Department for Energy Security & Net Zero

# Technical annex: A policy framework to grow the market for low carbon industrial products

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# Contents

# Introduction

This technical annex provides additional detail to support discussion of the concepts and questions in Chapters 2 to 5 in the 'Technical consultation on a policy framework to grow the market for low carbon industrial products'. It should be used as a supplementary document to the main consultation only and does not set out government proposals and should not be used in isolation.

Part 1 focusses on Chapters 2 to 4 of the consultation which explores the embodied emissions reporting framework (EERF), and outlines the relationships between different standards, and between standards and product category rules relating to carbon accounting. It also illustrates the concepts of 'identical' or 'equivalent' aspects of measurement in different standards and their impact on comparability.

Part 2 focusses on Chapter 5 of the consultation on product classifications for embodied emissions. It sets out additional background on the steel, cement, and concrete sectors. It also provides more detail on the International Energy Agency's (IEA's) definition of near zero and low emission steel and elaborates further (but not exhaustively) on the relevant certification, emissions reporting and verification aspects of steel product classification options like the ResponsibleSteel Decarbonisation Progress Levels (DPLs), Low Emission Steel Standard (LESS) and the Global Steel Climate Council's (GSCC) product standard. On concrete product classification options, further detail is provided on the combined approach to the Lower Carbon Concrete Group's (LCCG) Market Benchmark and Arup's Universal Classification for embodied carbon of concrete, and the Global Cement and Concrete Association's (GCCA) Global Ratings adapted by the Mineral Products Association (MPA) for the UK.

# Part 1: Embodied Emissions Reporting Framework, EERF (Chapters 2-4)

As shown in Figure 1, standards generally become more specific in order to increase comparability between measuring the emissions of products. The ISO 14000 series is a family of standards focusing on environmental management systems (EMS). Product Category Rules (PCRs) are designed in accordance with standards to apply to categories of products such as all construction products (EN15804).

'Underneath' PCRs are sub or complementary PCRs such as "BS EN 16757:2022, Concrete and concrete elements" to apply to more specific categories of products. The year after the standard number refers to the year it was published.

