measures and records on a consistent basis: <ul style="list-style-type: none"> • Its annual production of crude steel (saleable tonnes) • The quantity of iron, steel scrap and other scrap metals used in its annual production of crude steel (tonnes) • The GHG emissions (tonnes CO₂e) associated with producing crude steel in accordance with the requirements specified in Criterion 10.4 of this Standard.
---------	--

	b) The site's data is collated and recorded for the site's previous year of operation.
10.6.2.	<p>The site calculates and records its ResponsibleSteel crude steel GHG emissions intensity performance in accordance with the equation:</p> <p><i>ResponsibleSteel crude steel GHG emissions intensity performance (tonne CO₂e/tonne) = total GHG emissions (tonnes CO₂e) for the previous year of operation divided by saleable tonnes of crude steel produced in the previous year of operation (tonnes)</i></p>
10.6.3.	<p>The site may only market and sell steel products, co-products or by-products produced at the site as ResponsibleSteel certified when requirements 10.6.3 and 10.6.4 have both been met:</p> <p>a) The GHG emissions intensity of the crude steel produced at the site has been determined in accordance with the requirements of Criteria 10.3 and 10.4.</p> <p>b) The GHG emissions intensity (metric tonnes of CO₂e/metric tonne crude steel) of the crude steel produced at the site is at least ResponsibleSteel Decarbonisation Progress Level 1, as specified in accordance with the formula:</p> $y \leq 2.8 - 2.3 (x)$ <p>Where:</p> <p><i>y = the determined GHG emissions intensity for crude steel production (tonne CO₂e/ tonne crude steel) at the site</i></p> <p><i>x = the proportion of scrap used as an input material for producing crude steel at the site, specified as the percentage of the total metallics input</i></p> <p>(10.6.3.b) Mandatory guidance:</p> <p>Figure 5 – Scrap Definitions</p> <p>The diagram illustrates the classification of scrap into Pre-consumer and Post-consumer categories. Pre-consumer scrap includes 'Internal' (generated before crude steel production, excluded from metallics input) and 'Home' (generated after crude steel production, during rolling and finishing). Post-consumer scrap includes 'Manufacturing' (generated in downstream processing) and 'End of life' (generated after the product's useful life, included in metallics input). The 'Internal' category is further specified as being generated before the point of crude steel production, i.e., during the BOF/EAF steelmaking process.</p> <p>Note: definitions of types of scrap are aligned to ISO 20195: 2019(E) Life cycle inventory calculation methodology for steel products; and the definition of scrap has been extended to include other metals in addition to iron and steel scrap.</p> <p>The proportion of scrap used as an input material is specified as the percentage scrap share of the total metallics input for crude steel production, according to the following equation:</p> $\text{Scrap share of metallic inputs (\%)} = \frac{\sum_{s=1}^N (f_{\text{met},s} * Q_{\text{in},s})}{\sum_{p=1}^N (f_{\text{met},p} * Q_{\text{in},p}) + \sum_{s=1}^N (f_{\text{met},s} * Q_{\text{in},s})}$

Where:

Q_{in} = quantity of material input into steelmaking (tonnes).

f_{met} = metallic fraction of the input material, which in the absence of primary data can be assumed to be 98% for scrap, 94% for DRI/HBI, and 94% for pig iron (as defined in the SBTi Steel Sector Guidance).

s = secondary metallic-containing materials, defined as home scrap, manufacturing scrap and end-of-life (EOL) scrap (i.e., excluding internal scrap), inclusive of both ferrous scrap and non-ferrous scrap.

p = primary metallic-containing materials, including pig iron, DRI, HBI, ferro-alloys, and non-ferrous metals.

Note: if scrap is the only input material, then the scrap input specified as the percentage share of the metallics input will be 100%. If the proportion of scrap were to be measured as a percentage of the saleable production of crude steel, the proportion of scrap would be greater than 100%, as some metallic material is lost during processing, and so it takes more than one tonne of metal in scrap to produce one tonne of saleable production.

- c) the ResponsibleSteel GHG emissions intensity for crude steel production (tonnes CO₂e/tonne crude steel) (y) has been verified as being below the applicable ResponsibleSteel Decarbonisation Progress Level for the proportion of scrap used at the site as input material (x), according to the values of (m) and (b) shown in the table below and the formula:

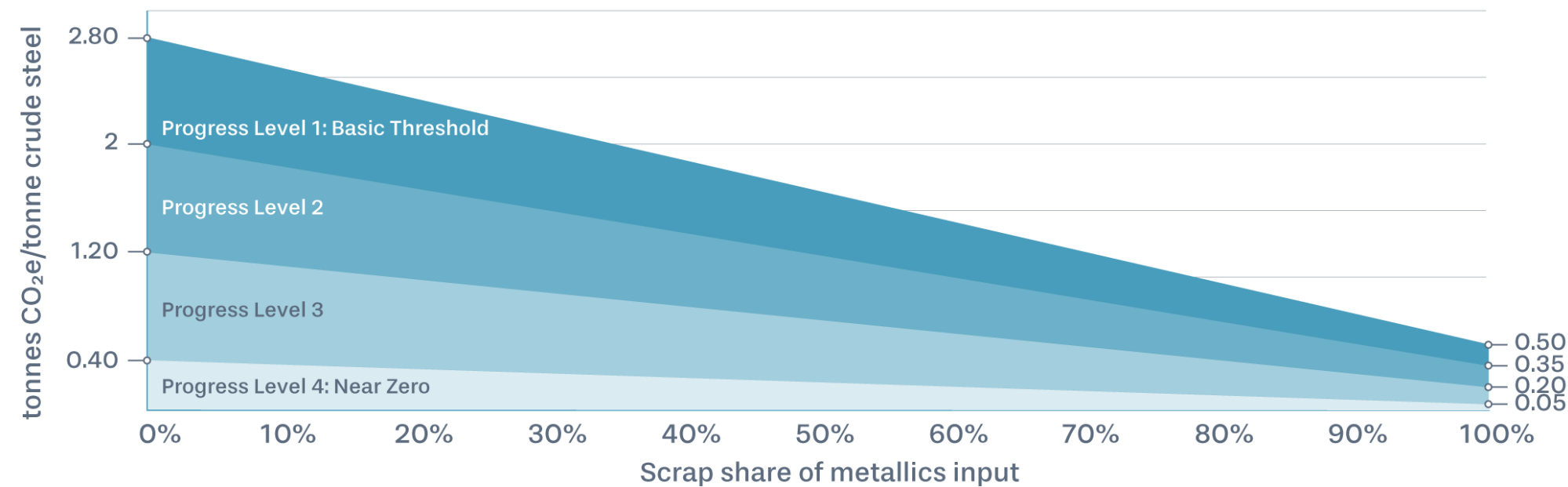
$$y \leq b - m(x)$$

Table 4 - ResponsibleSteel Decarbonisation Progress Level formulae



	b: ResponsibleSteel crude steel GHG emissions intensity performance using 0% scrap as input (tonne CO ₂ e/ tonne crude steel)	m: gradient	ResponsibleSteel crude steel GHG emissions intensity performance using 100% scrap as input (tonne CO ₂ e/ tonne crude steel)
ResponsibleSteel Decarbonisation Progress Level 1	2.80	2.30	0.50
ResponsibleSteel Decarbonisation Progress Level 2	2.00	1.65	0.35
ResponsibleSteel Decarbonisation Progress Level 3	1.20	1.00	0.20



