Department for
Business, Energy
& Industrial Strategy

# Call for Evidence: Towards a Market for Low Emissions Industrial Products

Closing date: 28 February 2022

December 2021

# Contents

# General information

## Why we are calling for evidence

Within the context of the UK government and Devolved Administrations' climate targets, and the recently published Industrial Decarbonisation Strategy, we are calling for evidence on policies to grow the market for low emissions industrial products. These policies can support low emissions manufacturers and help buyers of industrial products contribute to net zero, by providing ways to recognise low emissions products.

## Call for Evidence details

**Issued:**         6 December 2021

**Respond by:** 28 February 2022

**Enquiries to:**

Industrial Decarbonisation Team
Department for Business, Energy and Industrial Strategy
2nd Floor
1 Victoria Street
London
SW1H 0ET

Tel: 0300 068 8288
Email: IEStakeholderEngagement@beis.gov.uk

**Call for Evidence reference:** Call for Evidence: Towards a Market for Low Emissions Industrial Products

**Audiences:**

Our aim is to gather evidence from a broad range of UK and international manufacturers, buyers of industrial products and other experts, to enable development of proposals for successful demand-side policies that work for the whole of the UK. While some questions ask for responses from particular types of businesses, we are interested in views from academics, NGO representatives, and other individuals in all areas.

**Territorial extent:**

This Call for Evidence seeks information for consideration by the UK government but does not contain policy proposals. Responsibility for some of the policy areas covered in this Call for Evidence also fall to the Devolved Administrations. Responses to the Call for Evidence will be shared with Devolved Administrations.

# How to respond

Your response will be most useful if it is framed in direct response to the questions posed. Please support your response with evidence relating to your business, products or sector, published literature or studies, or to your broader expertise, wherever possible. Further comments and wider evidence are also welcome. We encourage responses on the Citizen Space online portal, which provides an easier method to complete responses, if possible.

Given the breadth of this Call for Evidence, we do not expect all respondents to answer every question and sub question, instead selecting the ones where they feel they have relevant experience or expertise. Priority questions for response are marked with an *asterisk at the beginning.

**Respond online at:** https://beisgovuk.citizenspace.com/clean-growth/market-low-emissions-products-cfe

or, if unable to respond online, **email to:** IEStakeholderEngagement@beis.gov.uk

We advise that you do not send responses by post to the department at this time.

# Confidentiality and data protection

Information you provide in response to this Call for Evidence, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

We will summarise all responses and publish this summary on GOV.UK. The summary will include a list of names of organisations that responded, but not people's personal names, addresses or other contact details. Please indicate in your response if you do not want your organisation to be named or your response to included in the summary.

# Quality assurance

This Call for Evidence has been carried out, as far as applicable and relevant, in accordance with the government's consultation principles. If you have any complaints about the way this Call for Evidence has been conducted, please email: beis.bru@beis.gov.uk.

# Introduction

This Call for Evidence will inform the development of UK government policies on industrial greenhouse gas emissions. The government's definition of industry covers the full range of UK industrial sectors: metals and minerals, chemicals, food and drink, paper and pulp, ceramics, glass, oil refineries, and less energy-intensive manufacturing.

On 17 March 2021, government published the [Industrial Decarbonisation Strategy](#). The document was the first strategy published by a major economy to set out how industry can decarbonise in line with net zero, whilst remaining competitive and without pushing emissions abroad. The Strategy marks the beginning of a process that will see extensive deployment of emissions reduction technologies across industry, refinement of government's policy approach to incentivise and support decarbonisation, and new coordinated action with our international partners to enable abatement around the world.

## Role of demand-side policies

As set out in the Industrial Decarbonisation Strategy, government can support low emissions manufacturers through policies that increase overall demand for their products ('demand-side' policies). These policies can help buyers contribute to net zero by providing ways to recognise low emissions products and to make green choices. By encouraging the market to grow, these policies can also drive decarbonisation and mitigate the risk of carbon leakage (see [glossary](#) for an explanation of technical terms in this document).

In the Strategy, government committed to developing new proposals for a range of policies that can support this ambition. These policy options, including product standards and labelling, are summarised in [Table 1](#). Each policy is underpinned by two major design decisions: how 'low emissions' is defined, and how it is measured.

While the policies discussed in Table 1 can also reduce the risk of carbon leakage, this document does not pre-empt the UK's long-term approach to carbon leakage mitigation. We continue to assess a range of potential options, as discussed in the [Net Zero Review](#). Our first priority remains to work closely with country partners to mitigate climate change ambitiously, in coordination with each other, to reduce the leakage risk across economies. Following COP26, 90% of the global economy is now covered by net zero commitments.