# Relationship between standards for measuring embodied emissions (Chapter 3)

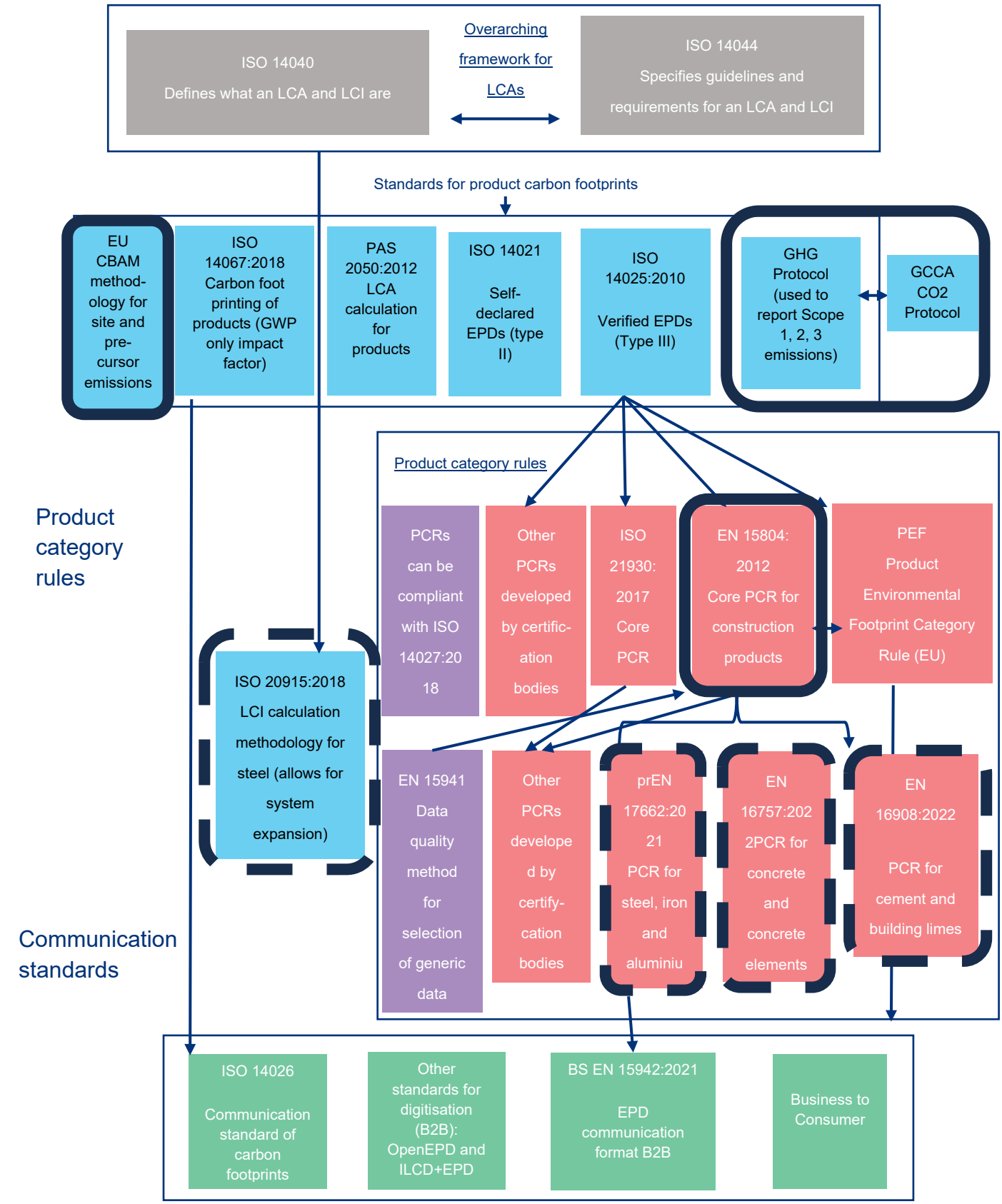


*Figure 1: The relationship between general standards, sector specific PCRs, and other standards.*

# Ensuring comparability of embodied emissions results (Chapter 3)

To enable fair, like for like comparison, aspects of measurement specified in standards need to be identical or equivalent. Standards do not need to be totally identical for comparison, but certain common features must hold. 'Equivalent' in this context means not being identical but having the same effect.

For instance, in the context of transport contributing to environmental impacts, 'equivalent' would be a comparison of distance to the same location from two different locations. One could be 100km the other could be 200km or by different forms of transport. The distance would not be identical but the category of 'transport to the location' would be equivalent because of a common unit of measurement, enabling a buyer to compare two EPDs on that basis. Note that the transport of goods within the manufacturing process is within the scope of EPDs but not that of the EU Carbon Border Adjustment Mechanism (EU CBAM).

The precise aspects that may need to be recommended to be standardised in guidance (on an identical or equivalent basis) in order to enable like for like comparison cannot be fully determined prior to consultation. Nevertheless, the government is interested in which aspects of embodied emissions measurement standardisation are essential.

Provided below as an example is an extract from the international EPD standard ISO 14025[1] setting out requirements for standardised features (modified with explanatory context).[2] Whether the component must be identical or equivalent is on the right.[3] Identical or harmonised standards are defined in the footnote.[4]

[1] BS EN ISO 14025:2006 (abbreviated as ISO 14025), Environmental labels and declarations, Type III environmental declarations, Principles and procedures
[2] Section 6.7.2
[3] Note equivalent in not defined in the standard
[4] ISO/IEC Guide 2:2004(en) Standardization and related activities; General vocabulary
"Harmonised standards or equivalent standards: standards on the same subject approved by different standardizing bodies, that establish interchangeability of products, processes and services, or mutual understanding of test results or information provided according to these standards. Note 1 to entry: Within this definition, harmonized standards might have differences in presentation and even in substance, e.g. in explanatory notes, guidance on how to fulfil the requirements of the standard, preferences for alternatives and varieties. Identical standards: harmonized standards that are identical in both substance and presentation. Note 1 to entry: Identification of the standards may be different. Note 2 to entry: If in different languages, the standards are accurate translations."

| | |
|---|---|
| PCR definition and description[5] (e.g. function, technical performance and use) | Identical |
| **Goal of LCA and Scope of assessment Definition** | |
| Functional unit | Identical[6] |
| System boundary. Equivalent means they do not need to be identically worded, but the position of the boundary must be the same, i.e. from raw material supply to manufacture. Equivalent also means that one system boundary can be larger than another (i.e. not identical) and still compared if only the relevant sub-part is compared which does have the same position. For example, an A1-A3 EPD could be compared with an A-C EPD by ignoring the C module component in the comparison. Note also that only products of the same part in the value chain (e.g. finished or intermediate can be compared). | Equivalent |
| Description of data | Equivalent |
| Criteria for inclusion of inputs and outputs[7] | Identical |
| Data quality requirements (e.g. coverage, precision, completeness, representativeness, uncertainty, consistency.) | Equivalent |
| **Inventory Analysis** | |
| Methods of Data Collection | Equivalent |
| Calculation procedures | Identical |
| Allocation of material energy flows and releases | Equivalent |
| **Environmental Impact Category** | |
| Predetermined parameters for reporting of LCA data | Identical |
| Requirements for provision of additional environmental information, including any methodological requirements (e.g. specifications for hazard and risk assessment) | Equivalent |