	ResponsibleSteel Decarbonisation Progress Level 4	0.40	0.35	0.05
--	---	------	------	------

Figure 6 - ResponsibleSteel Decarbonisation Progress Levels



10.6.4.	<p>The product carbon footprint for steel products, co-products or by-products to be marketed or sold as ResponsibleSteel certified is determined:</p> <ul style="list-style-type: none"> a) In conformity with the applicable requirements of specified regional or international standards for reporting the product carbon footprint. b) Inclusive, as a minimum, of the 'cradle-to-gate' emissions associated with extracting and processing raw materials, transportation of materials to site, and product manufacturing (i.e. life cycle Modules A1 – A3). If other additional life cycle stages are included, e.g. downstream re-use or recycling (i.e. life cycle Module D), that form a 'cradle to cradle' assessment, these must be reported separately.
---------	--

<div>  Criterion 10.7: GHG emissions disclosure and reporting  </div>	
Key measures of the site's GHG emissions performance are publicly disclosed.	
10.7.1. <div>Core</div>	<p>The site has collated and submitted the following information (or in the case of a defined portfolio of sites, as specified in Criterion 10.5, information for each site within that portfolio) for publication on the ResponsibleSteel website:</p> <ul style="list-style-type: none"> a) The total GHG (CO₂e) or CO₂ emissions for each site, calculated in accordance with the requirements of Criterion 10.3 and in accordance with the specifications defined in Criterion 10.4, where applicable. b) The basis for determining the total GHG emissions for each site, including: <ul style="list-style-type: none"> (i) The international or regional standard(s) used (ii) Whether or not the determination has been prepared in conformity with the requirements specified in Criterion 10.4 (iii) Whether the determination includes the purchase of renewable energy certificates or similar mechanisms, such as power purchase agreements, virtual power purchase agreements, or green tariffs paid in relation to the sourcing of the site's electricity, and, if so, a description of the source and quantity of certificates or agreements (iv) A clear description of the scope boundary for the determination, including which emissions associated with extracting, preparing, processing and transporting input materials have been included or excluded in the determination (v) An explanation of the GHGs that the determination accounts for, or, if only CO₂ emissions have been considered, a clear statement to this effect (vi) The level of assurance provided by the verification body for the site's determination of the reported GHG emissions, in accordance with the definitions and specifications for the level of assurance as specified in ISO 14064-3:2019 Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (vii) The date of the determination (viii) An explanation of variations in figures reported using different measurement standards, if the site has used more than one standard and has reported different figures as a result. c) In the case of a portfolio of sites (as specified in 10.5.1) the basis for determining the total GHG emissions should include all the elements listed in 10.7.1.a and 10.7.1.b, plus:

	<ul style="list-style-type: none"> (i) The number of sites in the defined portfolio (ii) The names of the sites in the defined portfolio (iii) A consolidated summary of each of the elements listed in 10.7.1a to 10.7.1b, for the portfolio as a whole. d) The time-specific medium-term targets for GHG emissions for the site or the defined portfolio of sites as determined to meet the requirements of 10.5.1 and 10.5.2.
10.7.2. 	<p>Crude steel GHG emissions intensity performance</p> <ul style="list-style-type: none"> a) The site has collated the following information for each site (including for individual sites in a group, if applicable, as specified under 10.7.2.b) for submission to the ResponsibleSteel Secretariat: <ul style="list-style-type: none"> (i) Name of the site (ii) Annual production of crude steel (saleable tonnes) for the site (iii) Proportion of scrap used as an input for crude steel production at the site (as determined in 10.6.1) (iv) The site's ResponsibleSteel crude steel GHG emissions intensity performance (metric tonnes of CO₂e/metric tonne crude steel), as determined in conformity with the requirements of Criterion 10.4 and 10.6 (v) The ResponsibleSteel crude steel GHG emissions intensity Decarbonisation Progress Level (1, 2, 3 or 4) as specified in 10.6.3.c that the site has achieved (vi) The level of assurance provided by the verification body for the site's determination of its reported GHG emissions, in accordance with the definitions and specifications for level or assurance specified in ISO 14064 - 3:2019 Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (vii) Date of the determination (viii) Whether the site's crude steel GHG emissions intensity performance will be reported publicly for the individual site, or as a weighted average with other sites. b) In the case of a site that wishes to disclose its crude steel GHG emissions intensity performance as a weighted average with other sites, the site has collated the following information, in addition to the elements listed in 10.7.2a: <ul style="list-style-type: none"> (i) Number of sites to be included in the group average (ii) Names of the sites to be included in the group average (iii) Name of the strategic business unit under which the sites are managed (iv) Type of steel produced by the sites: carbon and low alloy steels (<8% alloys and other elements); stainless steels (≥10.5% chromium); high alloy steels (≥8% alloys and <10.5% chromium) (v) Evidence demonstrating that the listed sites produce the same type of steel and are managed as a strategic business unit.
10.7.3. 	<p>The product carbon footprint for any product, co-product or by-product that is marketed or sold as ResponsibleSteel certified as determined in 10.6.4 is made publicly available, together with:</p>

- | | |
|--|---|
| | <ul style="list-style-type: none"> a) Reference to the specific international or regional standard that has been used as the basis for determining the product carbon footprint for the product, co-product or by-product b) The declaration of the ResponsibleSteel crude steel GHG emissions intensity performance Decarbonisation Progress Level (1, 2, 3 or 4) for the crude steel that the product is made from, where applicable. |
|--|---|

Mandatory guidance for 10.7.1

The certification body must provide the information listed in 10.7.1.a to d to the ResponsibleSteel for review, together with the public summary of its certification report, before a certification decision is taken.

ResponsibleSteel will publish a table on its website listing all the sites that are either ResponsibleSteel certified or that are included within a portfolio of sites, as specified under Criterion 10.5. The table will be publicly available and include the following information:

- a) In the case of sites that are certified on the basis of a medium-term target for GHG emissions for a single specific site under Criterion 10.5, the table will list the site-specific information specified in 10.7.1.a, b and d for each individual site.
- b) In the case of sites that are certified on the basis of a medium-term target for GHG emissions for a portfolio of sites under Criterion 10.5, the table will list the consolidated summary information for the portfolio of sites only, as specified in 10.7.1.c and d. The table will clearly state when the publicly reported information relates to a portfolio of sites, and the individual site-specific information listed under 10.7.1.a and b will be held by ResponsibleSteel as confidential information.

The information specified in 10.7.1.a to d must be reviewed by the certification body at the time of the **site's surveillance visit**. If the information has been revised, the certification body must submit the updated information to the ResponsibleSteel to update the table of public information as needed.