**Table 1: Summary of Potential Demand-Side Policy Options Explored in the Industrial Decarbonisation Strategy**

| Policy approach | Description | Objective | Target of policy |
|---|---|---|---|
| **Voluntary product standards / labelling** | Accredits businesses manufacturing products with lower associated emissions than a level set by government. | Enable low emissions manufacturers to distinguish their products from high emissions competitors. | UK & international industry and buyers of industrial products. |
| **Mandatory product standards / regulations** | Sets an upper limit on the associated emissions for industrial products that can be placed on the market. | Reduce domestic and imported emissions, supporting the investment case for decarbonisation. | UK industry & UK importers of industrial products. |
| **Mandatory product labelling** | Mandates that the packaging/documentation for industrial products displays information about their climate impact, including associated emissions. | Allow buyers to distinguish between different products based on associated emissions, enabling green choices. | Buyers of intermediate industrial products (e.g. construction, automotive industries) and end-consumer products. |
| **Public procurement** | Favours low emissions products in contracts for public projects, using labelling and/or standards to inform decisions. Public procurement policy differs across Devolved Administrations. | Create direct demand for low emissions products and catalyse market growth. | Public sector procurers, starting with central government. |
| **Private procurement** | Government supporting the private sector to buy low emissions products, for example through facilitating the formation of voluntary buyers' alliances. | Increase and aggregate the demand for low emissions products. | Buyers of intermediate industrial products (e.g. construction, automotive industries). |

**Definition of 'Industrial Products'**

Industrial products cover a wide range of goods. For the purposes of this Call for Evidence, we are dividing industrial products into two broad groups:

Intermediate (or 'semi-finished') industrial products, which are manufactured using raw materials, but require further processing before they are ready for use, such as steel and cement

End-consumer (or 'finished') products, such as vehicles and appliances

Industrial products often serve as inputs to construction and infrastructure projects. There is increasing interest in the climate impact of such projects, including how the materials were made. By defining and measuring the emissions associated with the inputs (the focus of this Call for Evidence), we can support architects, builders and their clients to create projects with a lower climate impact overall.

**Differentiating between 'Manufacturers' and 'Buyers' of industrial products**

In this Call for Evidence, sectors such as construction, which use industrial products, are considered 'buyers'. In some cases, sectors can be both manufacturers and buyers of industrial products. For example, the automotive sector is a buyer of intermediate industrial products but is also a manufacturer of end-consumer industrial products.

# Current government policy

Demand-side policies will be introduced to complement existing policies that support industrial decarbonisation, including the UK Emissions Trading Scheme, the Climate Change Agreements Scheme, the Industrial Energy Transformation Fund and CCUS & Hydrogen business models. They will form part of a clear set of decarbonisation incentives that can stand the test of time and deliver our net zero and Carbon Budget targets.

Some demand-side policies have already been established by government to encourage the market for energy efficient and resource efficient products to grow. These include the ecodesign and energy labelling scheme for energy-related products (e.g. refrigeration, washing machines, dishwashers) and Energy Performance Certificates for buildings. However, existing policies are not focused on measuring and reducing the emissions related to the manufacture of industrial products, which is the focus of this Call for Evidence.

Responsibility for some of the policy areas covered in this Call for Evidence falls to the Devolved Administrations and responses to the Call for Evidence will be shared with Devolved Administrations.

The Industrial Decarbonisation Strategy established seven principles, which any demand-side policy would need to meet in order to be successful. These were that the policy should:

1. create incentives for emissions reductions which are balanced across industry

2. support industry to share the cost of decarbonisation with consumers

3. apply equally to domestically produced and imported products to ensure a level playing field

4. be adaptable according to the needs of different sectors

5. be technology-neutral to allow for the possibility of future innovation

6. work in harmony with other policies, such as carbon pricing, energy efficiency and business models for low emissions technologies

7. be suited to a joint approach between the UK and other countries pursuing similar goals

These principles continue to underpin our policy development and inform the expectations set out in this Call for Evidence.

Alongside this Call for Evidence, we are publishing a report from PA Consulting, commissioned by government, on demand-side policies. The report summarises the available evidence on how to make these policies effective, based on schemes with similar objectives or design, in the UK and abroad. The report includes a range of recommendations for the design and delivery of demand-side policies, which we will consider alongside the responses to this Call for Evidence.

# The international market

In line with our principles, we will look to align our domestic approach with that of our international partners. Global alignment can be mutually beneficial, providing a stronger market signal, catalysing demand, and increasing the incentive for businesses to move onto a low emissions pathway.

In June 2021, a coalition of governments and organisations, led by the UK and India, launched the new Industrial Deep Decarbonisation Initiative (IDDI) under the Clean Energy Ministerial. This initiative is working on the harmonisation of embodied emissions (see glossary) reporting, procurement practices and standard setting through working groups launched at COP26. Alongside these working groups, members also adopted a commitment to begin disclosing embodied carbon in public construction projects by 2025.

Also at COP26, the UK launched the Breakthrough Agenda, supported by over 40 world leaders – representing more than 70% of the world's economy and every region. The Prime Minister set out the first five goals – the Glasgow Breakthroughs – collectively covering more than 50% of global emissions. This included the steel sector, with the aim of bringing together

global demand-side and supply-side initiatives on steel, to accelerate the transition. On the demand-side, this includes the IDDI, as well as the US-led First Movers Coalition, which exists to increase private demand for low emissions steel, aluminium, chemicals and other products.

Responses to this Call for Evidence will inform our engagement with these initiatives, which can simplify the policy landscape for businesses operating in multiple countries.