[5] Not the OCR itself
[6] Note EN15804 is exempted from an identical functional unit because there may be applications when one is not needed or appropriate to compare.
[7] Note the criteria must be identical not the actual cut off rules themselves. For example, two cut of criteria of 1% and 2% could both fit under a criterion of ‘less than 5%’

| | |
|---|---|
| Materials and substances to be declared (e.g. information about product content, including specification of materials and substances that can adversely affect human health and/or the environment, in all stages of the life cycle) | Equivalent |
| Instructions for producing the data required to create the declaration (LCA, Life Cycle Inventory, information modules and additional environmental information) | Equivalent |
| Instructions on the content and format of the Type III environmental declaration | Equivalent |
| Instructions on the content and format of the Type III environmental declaration | Equivalent |
| Period of validity[8] | Equivalent |

*Table 1: Table from ISO 14025 (with context) displaying aspect of measurement to compare products*

[8] For example, if both EPD have a period of validity of 5 years, then they are equivalent, even if one is valid from 2021-2026 and the other from 2024-2029

# Part 2: Product classifications for embodied emissions (Chapter 5)

## Additional background on steel, cement, and concrete production

### Steel

The UK currently has a demand for steel of around 9 to 11 million tonnes a year.[9] This is expected to grow 10% by 2030, mostly driven by sectors requiring large amounts of steel like offshore wind, nuclear and transport infrastructure.[10] The UK is a net importer of steel, importing primarily from Europe and Asia, while its main export partners are the Americas and Europe.[11] Globally, steel production in 2023 exceeded demand by around 500 million metric tonnes.[12] The iron and steel sector contribute around 7%[13] of greenhouse gas (GHG) emissions and about 7%[14] of energy sector CO2 emissions globally. Emissions from the sector are hard to abate as key decarbonisation technologies like carbon capture utilisation and storage and hydrogen based direct reduced iron with electric arc furnace are not yet ready for large scale use by primary steel producers, and due to the high upfront costs of retrofitting or replacing existing steel plants.[15]

### Steel production

Steel production can be categorised as primary steelmaking, which utilises iron ore as the main raw material input, or secondary steelmaking, which uses scrap steel as the key input. The three main production routes for steel are blast furnace with basic oxygen furnace, direct reduced iron with electric arc furnace (both primary steelmaking) and scrap with electric arc furnace (secondary steelmaking). These production routes are described below:

- Blast furnace with basic oxygen furnace (BF-BOF): In a BF, iron ore is converted into pig iron using coke (from coal) which acts as both a heat source to smelt the iron ore and as a reducing agent to remove oxygen from it. Scrap typically constitutes 15-25% of the material input but BFs can also operate with nil scrap. Pig iron is converted to molten steel in a BOF where oxygen is used to burn impurities like carbon, silicon etc. Other materials can be added to the furnace like lime to help remove impurities. Lime fuses with the impurities to form blast furnace slag which separates from the steel and is removed.
- Direct reduced iron with electric arc furnace (DRI-EAF): DRI technology uses reducing agents such as carbon monoxide or hydrogen to remove oxygen from the iron ore and

[9] World Steel Association, 2024, 'World Steel in Figures 2024'
[10] UK Steel, April 2024, page 3, 'UK Steel Capacities and Capabilities'
[11] UK Steel, May 2024, page 9, 'Key Statistics Guide May 2024'
[12] The Organisation for Economic Cooperation and Development (OECD), June 2024, page 6, 'Latest developments in steelmaking capacity and outlook until 2026'
[13] Global Efficiency Intelligence, April 2022, page 2, 'Steel Climate Impact'
[14] International Energy Agency (IEA), October 2022, page 3 'Iron and Steel Technology Roadmap'
[15] OECD, December 2024, chapter 3, 'Addressing steel decarbonisation challenges for industry and policy'

convert it to direct reduced iron. This is added to an EAF which uses graphite electrodes to convert the DRI into molten steel.

- Scrap with electric arc furnace (scrap-EAF): Steel scrap is used as the main material input, which can make up to 100% of inputs in an EAF. It is melted in an EAF into molten steel.