(10.7.1) Each site within the portfolio must meet the requirements of Principle 10 individually in its own right, except in the following instances:

- a) Defining GHG targets across a portfolio of sites to meet the requirements of 10.5.1
- b) Public reporting of information here under 10.7.1
- c) Public reporting of the average of the ResponsibleSteel crude steel GHG emissions intensity for the site under 10.7.2

Sites that are included in the portfolio under 10.5.1, but are not themselves ResponsibleSteel certified, are not required to be assessed or certified for conformity with the other Principles of the Production Standard.

(10.7.1.b) ISO 14064-3:2019 Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements defines two possible levels of assurance: verification at a 'reasonable level of assurance', and verification at a 'limited level of assurance'. Preferably, verification should be provided at the reasonable level of assurance but must be provided at least at the limited level of assurance. Either way, under this requirement, the site must report the level of assurance provided for the verification of its GHG emissions data.

Mandatory guidance for 10.7.2

The certification body must submit the information listed in 10.7.2.a and b for each site to the ResponsibleSteel Secretariat for review, together with the public summary of its certification report, before a certification decision is taken.

If a certificate is issued, the ResponsibleSteel Secretariat will publish the information listed under 10.7.2.a for the site, unless the site has specified that it wishes to disclose its crude steel GHG emissions intensity performance as a weighted average for a group of sites. The ResponsibleSteel crude steel GHG emissions intensity Progress Level for a group of sites may be published as a weighted average of the crude steel production volume (saleable tonnes) for each member of the group where:

- All the sites within the group are managed within the same strategic business unit and produce the same type of steel: carbon and low alloy steels (<8% alloys and other elements); stainless steels (≥10.5% chromium); or high alloy steels (≥8% alloys and <10.5% chromium) and
- Each site within the group must be successfully audited against the Core Site Certification requirements and must itself have achieved the Progress Level requirements for the responsible sourcing of input materials and climate change and GHG emissions, at least to Progress Level 1, where levels are specified.

(10.7.2.b) The steelmaker must be able to demonstrate that the sites within the group are managed as a strategic business unit (see Glossary), meet customer orders through a collective production schedule and do not market their own products as separate entities.

(10.7.2.b) Sites within a group may use different steelmaking technologies, including, for example, EAF and BF/ BOF sites within one group of sites reporting an averaged GHG emissions intensity for its crude steel production.

(10.7.2.b) When a site has chosen to report its ResponsibleSteel GHG emissions intensity and Progress Level to ResponsibleSteel as an average across a group of sites it may not report or claim a different site-specific ResponsibleSteel GHG emissions intensity or Progress Level under any circumstances for other purposes. If this were to occur and be brought to the attention of ResponsibleSteel the site would be taken out of the group and the group average would be recalculated accordingly.

Publication of data by ResponsibleSteel

On issuing a certificate the ResponsibleSteel Secretariat will add information about the crude steel GHG emissions intensity performance for each site to the table of certified sites published on the ResponsibleSteel website. Where sites choose to individually report their crude steel GHG emissions intensity performance publicly, the table will list the site-specific information specified in 10.7.2.a for the site.

Where sites have requested to report their crude steel GHG emissions intensity performance as a group average, the table will list the average site-level GHG emissions intensity to crude steel, weighted according to the quantity of crude steel (saleable tonnes) produced at each site in the group, together with the weighted average ResponsibleSteel Decarbonisation Progress Level (1, 2, 3 or 4) that has been achieved for the group of sites.

The table will clearly state sites that choose to report their crude steel GHG emissions intensity performance as a group average, alongside the relevant site information as specified in 10.7.2.b.i to iii. The individual site-specific information specified in 10.7.2.a iii and iv will be held by ResponsibleSteel as confidential information.

Principle 11. Noise, Emissions, Effluents and Waste

Objective:

ResponsibleSteel certified sites prevent and reduce emissions and effluents that have adverse effects on communities or the environment, manage waste according to the waste management hierarchy and take account of the full life cycle impacts of waste management options.

Background:

Noise and emissions to air, soil and water can have highly adverse impacts on people and nature and can result in significant financial and reputational damage to companies.

The ResponsibleSteel International Production Standard takes the following approach to noise and vibration and air emissions: commit, monitor, reduce where needed, track and verify performance. A similar approach is applied to spills and leaks. The waste and production residues Criterion applies 'life cycle thinking' and the application of the Waste Management Hierarchy. The intent is to find the most appropriate waste management option, making sure that waste is avoided or recovered where reasonably possible, and disposed of in a responsible manner. The responsibility here extends to third parties that handle waste on the site's behalf. The Production Standard also requires that companies work to phase out the practice of long-term waste and production residues storage, which can pose significant risks to humans and the environment.

The Criteria in the Noise, Emissions, Effluents and Waste Principle are not applicable to a site's offices and other administrative buildings since their impact can be considered non-material.

The Noise, Emissions, Effluents and Waste Principle has links with Principles 12 (Water Stewardship) and 13 (Biodiversity), so effective management here should have a positive effect on performance in the other two Principles.

Principle 5 (Occupational Health and Safety) covers worker exposure to noise and contains a Criterion for Emergency Preparedness and Response, which is why requirements related to worker exposure to noise and emergencies are not covered here.



Criterion 11.1: Noise and vibration


Core

The site implements plans to prevent and reduce adverse impacts from noise and vibration on communities or the environment.

11.1.1.

The site is committed to prevent and continually reduce noise and vibration.

11.1.2.	The site has an ongoing monitoring programme that covers the facilities and plants it owns or fully or partly controls, and that establishes baseline values so that changes to noise and vibration levels can be identified.
11.1.3.	The site: <ul style="list-style-type: none"> a) Reviews its operational and maintenance processes and identifies potential opportunities to prevent or reduce noise and vibration b) Analyses the feasibility of the identified opportunities and provides a clear rationale for why prevention and reduction opportunities are taken or not.
11.1.4.	Based on its analyses in 11.1.3.b, the site defines target levels and time-bound action plans to prevent and reduce noise and vibration.
11.1.5.	The site tracks its performance against the noise and vibration action plans. Where progress in achieving the targeted noise and vibration levels is lacking, the site revises and amends its reduction plans.
11.1.6.	A competent party regularly verifies the effectiveness of the site's noise and vibration reduction plans. Where the site has been the subject of controversy in relation to noise and vibration, it implements a mitigation plan. The effectiveness of the plan is verified by a competent third party.

 Criterion 11.2: Emissions to air Core	
The site implements plans to prevent and reduce emissions to air that have adverse impacts on communities or the environment	
11.2.1.	The site is committed to prevent and continually reduce adverse emissions to air.
11.2.2.	For emissions to air with adverse impacts on communities or the environment, the site has an ongoing programme or is taking part in a regional programme that monitors its point source emissions from the facilities and plants that the site owns or fully or partly controls, and that establishes baseline values so that changes to air emission levels can be identified.
11.2.3.	The site: <ul style="list-style-type: none"> a) Reviews its operational and maintenance processes and identifies potential opportunities to prevent or reduce point-source, diffuse and fugitive adverse emissions to air b) Analyses the feasibility of the identified opportunities and provides a clear rationale for why prevention and reduction opportunities are taken or not.
11.2.4.	Based on its analyses in 11.2.3.b, the site: <ul style="list-style-type: none"> a) Defines target levels and time-bound plans to prevent and reduce point-source adverse emissions to air b) Implements measures to prevent and reduce diffuse and fugitive adverse emissions to air.
11.2.5.	The site tracks its performance against the air emissions reduction plans. Where progress in achieving the targeted air emissions levels is lacking, the site revises and amends its reduction plans.

11.2.6.	A competent party regularly verifies the effectiveness of the site's air emissions reduction plans. Where the site has been the subject of controversy in relation to air emissions, it implements a mitigation plan. The effectiveness of the plan is verified by a competent third party.
---------	---

 Criterion 11.3: Spills and leaks Core	
The site works to effectively prevent, detect, mitigate and remedy spills and leaks that cause harm to communities or the environment.	
11.3.1.	<p>The site implements a preventive maintenance programme aimed at preventing spills and leaks. The programme includes:</p> <ul style="list-style-type: none"> a) Identification of structures, equipment and systems that apply to the programme b) Regular inspections of identified structures, equipment and systems c) Regular testing of such structures, equipment and systems d) Corrective and preventive action plans, where needed, to ensure structures, equipment and systems are in proper working order e) Records of preventive maintenance work.
11.3.2.	<p>The site has documented procedures for managing the impacts from spills and leaks. The procedures define how the site will:</p> <ul style="list-style-type: none"> a) Analyse and assess the impact from spills and leaks b) Mitigate and remediate the impact of spills and leaks c) Quantify mitigation and remediation progress when a spill or leak has occurred.
11.3.3.	A competent party regularly verifies the effectiveness of the site's prevention programme and management procedures for spills and leaks. Where the site has been the subject of controversy in relation to spills and leakage, it implements a mitigation plan. The effectiveness of the plan is also verified by a competent third party.

 Criterion 11.4: Waste, by-product and production residue management Core	
The site applies the waste management hierarchy to reduce the impact of its waste and residues and takes account of full life cycle impacts to find the waste management option with the lowest environmental impact.	
11.4.1.	<p>The site implements a waste and production residues management plan that applies the waste management hierarchy, informed by Life Cycle Thinking, to reduce adverse impacts from waste, by-products and production residues on humans and the environment. As part of its waste management strategy, the site:</p> <ul style="list-style-type: none"> a) Characterises accruing waste and production residues to identify their potential for waste avoidance and recovery, as well as the disposal routes that pose the least risk and impact on humans and the environment for each type of accruing waste and production residue

	<p>b) Outlines measures for avoiding and mitigating risks and impacts from generation, storage, handling, treatment, transportation and disposal of the different types of accruing waste and production residues</p> <p>c) Defines targets and time-bound plans to reduce the amount of waste that is sent to landfill, on- or off-site</p> <p>d) Applies a policy that prohibits the discharge of production residues to riverine, submarine and lake environments. Only where riverine, submarine and lake discharge is socially and environmentally the best option, does the policy grant an exception. These exceptional circumstances are documented with reasons for the exception clearly explained.</p>
11.4.2.	The site addresses risks and impacts on humans and the environment associated with the off-site movement and transportation of its accrued waste and production residues. Where the site contracts third parties to carry out these activities on its behalf, the site takes action to ensure that it addresses the risks and impacts on humans and the environment.
11.4.3.	When third parties conduct hazardous waste and production residues storage, transportation and disposal on a site's behalf, the site requires chain of custody and ownership documentation to the final destination.
11.4.4.	<p>Any on- or off-site storage areas that the site uses:</p> <p>a) Must effectively prevent the release of production residues and leachates to the environment, considering potentially catastrophic events such as floods and earthquakes</p> <p>b) Are routinely checked and controlled by competent parties to ensure their integrity.</p>
11.4.5.	Where the site practices waste and production residues storage, it has established a timeline and a roadmap to phase this out in the mid-term.
11.4.6.	The site tracks its performance on managing waste and production residues and has evidence that it is implementing its strategy effectively.
11.4.7.	Effective implementation of the site's waste and residues management plan is regularly verified by a competent party. Where the site has been the subject of controversy in relation to waste and production residues, it implements a mitigation plan. The effectiveness of the plan is then verified by a competent third party.

Principle 12. Water Stewardship

Objective:

ResponsibleSteel certified sites demonstrate good water stewardship.

Background:

Global pressures on fresh water are rising rapidly. Due to a fast-growing global population and steady economic growth, the demand for fresh water increasingly exceeds the amount that is



Jump to: [P1](#) - [P2](#) - [P3](#) - [P4](#) - [P5](#) - [P6](#) - [P7](#) - [P8](#) - [P9](#) - [P10](#) - [P11](#) - [P12](#) - [P13](#) Annexes: [1](#) - [2](#) - [3](#) - [4](#) - [5](#)



102

available. Climate change will exacerbate the situation, with almost half of the world's population expected to be living in areas of high water stress by 2030. In addition, physical, regulatory and reputational risk mean that there is a clear business case for managing water responsibly and sustainably. Water stewardship means that water users take responsibility for their own impacts on the shared resource and work with others to manage it sustainably. This is the approach that the ResponsibleSteel International Production Standard takes to water. The requirements are intended to align with the standard of the Alliance for Water Stewardship (AWS) and focus on understanding one's own water use and impact, catchment context and shared concerns in relation to water availability and quality – now and in the future. They go on to require that sites engage in meaningful individual and collective action to ensure that the water resources they and others rely on are managed responsibly and sustainably.

The Water Stewardship requirements are not applicable to a site's offices and other administrative buildings since their impact can be considered non-material.

Note that water-related habitats, aquatic species and areas of cultural or religious importance are covered under Principles 9 (Local Communities) and 13 (Biodiversity).

	Criterion 12.1: Water-related context	
	The site understands the current and future water-related needs and dynamics in its area of influence.	
12.1.1.	The site's water-related area of influence is defined, taking account of the site's operational boundaries, the sources it draws water from, the locations it returns discharges to, and the catchment(s) it affects and relies on. The site regularly reviews its area of influence.	
12.1.2.	The site contributes to integrated water resource management and policies by engaging in water governance fora. Where these do not exist, and where water issues are relevant in the site's area of influence, the site initiates such a forum or engages in other similar platforms.	
12.1.3.	<p>The site works with relevant stakeholders in its area of influence to identify and understand current and potential future uses of water and shared water challenges within its catchment area. The analysis is updated on a regular basis and considers:</p> <ul style="list-style-type: none"> a) Seasonal and temporal variability in quantity and quality of surface and subsurface waters b) Climate change projections c) Anticipated population growth d) Natural and built water-related infrastructure e) The presence and location of scarce or stressed water sources. 	

	Criterion 12.2: Water balance and emissions	
	The site measures the flow of water in and out of its site and the quality of its water withdrawals and discharges.	