Once molten steel is produced via the routes above, it is cast into crude steel which describes steel in its first solid state. Crude steel is considered the common production stage of all steel products as downstream production processes that take place after can vary significantly to achieve the application requirements of the finished steel product (i.e. defence, construction, automotive, transport infrastructure). Downstream production processes after crude steel is produced can include hot rolling, cold rolling, forging, annealing, pickling, coating and fabricating.[16]

## Steel products

Finished steel products fall into two broad categories:

- Long steel: Used most often in construction, includes reinforcing steel (i.e. rebar).
- Flat steel: Includes sheets, coils, plates and is used most often in automotive, tubing, appliance, and machinery manufacturing.

## Steel scrap

Steel scrap is an essential raw input material in steel production and a highly traded, yet limited commodity. Scrap's role in decarbonisation is growing as secondary steelmaking is less emissions intensive than primary steelmaking as scrap has already undergone conversion from iron ore to steel for its initial use. The magnetic property of steel means it can be easily segregated and infinitely recycled, increasing resource efficiency. According to the World Steel Association's (worldsteel) Life Cyle Inventory (LCI) data, every tonne of scrap used for steel production prevents 1.5 tonnes of CO2 emissions and reduces the consumption of 1.4 tonnes of iron ore, 740kg of coal and 120kg of limestone. However, various net zero emissions scenarios by 2050 have shown that secondary steelmaking alone is insufficient in meeting projected global steel demand due to limited scrap availability, there is therefore a need to decarbonise primary steelmaking.[17]

As the global steel industry transitions to scrap based production the demand for scrap is expected to increase to around a billion tonnes by 2050.[18] However, scrap availability varies significantly across steel producing economies, where developing and emerging markets tend

[16] See 'Worldsteel glossary' for definition of hot rolling, cold rolling, annealing, pickling, coating and 'Industrial Quick Search (IQS) directory - forging steel' for definition of forging and 'IQS directory - fabricating steel' for definition of fabrication.
[17] IEA, May 2021, 'Net Zero by 2050', and Mission Possible Partnership (MPP), September 2022, ''Making net zero steel possible'
[18]UK Steel, December 2023, page 2, 'UK Steel report on steel scrap'

to have less scrap than economies like the UK, US, EU, Canada and Japan, due to different stages of industrial development and recycling infrastructure.[19]

## Concrete

Ready-mix concrete is primarily locally sourced with an average delivery distance of eight miles. According to industry survey data from the Mineral Products Association (MPA), ready-mix concrete sales have declined since 2016 due to reduced investment in commercial construction projects. Meanwhile, pre-cast concrete is facing growing international competition due to the import of cheaper, less environmentally friendly products. In 2009, the UK became a net importer of concrete products.[20]

## Concrete products

There are a variety of concrete products on the UK market, with ready-mix and precast concrete amongst the most popular:

- Ready-mix concrete**:** Manufactured in a factory or batching plant by mixing cement, water and aggregates (sand, gravel, or crushed stone) in controlled proportions**.** It is then delivered to construction sites 'just in time' to be cast into any size or shape.[21] Commonly used for foundations, floors, walls, bridges and roads.
- Precast concrete: Produced in a controlled factory environment and then transported to the construction site. Allows for high-quality, consistent products that can be used for various architectural and structural applications, including columns, beams, paving and multi-storey car parks.

## Cement

Demand for cement in the UK over the last two decades has averaged 11.3 million tonnes per annum.[22] This demand is met through a combination of domestic production and imports. In 2023, the sector produced 7.7 million tonnes of cement, down from 8.4 million tonnes in 2022[23] and around 20 million tonnes of cement in the 1970s.[24] This decline reflects broader challenges within the industry, including economic factors and efforts to reduce carbon emissions.

UK cement imports have risen significantly, from 1.5 million tonnes in 2001 to 3.6 million tonnes in 2023, now making up 30% of the cement used in the UK. In 2016, imports accounted for just 13% of UK cement demand, highlighting a notable increase in reliance on imports over less than a decade.[25] According to the MPA, the cement sector was operating at 68% of its estimated capacity in 2023.

[19] OECD, December 2024, page 5, 'Unlocking potential in the global scrap steel market'
[20] Mineral Products Association, 2023, 'Profile of the UK Mineral Products Industry'
[21] Mineral Products Association, Ready-mixed Concrete
[22] Mineral Products Association, 2024, 'Annual Cementitious Statistics'
[23] UK Government, 2025, 'Construction building materials: commentary January 2025'
[24] World Cement, 2023, 'Opportunities and Challenges for UK Cement'
[25] Mineral Products Association, 2024, 'Annual Cementitious Statistics'

# Supplementary information on steel product classification options (Chapter 5, Part 2)

Steel product classification options like the ResponsibleSteel Decarbonisation Progress Levels (DPLs) and the Low Emission Steel Standard (LESS) use the International Energy Agency's (IEA) definition of near zero and low emission steel as a basis to set thresholds. The IEA's model is described below.