12.2.1.	The site records, and updates as needed, the locations of the water sources and ultimate water sources that it draws water from and the locations of the water bodies and ultimate water bodies to which it returns its discharges.
12.2.2.	The site maintains a water balance for its site and calculates its efficiency of water use.
12.2.3.	<p>The site monitors and keeps records of water emissions. Sampling of water:</p> <ul style="list-style-type: none"> a) Is sufficiently frequent to detect and allow management to respond effectively to significant changes b) Is timed so that it takes account of seasonal fluctuations, storms and extreme weather events that may cause changes in water characteristics c) Always occurs at the same specified points upstream of a site's water sources and downstream of a wastewater discharge point d) Considers relevant physical, chemical and biological aspects of water quality e) Establishes thresholds aimed at providing early warning of negative changes in water characteristics.
12.2.4.	In the absence of applicable regulatory standards, the site adopts, and makes publicly available, specific water quality objectives that have been established using credible methodologies and that are in line with prevailing water quality standards.



Criterion 12.3: Water-related adverse impact

Core

The site evaluates its water-related adverse impacts on the local environment and communities.

12.3.1.	<p>The site has identified and assessed its current and potential future water-related environmental and social adverse impacts. The assessment:</p> <ul style="list-style-type: none"> a) Considers the quantity of water use and quality of water discharges b) Considers extreme weather events, such as flooding or drought c) Takes account of stakeholder views d) Is updated regularly, and when significant changes occur in the site's operations.
12.3.2.	The site encourages other commercial water users in its area of influence to conduct their own environmental and social adverse impact assessments.
12.3.3.	The site uses its best efforts to combine the findings of its own and other commercial water users' environmental and social adverse impact assessments to understand the cumulative impact in its area of influence.



Criterion 12.4: Managing water issues

Core

The site addresses water-related challenges and adverse impacts in its area of influence.

12.4.1.	The site integrates water considerations in its business planning.
12.4.2.	The site engages stakeholders in its area of influence in developing and maintaining a water stewardship plan. The plan:

	<ul style="list-style-type: none"> a) Sets time-bound targets in relation to water use efficiency and quality that reflect good practice for the site's region and type of operation or, where these do not exist, reflect prevailing standards or guidelines b) Sets time-bound targets that minimise any adverse impacts on communities or the environment resulting from the discharges of water from the site c) Outlines how the site will contribute to addressing shared water challenges in its catchment area d) Outlines site measures to relieve any scarce and stressed water sources e) Is updated on a regular basis and made available to the public.
12.4.3.	There are documented procedures or action plans to implement the water stewardship plan.
12.4.3.	The site tracks and documents its performance against the water stewardship plan. Where progress is lacking, the site reviews and adjusts the plan.

Principle 13. Biodiversity

Objective:

ResponsibleSteel certified sites protect and conserve biodiversity.


Background:

Biodiversity – biological diversity – means the diversity of life in all its forms. The importance of biological diversity to human society is hard to overstate. An estimated 40% of the global economy is based on biological products and processes. However, a recent landmark report by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) concluded that we are facing a global biodiversity crisis caused by human activity. Biodiversity losses are running at unprecedented levels, with up to one million species facing extinction over the coming years and decades. Whole ecosystems are in danger and with them the ecosystem services (e.g. water, air, food) that humans depend on.

Protecting biodiversity is an important and shared responsibility. The ResponsibleSteel International Production Standard requires sites to take stock of the risk they pose and the impact they have on biodiversity and to implement a plan to manage these risks and impacts. The Production Standard also expects sites to respect areas that are protected and conserved under various governance models and to safeguard areas that have been identified as key for biodiversity. The Production Standard does not specify explicit requirements to identify and **maintain the benefits of ecosystem services, on the grounds that the site's impact on these** services will be addressed through the protection of protected areas and habitats, as well as through the application of Principle 12 (Water Stewardship).

Principles 11 (Noise, Emissions, Effluents and Waste) and 12 are closely linked with this Principle, as a site's performance in these Principles will indirectly help it achieve the

requirements of the Biodiversity Principle.

	<div> Criterion 13.1: Biodiversity commitment and management Core </div> <p>The site is committed to protecting biodiversity and applies the mitigation hierarchy to manage its biodiversity risks and adverse impacts.</p>
13.1.1.	<p>The site has made a public commitment to respect protected and conserved areas and to manage adverse impacts on biodiversity in its area of influence effectively and in line with the mitigation hierarchy. That commitment includes the points listed in 13.1.2 to 13.1.6.</p>
13.1.2.	<p>The site does not initiate activities, or plan associated facilities, in or immediately adjacent to the following areas:</p> <ul style="list-style-type: none"> a) World Heritage sites b) Protected areas of the IUCN protected area management categories I–VI and conservation areas protected under national or local law c) Indigenous and community-conserved areas (ICCAs), unless such activities are endorsed with the free, prior and informed consent of the affected peoples and communities d) Ramsar sites e) Key Biodiversity Areas (KBAs).
13.1.3.	<p>The site does not significantly convert or degrade natural habitats, unless all the following are demonstrated:</p> <ul style="list-style-type: none"> a) No other viable alternatives for development on modified habitat exist within the region b) Consultation has established stakeholder views, including affected communities and indigenous peoples, on the extent of conversion and degradation c) Any conversion or degradation is mitigated according to the mitigation hierarchy and designed to achieve no net loss.
13.1.4.	<p>The site does not implement any activities or plan infrastructure in critical habitats, unless all the following are demonstrated:</p> <ul style="list-style-type: none"> a) No other viable alternatives to develop on modified, or natural habitat that is not deemed critical, exist within the region b) The activities and infrastructure do not lead to adverse impacts on those biodiversity values that constitute the critical habitat, and on the ecological processes supporting those biodiversity values c) The activities do not lead to a net reduction in the global, national or regional population of any endangered or critically endangered species.
13.1.5.	<p>In the event of downgrading, downsizing or degazettement of World Heritage Sites, Ramsar sites or protected areas of the IUCN categories I–VI, the site continues its no-go policy.</p>
13.1.6.	<p>Where a World Heritage site, Ramsar site or officially protected area is established in, around or adjacent to an existing site's area of activity, the site ensures that that activity does not adversely impact the values for which the World Heritage site, Ramsar site or protected area was designated.</p>

13.1.7.	<p>The site has identified and assessed the biodiversity risks and adverse impacts in its area of influence that result from its activities. The assessment has taken account of risks to, and adverse impacts, on the following:</p> <ul style="list-style-type: none"> a) Protected and community-conserved areas and Ramsar sites b) Species on the IUCN Red List of Threatened Species, categorised as vulnerable, endangered or critically endangered c) Key Biodiversity Areas d) Natural and critical habitat, as well as modified habitat with significant biodiversity value.
13.1.8.	The site implements a management plan to address biodiversity risks and impacts in its area of influence that result from its activities.
13.1.9.	<p>The management plan:</p> <ul style="list-style-type: none"> a) Follows the mitigation hierarchy b) Aims to achieve no net loss for natural habitat and a net gain for critical habitat if residual impacts are expected c) Develops offsets in line with current best practice if residual impacts are expected d) Responds to changing conditions and the results of monitoring, to take account of the long-term complexities in predicting biodiversity impacts.
13.1.10.	A competent party verifies that the site's biodiversity risks and impacts assessment and the management plan are adequate and comprehensive.
13.1.11.	Where the site has been the subject of controversy, its activities have been verified by a competent party as having no adverse impact on World Heritage sites, protected and conserved areas, indigenous and community-conserved areas, Ramsar sites or Key Biodiversity Areas (KBA).