Further information on certification and how emissions data is determined and verified for ResponsibleSteel DPLs (option 1), LESS (option 2) and the GSCC's product standard (option 3) are provided below. These will be considered in the comprehensive evaluation of these options against the assessment criteria.

## The International Energy Agency (IEA)'s definitions of near zero and low emission steel

The IEA adopts a scrap sliding scale and has set thresholds for near zero and low emission crude steel for the full spectrum of scrap use (zero to 100%).[26] The near zero emission threshold is compatible with the IEA's net zero emission by 2050 scenario as well as other IEA net zero energy system scenarios. The definition for low emission crude steel is divided into five bands, labelled A through E. The emissions intensity of each band is calculated as multiples of the near zero threshold value. The system boundary for crude steel production includes scope 1, scope 2 and some upstream scope 3 emissions which includes casting but excludes emissions from further downstream production processes.

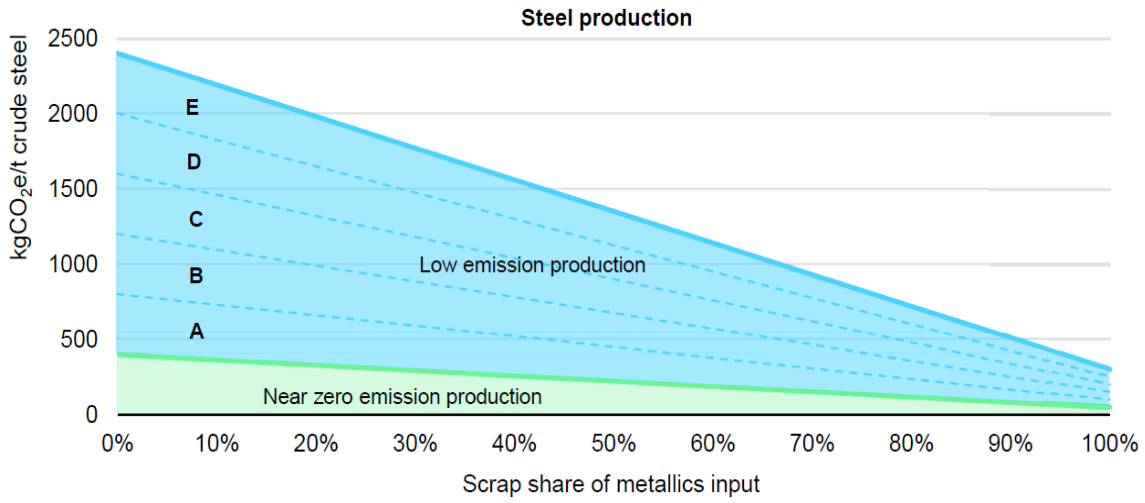


*Figure 2: IEA's definition for low and near zero emission crude steel*
*Source: IEA, May 2022, 'Achieving Net Zero Heavy Industry Sectors in G7 Members'*

## Option 1: The ResponsibleSteel Decarbonisation Progress Levels (DPLs)

The ResponsibleSteel standard[27] features 13 principles that contain over 500 requirements for steel producers related to environmental, social and governance (ESG) issues like labour,

[26] IEA, May 2022, 'Achieving Net Zero Heavy Industry Sectors in G7 Members'
[27] ResponsibleSteel, October 2024, 'ResponsibleSteel international production standard version 2.1.1'

human rights, water and biodiversity. Compliance across most of these requirements, enables a steelmaking site to achieve core site certification. To progress to steel certification, additional requirements related to responsible sourcing and assessment against the DPLs is undertaken. Key features of reporting and verification are summarised below for the DPLs.

Scope 1 emissions are determined in accordance with international and/or regional standards recognised by ResponsibleSteel which include the GHG Protocol[28] and EN 19694[29] (parts as applicable) for measurement of GHG emissions. ISO 14404[30] is also recognised (parts as applicable) for the measurement of CO2 emissions by sites. Scope 2 emissions are determined similarly to scope 1, but with additional requirements for imported electricity, and heating, cooling, and steam.[31]

To determine upstream scope 3 emissions, producers should use primary data provided by the supplier, whenever available, for input materials.[32] ResponsibleSteel also provide default embodied GHG values[33] which are to be used when primary data is not available. These default values are conservative due to the use of a 'burden of the doubt' approach, whereby the global average values have been multiplied by 1.2, or 1.6 in the case of coal, coke, and natural gas, considering additional uncertainty associated with methane emissions from these inputs. The values are derived from a range of sources, including the Commodities Research Unit (CRU), worldsteel, and the GaBi/Sphera database.