Annex 1 (mandatory): The steel sector's core raw materials

List of the most important raw materials used for steelmaking, developed for worldsteel by The Dragonfly Initiative complemented by important raw materials used for stainless steel production.

- Aluminium (metallic)
- Charcoal
- Chromium metal
- Coal
- Metallurgical coal
- Coke
- Cobalt
- Calcium (cored wire)
- Dolime
- Dolomite
- Ferro-aluminium
- Ferro-boron
- Ferro-chromium
- Ferro-manganese
- Ferro-molybdenum
- Ferro-nickel
- Ferro-niobium
- Ferro-phosphorous
- Ferro-silicon
- Ferro-titanium
- Ferro-tungsten
- Ferro-vanadium
- Graphite
- Iron ore
- Iron (pig)
- Lime
- Limestone
- Manganese metal
- Magnesia
- Molybdenum metal
- Molybdic oxide
- Nickel
- Nickel niobium
- Scrap
- Silico manganese
- Tin
- Zinc

Annex 2 (mandatory for Principle 3): Input materials covered, not covered and excluded

1. Input materials covered:

The list below shows the mined and quarried input materials that are covered by the responsible sourcing requirements. The list is based on the report 'Responsible Sourcing and Due Diligence for the Worldsteel Membership', which identifies the most material inputs to the steel industry overall. We added 'lead' and 'oils' to align the list below with the list of input materials covered by the GHG requirements. We also added 'agricultural residues', 'waste materials' (other than scrap) and "wood from plantations" as steelmakers are searching for alternatives to coal-based input materials to support decarbonisation. The list of input materials covered here is thought to account for 80-90% of all the input materials used in iron and steel production, processing and finishing.

The responsible sourcing requirements differentiate between raw and processed input material:

- Raw input material: input material that has not undergone chemical transformation. For example, iron ore, coal, limestone. Raw input material has not been heated or smelted, but might have been crushed, grinded or pressed.
- Processed input material: input material that has been chemically transformed. For example, pig iron, ferro-manganese or ferro-chromium.

Note: whether an input material counts as raw or processed may depend on the technology used. For example, if pellets are produced by cooking iron ore fines, they will be regarded as 'processed' because the cooking results in chemical transformation. Where the pellets are produced using binders, there is no chemical transformation and the pellets would be considered raw.

The input materials below are usually listed in their raw, unprocessed form. If the steel site that aims to achieve Steel Certification uses these materials in raw or processed form, the responsible sourcing requirements must be applied to them. For example, the following are all covered by the responsible sourcing requirements:

- Raw iron ore and its processed forms, such as pellets, sinter, pig iron, DRI and HBI
- Likewise, any form of coal, such as anthracite, coking coal or pulverised coal
- Nickel metal, nickel oxide sinter, nickel pig iron are covered as they are based on nickel
- Wood from plantations and its product 'charcoal'.

If iron, coal or any other input material covered by the responsible sourcing requirements is used in processed form at the site that applies for Steel Certification, the respective

requirement applies to the main input materials used by the supplier of the processed material. For example:

- Where a site uses pig iron, the main input materials used by the supplier will be iron ore and coal, charcoal, hydrogen or natural gas, plus limestone. Note that hydrogen and natural gas are currently not covered by the responsible sourcing requirements, so none of the requirements apply to hydrogen and natural gas. They do apply to the other key input materials though.
- For nickel pig iron, the main input materials are nickel ore, coal and a mixture of sand and gravel. While sand and gravel are not covered by the requirements, nickel and coal are covered and the requirements therefore apply.
- Where a site is a steel processing site that receives, for example, slabs, billets or blooms as input materials, the crude steel production sites that it sources from must have Steel Certification for the steel processing site to demonstrate achievement of the responsible sourcing requirements.
- Producers of pre-processed input materials, such as DRI, HBI or pig iron, cannot themselves achieve Steel Certification. However, the responsible sourcing requirements apply to them.

Mined and quarried input materials:

- | | |
|-------------|--------------------------------|
| • Bauxite | • Molybdenum |
| • Boron | • Nickel |
| • Calcium | • Niobium |
| • Chromium | • Oil (heavy as well as light) |
| • Cobalt | • Phosphorous |
| • Dolomite | • Silicon |
| • Graphite | • Tin |
| • Iron | • Titanium |
| • Lead | • Tungsten |
| • Limestone | • Vanadium |
| • Magnesium | • Zinc |
| • Manganese | |

Scrap:

- **Pre-consumer:** scrap that occurs during the production or manufacture of steel or steel products (i.e. internal, home and manufacturing scrap).
- **Post-consumer:** scrap that occurs when steel products reach the end of their useful life (i.e. end-of-life scrap).

Agricultural residues: for example, sugar cane bagasse, wheat straw, corn stover, barley straw, coconut shells.

Waste materials: for example, reclaimed wood, post-consumer plastics, tyres.

Jump to: [P1](#) - [P2](#) - [P3](#) - [P4](#) - [P5](#) - [P6](#) - [P7](#) - [P8](#) - [P9](#) - [P10](#) - [P11](#) - [P12](#) - [P13](#) Annexes: [1](#) - [2](#) - [3](#) - [4](#) - [5](#)

Wood from plantations: only wood and wood-derived products from plantations may be used by steel sites that wish to market or sell their products as ResponsibleSteel certified. Wood from forests is excluded (see also below). For Progress Level 1, 90% of wood-based input material must be from FSC-certified plantations that are covered by an FSC chain of custody certificate. Only sawdust generated as a by-product, and wood pellets made from such sawdust, may be a mix of plantation- and forest-derived sawdust as it is not feasible to keep sawdust from different sources separate.

2. Input materials not covered:

The input materials listed below are not covered by the responsible sourcing requirements. This means that they can be used at steel sites, but there are currently no ESG expectations attached to them:

- Home scrap: scrap from a downstream steel production process within the steelworks (e.g. rolling, coating) that is returned to steelmaking processes (e.g. basic oxygen furnace (BOF) or electric arc furnace (EAF))
- Internal scrap: scrap from a crude steelmaking unit that is then recycled within the same unit process (e.g. BOF or EAF – adapted from ISO 20915:2018(E) Life cycle inventory calculation methodology for steel products).
- Hydrogen
- Natural gas
- Paints

Input materials that are not listed as 'covered' or 'excluded' are considered to fall into the 'not covered' category.

3. Input materials that are excluded:

The following input materials are excluded. This means that they may not be used by steel sites seeking Steel Certification:

- Energy crops: for example, maize, miscanthus (elephant grass) or short rotation coppice, like poplar and willow
- Wood from forests
- Controlled wood: meaning wood and wood-based products labelled as 'FSC MIX'.

Stakeholder views on whether these materials should be covered by the responsible sourcing requirements differ widely. Some fear that ResponsibleSteel could drive demand for energy crops if they were covered by the responsible sourcing requirements. Given that energy crops rely on arable land that is limited in quantity, this could prompt complex issues like land use change and food insecurity. Some stakeholders also argue that input materials like forest wood, are better used in longer-lasting, higher-value products (e.g. construction or furniture) or as a bioenergy in industrial production processes. Others consider that covering these sources with recognised ESG certification programmes ensures responsible sourcing, and indeed that

ResponsibleSteel should encourage the expansion of such certification to support the sustainable management of forests and short rotation woody biomass.

Climate scenarios that are aligned with the Paris Agreement typically indicate that biological input materials will play a rather marginal role in the steel industry's decarbonisation, due to limited availability of sustainably sourced materials of biological origin. In the International Energy Agency's Sustainable Development Scenario, for example, the share of bioenergy in the sector's total energy input mix increases from less than 1% to 5% in 2050. The modelling developed for the [Mission Possible Partnership's Net Zero Steel Sector Transition Strategy](#) indicates in all scenarios that the steel sector use of bioresources would peak in 2030 at less than 2% of the estimated truly sustainable bioresources available, and would decline after that. By excluding the two categories listed, that are subject to particular stakeholder concern, but including agricultural residues and wood from FSC-certified plantations, the ResponsibleSteel International Production Standard avoids the risk of contributing to the issues outlined above while allowing for sufficient opportunity for steelmakers to responsibly source biological inputs.

The ResponsibleSteel International Production Standard will be reviewed at least every five years and the list of input materials that are covered, not covered and excluded may change as a result.

Annex 3 (mandatory for Principle 3): Principles for the Responsible Management of Scrap

Establishing fully responsible scrap supply chains globally can only be achieved through a common understanding of responsibility and collaboration. The Principles for the Responsible Management of Scrap are a set of good practices, developed with input from the steel recycling industry, to help standardise expectations on management and improve ESG performance in the steel recycling industry.

The Principles can be applied as a standalone tool, integrated into or appended to supplier codes of conduct, reflected in relevant policies or procedures, used as the basis for ESG risk assessment by steel companies and their supply chains, or in any other way deemed appropriate.

The Principles are to:

1. Collaborate to help meet the ResponsibleSteel mission, while keeping markets and trade flows free, avoiding protective and trade restrictive measures.
2. Recognise and fairly reflect responsible supply practices in commercial decision-making.
3. Maximise the recycled content in steel production as a common goal of the steel and recycling industry to reduce the impacts of climate change and other negative external effects.
4. Operate legal and ethical trading practices.
5. Procure from and supply to responsible customers/counterparties (know your customer/counterparty).
6. Improve knowledge of ESG risks and the potential for positive impact through effective supply chain mapping and assessment.
7. Maximise high-quality segregation during manual and mechanical processing to avoid contaminants and pollution and to maximise the value obtained from the scrap. In particular, ensure that scrap with high chromium or nickel content is adequately sorted for use as an input material in stainless steel production.
8. Monitor scrap consignments for radioactivity and document test certificates and conformity statements.
9. Ensure the effective management and treatment of environmental pollutants to avoid untreated and hazardous materials and emissions escaping into air, water and onto land.
10. Ensure the sound and legal disposal of reprocessing waste streams, encouraging circular economy principles. Do not engage in practices such as open burning and open dumping where steel is sourced from mixed materials, such as from old tyres.

11. Develop and maintain good housekeeping practices during collection, including handling, transportation, logistics and at facilities.
12. Enable safe manual and mechanical dismantling, handling and processing practices, including the provision of appropriate personal protective equipment (PPE).
13. Provide support and compensation for work-related death, injuries or illness to workers and their dependants.
14. Respect internationally recognised human rights.
15. Not use or tolerate child, forced and compulsory labour.
16. Not engage in discrimination of any kind, with a particular focus on vulnerable and marginalised groups.
17. Ensure fair and timely payment of workers to at least the legal minimum wage or a recognised equivalent, when not defined in law.
18. Ensure fair treatment of workers that meets local legislation or ILO standards, at a minimum including working hours, breaks, defined and communicated contractual terms and conditions, collective bargaining opportunities and fair disciplinary practices.
19. Communicate these scrap Principles further up the scrap supply chain.
20. Support ESG capacity further up the scrap supply chain, through training, raising awareness, and involvement in initiatives to improve ESG performance.
21. Improve ESG achievement tracking and chain of custody practices so that confidence in responsible sourcing can be gained without compromising commercial arrangements.

Good housekeeping practices: include adequate storage space and practices, dedicated and covered (where appropriate), safe spaces for hazardous materials, proper labelling and controls on materials handled, keeping working areas clear of debris, documentation of material flows through premises, maintaining vehicles and equipment and awareness raising and training.

Annex 4 (mandatory for 10.3.3): Materials for which the upstream GHG emissions must be considered under requirement 10.3.3.

Gas fuel <ul style="list-style-type: none">• Natural gas• Coke oven gas• Blast furnace gas• Basic oxygen furnace (BOF) gas• Town gas	Auxiliary material <ul style="list-style-type: none">• Limestone• Burnt lime• Crude dolomite• Burnt dolomite• Nitrogen• Argon• Oxygen
Liquid fuel <ul style="list-style-type: none">• Heavy oil• Light oil• Kerosene• Liquefied petroleum gas (LPG)	Ferrous-containing material <ul style="list-style-type: none">• Pellets• Sinter• Hot metal• Cold iron• Gas-based DRI• Coal-based DRI• Hot briquetted iron (HBI)
Solid fuel <ul style="list-style-type: none">• Coking coal• Blast furnace (BF) injection coal• EAF coal• Sinter/BOF coal• SR/direct reduced iron (DRI) coal• Steam coal• Coke• Charcoal	Alloys <ul style="list-style-type: none">• Ferro-nickel• Ferro-chromium• Ferro-molybdenum

Modified list of materials based on ISO 14404-1:2013 Table 2, and ISO 14404-2:2013 Table 2

Annex 5 (mandatory for 10.4): ResponsibleSteel default embodied GHG values

Table A1. ResponsibleSteel default embodied GHG values. The current table of emission factor as published by ResponsibleSteel at www.responsiblesteel.org must be used to determine the crude steel GHG emissions intensity performance of the site.