In terms of emissions allocation, no emissions can be allocated to slag. However, emissions allocation for the utilisation of process gas emissions and waste heat for onsite or offsite energy reutilisation is accepted, using the system expansion approach.

Emissions reporting for DPLs is verified by auditors approved by ResponsibleSteel. Sites must complete a self-assessment before certification. Any audit report with a positive certification recommendation is reviewed by the ResponsibleSteel secretariat and the independent assurance panel. Certificates are valid for three years. Certified sites must undergo surveillance audit and ongoing monitoring between 12 and 18 months after certification.[34]

## Option 2: The Low Emission Steel Standard (LESS)

The LESS certification scheme is managed by an international non-profit organisation, based in Brussels. Main features of reporting and verification for LESS are summarised below.[35]

[28] GHG Protocol, 'Standards & Guidance'
[29] BS EN 19694 (abbreviated as EN 19694), Stationary source emissions - Determination of greenhouse gas (GHG) emissions in energy-intensive industries
[30] BS ISO 14404 (abbreviated as ISO 14404), Calculation method of carbon dioxide emission intensity from iron and steel production
[31] See ResponsibleSteel, section 10.4.4, 'International Production Standard', for additional requirements to determine scope 2 emissions.
[32] See ResponsibleSteel, section 10.4.5, 'International Production Standard', for list of input materials to determine the site's upstream scope 3 emissions
[33] ResponsibleSteel, Annex 5, 'International Production Standard'
[34] ResponsibleSteel, June 2024, 'ResponsibleSteel Assurance Manual version 2.2'
[35] German Steel Association (WV Stahl), March 2025, 'Rulebook for the classification system of the Low Emission Steel Standard (LESS) version 1.1'

For scope 1 emissions, where fuels are not covered by the EU Emissions Trading System (EU ETS), producers must use comprehensible individual emission factors or current official emission factors relevant to the region (e.g. standard values from the EU ETS). If the electricity is purchased by the producer, scope 2 emissions data is determined using the real emission factors from the actual electricity mix used by the site. However, LESS permits the use of accounting-related allocation for energy use, given that guarantees of origin from officially recognised registers are provided.[36] These producers can claim lower energy emissions, even if such energy was not physically used at the site.

To determine upstream scope 3 emissions, LESS provides standard emission factors (i.e. default values), the majority from Ecoinvent.[37] Individual emission factors may be used if they are provided by the supplier and meet specific criteria which include determining the data according to specific international standards such as GHG Protocol Product Standard,[38] GHG Protocol, ISO 14040/14044,[39] ISO 14064[40] or ISO 14067[41] and checked by a certification body for LESS.

LESS has agreed economic allocation rules, where steel producers for granulated slag or comparable by-products are credited a fixed emissions allocation of 0.100 tonnes of CO2e per tonne if it is sold as clinker substitutes for cement production. No emissions can be allocated for other by-products. Emissions allocation is permitted for the utilisation of gases stored in domes for the generation of heat or electricity (similar to the EU ETS) consumed off-site.

The producer is required to document a company's internal methodology, referred to as the determination model, for determining emissions and their assignment to products under the LESS classification system.[42] The determination model is verified by a certification body approved by LESS and will be similar to the monitoring plans approved for the EU ETS. Certificates are valid for three years however LESS mandates annual verification, where producers must complete an audit within the first year of their previous verification.

## Option 3: Global Steel Climate Council's (GSCC) product standard

GSCC requires producers to set science-based emissions targets (SBET) prior to being certified against the product standard.[43] Key aspects of reporting and verification for the product standard for flat and long steel products are outlined below.

The embodied emissions values for scope 1, scope 2 and upstream scope 3 emissions are required to be developed in accordance with specific international standards such as GHG

[36] Guarantees of origin prove that a certain amount of energy was produced from renewable sources. The LESS rulebook also covers accounting-related procurement of biogas (see WV Stahl, Part 3, 'Rulebook for the LESS')
[37] WV Stahl, April 2024, Annex VI, 'Annex to the LESS-rulebook',
[38] GHG Protocol, 'Product standard'
[39] BS EN ISO 14040 and 14044 (abbreviated as ISO 14040 or 14044), Environmental management – Life cycle assessment – Principles and framework
[40] BS EN ISO 14064 (abbreviated as ISO 14064), Greenhouse gases
[41] BS EN ISO 14067 (abbreviated to ISO 14067), Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification
[42] WV Stahl, part 1.3, 'Rulebook for the LESS'
[43] GSCC, July 2024, 'The steel climate standard'

Protocol Product Standard, ISO 14040, ISO 14044 or ISO 14067,[44] with the GSCC's reporting requirements superseding any requirements in the international standards that conflict with theirs.