	Unit	Original data source	Basis for default (see notes)	Default embodied GHG value (tCO ₂ e/unit)
Ferrous-containing materials				
Cold iron, charcoal based	t	CRU methodology for ResponsibleSteel	a	2.350
Cold iron, generic	t	CRU methodology for ResponsibleSteel	a	2.623
Direct reduced iron (DRI), coal-based	t	CRU methodology for ResponsibleSteel	a	2.623
DRI, gas-based	t	CRU methodology for ResponsibleSteel	a	1.219
Granulated pig iron (GPI)	t	CRU methodology for ResponsibleSteel	a	2.623
Hot briquetted iron (HBI)	t	CRU methodology for ResponsibleSteel	a	1.219
Iron ore	t	2024.1 GaBi database from Sphera*	a	0.025
Pellets	t	CRU methodology for ResponsibleSteel	a	0.235
Scrap	t	NA	b	0.000
Sinter	t	CRU methodology for ResponsibleSteel	a	0.365
Steel slab, basic oxygen furnace (BOF)	t	ResponsibleSteel Progress Level 1 for steel production with 15% scrap input	a	2.460

Steel slab, electric arc furnace (EAF)	t	ResponsibleSteel Progress Level 1 for steel production with 95% scrap input	a	0.620
Alloys and metallic additives				
A replacement value equivalent to the ResponsibleSteel default embodied GHG value for 'Cold iron, generic' shall be used to determine the upstream indirect (Scope 3) GHG emissions for all non-ferrous metal and ferro-alloy additives.				
Non-ferrous metal and ferro-alloy additives replacement value	t	ResponsibleSteel embodied GHG value for 'Cold iron, generic' (without conservative factor of 1.2 applied)	NA	2.186
PROVISIONAL VALUES FOR INFORMATION ONLY:				
Aluminium	t	2024.1 GaBi database from Sphera	a	20.063
Copper	t	2024.1 GaBi database from Sphera	a	4.647
Ferro-chromium	t	2024.1 GaBi database from Sphera	a	8.170
Ferro-manganese	t	2024.1 GaBi database from Sphera	a	5.640
Ferro-molybdenum	t	IMO A 2022	a	9.648
Ferro-nickel	t	ISSF LCI 2022	a	13.519
Ferro-silicon	t	2024.1 GaBi database from Sphera	a	13.098
Ferro-vanadium	t	2024.1 GaBi database from Sphera	a	90.193
Lead	t	2024.1 GaBi database from Sphera	a	1.946
Magnesium	t	2024.1 GaBi database from Sphera	a	39.850
Manganese	t	2024.1 GaBi database from Sphera	a	15.995
Molybdenum oxide	t	IMO A 2022	a	6.000
Nickel metal	t	2024.1 GaBi database from Sphera	a	13.162
Nickel oxides	t	2024.1 GaBi database from Sphera	a	24.335
Nickel pig iron	t	worldsteel CO ₂ methodology	a	6.240
Silico manganese	t	2024.1 GaBi database from Sphera	a	7.084
Silicon metal	t	2024.1 GaBi database from Sphera	a	11.698
Tin metal	t	2024.1 GaBi database from Sphera	a	6.929
Auxiliary materials				
Argon	kNm ³	2024.1 GaBi database from Sphera	a	0.244
Burnt dolomite	t	2024.1 GaBi database from Sphera	a	1.478
Burnt lime	t	2024.1 GaBi database from Sphera	a	1.478

Crude dolomite	dry t	2024.1 GaBi database from Sphera	a	0.005
Limestone	dry t	2024.1 GaBi database from Sphera	a	0.005
Nitrogen	kNm ³	worldsteel CO ₂ methodology	a	0.124
Oxygen	kNm ³	worldsteel CO ₂ methodology	a	0.426
Graphite electrodes	t	worldsteel CO ₂ methodology	a	0.780
Solid fuels				
Materials of biological origin (e.g. charcoal, bio-coal, bio-coke)	dry t	NA	b	0.000
Coal	dry t	2024.1 GaBi database from Sphera	c	0.443
Coke	dry t	CRU methodology for ResponsibleSteel	c	1.022
Post-consumer materials (e.g. used plastic, tyres, reclaimed wood)	t	NA	b	0.000
Liquid fuels				
Heavy oil	m ³	worldsteel CO ₂ methodology	a	0.331
Kerosene	m ³	worldsteel CO ₂ methodology	a	0.296
Light oil	m ³	worldsteel CO ₂ methodology	a	0.296
Liquefied petroleum gas (LPG)	t	worldsteel CO ₂ methodology	a	0.638
Gas fuels				
Hydrogen	kg	2024.1 GaBi database from Sphera	a	13.916
Natural gas	kNm ³	worldsteel CO ₂ methodology	c	1.064
Electricity				
Grid electricity	MWh	IEA (global average)	-	0.458
Other input materials for steelmaking	The embodied GHG emissions of other input materials not listed must be included in the site's assessment of its upstream indirect (Scope 3) GHG emissions if its evaluation indicates that the material is likely to contribute to more than 5% of its total upstream (Scope 3) GHG emissions associated with steelmaking. Where this is the case, the materials must be assigned a default embodied GHG value using primary data or data from a publicly accessible and referenced source.			

*original data sourced from Sphera's 2024.1 GaBi database are used by worldsteel in their LCI data collection.

Notes for basis for default:

a: source data multiplied by default factor of 1.2

b: ResponsibleSteel assignation

c: source data multiplied by default factor of 1.6 to reflect known high variability

Guidance

(Table A1) ResponsibleSteel has applied a 'burden of the doubt' approach rather than a 'benefit of the doubt' approach to the use of default data when primary data is not available, in line with the recommendations of ISO 21930:2017: Sustainability in buildings and civil engineering works -- Core rules for environmental product declarations of construction products and services, which state that conservative assumptions should be applied to fill data gaps.

The default embodied GHG values specified by ResponsibleSteel are, therefore, conservative. This may constitute a top decile figure, the top end of the error bars for a range of Life Cycle Assessment (LCA) data within a database, or a default additional percentage (e.g. +20%, +60%) on top of reported average LCA data for a category of input material. Suppliers with worse than average performance should, therefore, not generally benefit from claiming an average level of GHG emissions for the material they supply. Suppliers that have invested resources in measuring their actual GHG emissions should expect to benefit from this in the majority of situations.

Materials of biological origin

ResponsibleSteel requirements for the responsible sourcing of input materials, including materials of biological origin, are specified under ResponsibleSteel Principle 3 (Responsible Sourcing of Input Materials).

Materials of biological origin that do not meet the requirements of Principle 3 are excluded from further consideration. Materials that meet the requirements of Principle 3 are assigned a default embodied GHG value of zero.

Post-consumer materials

ResponsibleSteel requirements for the responsible sourcing of input materials, including post-consumer materials, are specified under ResponsibleSteel Principle 3 (Responsible Sourcing of Input Materials).

Post-consumer materials that do not meet the requirements of Principle 3 are excluded from further consideration. Post-consumer materials that meet the requirements of Principle 3 are assigned a default embodied GHG value of zero.

Steel (non-scrap)

If steel other than scrap is imported to the site as an input for production of crude steel at the site, and if primary data for its upstream emissions is not available, it is assigned a default upstream emission factor as for other ferrous input materials as listed in Table A1. If steel is imported to the site for further downstream processing, the upstream emissions associated with its production are not included when determining the crude steel GHG emissions intensity for the site.



755 Hunter Street
Newcastle, NSW 2302
Australia