Primary data which meets requirements specified by the GSCC shall be used for both activity data[45] and for emission factors, if available. The use of primary data is necessary for purchased billets and slabs used to manufacture the steel product. In the absence of primary data for emission factors, the use of secondary data is allowed with the source referenced, however specific values are not specified other than 'industry average data'.[46] The percentage share of primary versus secondary data for the product's hot rolled steel emissions value must be disclosed to provide transparency.

With regards to emissions allocation, no allocation between steel products, by-products and co-products, including slag, is accepted. Exclusion of emissions from the use of bio-based materials may be allowed. Using a system expansion approach, emissions allocation is permitted for the use of process off-gases[47] that are recovered for reheating and electricity generation, provided this is used beyond the GSCC's system boundary of up to hot rolled steel. For instance, it may be used as fuel for downstream production processes like annealing or tempering furnaces.

Independent verification for emissions data is undertaken by certification bodies approved by the GSCC, and at least every three years thereafter. Certificates are valid for three years however steel producers must perform and publish internal self-audits annually to evaluate performance and ensure continued compliance. The steel product's emissions value may be documented and verified via an Environmental Product Declaration (EPD) in conformance with ISO 14025.[48] However, as Product Category Rules (PCRs) do not fully align with all aspects of the GSCC's product standard, a separate additional value for tonnes of CO2e per tonne of hot rolled steel must be calculated according to GSCC's system boundary and product calculation guidelines, and verified in parallel with the verification of the EPD value to the selected PCR.[49]

[44] GHG Protocol, Product Life Cycle Accounting and Reporting Standard, ISO 14040:2006, ISO 14044:2006, ISO 14067:2018
[45] Activity data are data for the specific processes and activities in a product's life cycle that contribute to GHG emissions. The scope of this is determined by GSCC's system boundary.
[46] GSCC, section 4.2, 'The steel climate standard'
[47] These are gases emitted as by-products or waste from a process. This includes coke oven gas and blast furnace gas from steelmaking
[48] ISO 14025:2006
[49] GSCC, July 2024, section 2.2, 'The steel climate standard: Supplemental technical guidance'

# Supplementary information on concrete product classification options (Chapter 5, Part 3)

## Option 1: The Lower Carbon Concrete Group's (LCCG) Market Benchmark and Option 2: Arup-Innovate UK's (UKRI) Universal Classification for embodied carbon of concrete combined

It was recognised that the LCCG's Market Benchmark and Arup-UKRI's Universal Classification could together provide a powerful tool for planning, specifying, and reporting the embodied carbon of concrete in the short and long term.[50]

The combined product classification illustrates the variation in the embodied carbon of concrete used within the UK by strength class. For instance, for all strength classes below C55/67 a buyer could currently procure a 'C' rated concrete.

Note that whilst this example uses the Universal Classification system, it is understood that the LCCG's Market Benchmark could similarly be used in conjunction with other static product classification systems such as the Global Cement and Concrete Association's (GCCA) Global Ratings adapted for the UK by the Mineral Products Association (MPA).

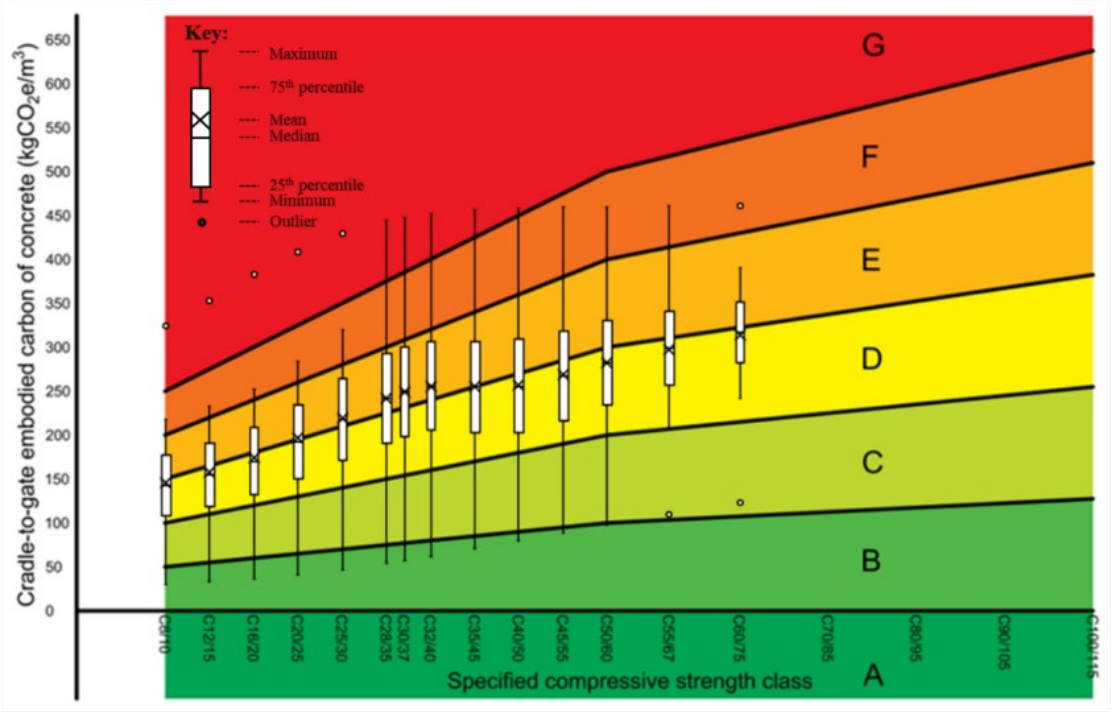


*Figure 3: The Universal Classification overlaid with a box and whisker plot of the industry data used to generate the 2024 Market Benchmark*

*ConcreteZero, 2023, 'Classification methodology for embodied carbon of concrete'*

[50] ConcreteZero, 2023, 'Classification methodology for embodied carbon of concrete'

## Option 3: The Global Cement and Concrete Association's (GCCA) Global Ratings adapted for the UK by the Mineral Products Association (MPA)

The GCCA Global Ratings for Concrete are the implementation of the definitions for low carbon and near zero emission concrete GCCA published in 2024. While they have been designed to be readily adopted by most countries, they allow for country adaptation.

This has already happened in the UK, where the MPA have adapted the graph below to account for UK-specific EPD reporting differences (see Chapter 5).[51]

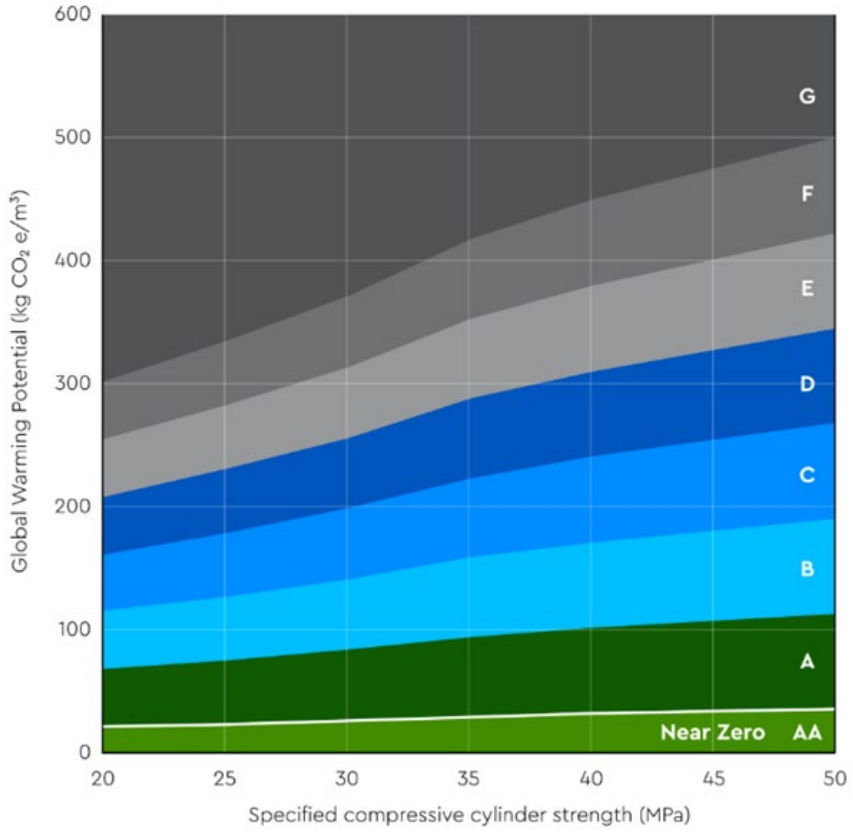


*Figure 4: The Global Cement and Concrete Association's (GCCA) Global Ratings adapted for the UK by the Mineral Products Association (MPA)*

*GCCA, 2025,* 'GCCA Global Ratings for Concrete'

[51] GCCA, 2025, 'GCCA Global Ratings for Concrete'

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