# Structure of the Call for Evidence

This document builds on a wide range of evidence previously provided to government, including the Climate Change Committee's advice on the sixth Carbon Budget, and stakeholder feedback during the development of the Industrial Decarbonisation Strategy.

The Call for Evidence has four chapters, each covering a cross-cutting issue for the design and delivery of demand-side policy:

**Chapter 1 - Defining Low Emissions**

To implement demand-side policies, we will need a shared definition of 'low emissions' industrial products. This chapter covers the following considerations:

- emissions scope – which emissions associated with the product are included in the assessment
- stringency – how low emissions will need to be for a product to be considered 'low emissions'
- views on existing definitions of low emissions in industry

**Chapter 2 - Sector and Product Scope**

It is likely that any new demand-side policy would apply to a small group of priority sectors or products at first, with more added over time once systems are established. This chapter examines how policies could be targeted across industry, considering:

- the current state of demand for low emissions industrial products
- the potential for demand-side policy to support decarbonisation in sectors
- the implications of demand-side policy for supply chains and the wider market
- coverage of industrial products imported to the UK

**Chapter 3 - Emissions Reporting and Verification**

Demand-side policies will need to be underpinned by robust emissions reporting. This chapter examines the characteristics of any reporting scheme for demand-side policy, including:

- design factors for any reporting scheme

- views on existing climate data reporting undertaken by industry

**Chapter 4 - Policy Implementation**

Alongside emissions reporting, there are several delivery considerations for any demand-side policy. This chapter examines these considerations, including:

- the role government can play in maximising the interest in demand-side policies from both manufacturers and buyers
- the timing of introduction of any new demand-side policy
- any wider considerations for the design of demand-side policy

Where possible, we have included a potential government position based on the existing evidence. These positions are not final government policy. They are intended to support stakeholder understanding of the issues and enrich the quality of responses to the Call for Evidence.

# Next steps

The Industrial Decarbonisation Strategy sets out an indicative timeline for how demand-side policies could be introduced over this decade:
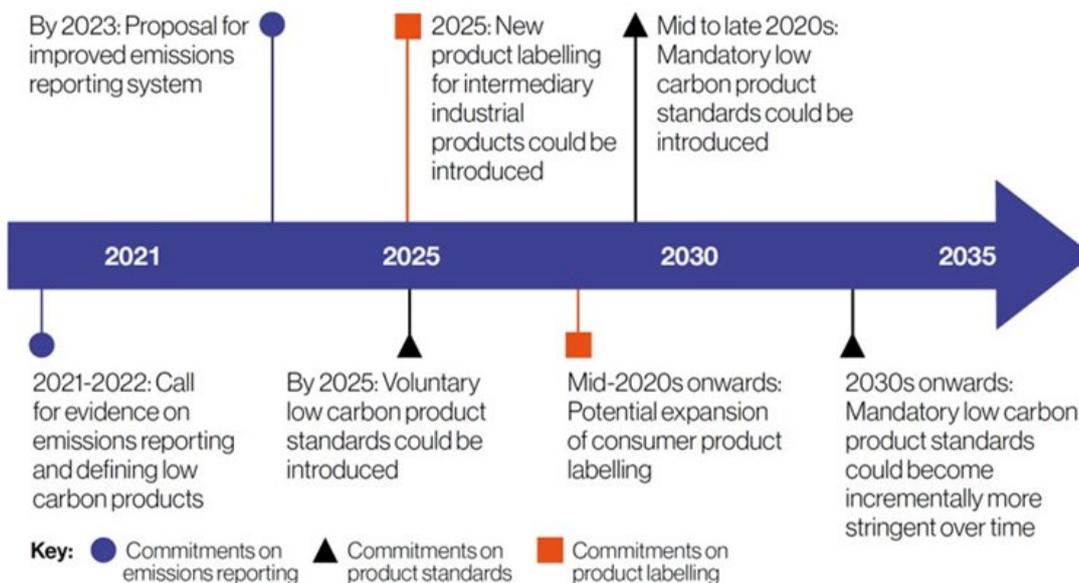


Figure 1: Indicative timeline for policy delivery as set out in Industrial Decarbonisation Strategy

The Call for Evidence is the first step of this timeline. Evidence can be submitted between 6 December 2021 – 28 February 2022. We intend to publish a summary of responses by summer 2022. Responses to the Call for Evidence will inform the next stage of policy development, including a public consultation on policy design planned for autumn 2022.

# Questions about your organisation

*Priority questions are marked with an \*asterisk*

1. **\*What type of organisation do you represent?** *Please select one:*

   **a) Private sector business / for profit organisation: large**

   **b) Private sector business / for profit organisation: SME**

   **c) Trade association or other industry body**

   **d) Academic institution**

   **e) Non-Government Organisation (NGO)**

   **f) Private individual**

   **g) Other**

2. **\*Do you represent or hold expertise on a specific industrial sector? If yes, which sector?**

3. **\*Do you / your organisation manufacture or purchase industrial products as defined on page 9 of this document?** *Please select one:*

   **a) Manufacturer of industrial products**

   **b) Buyer of industrial products**

   **c) Both buyer and manufacturer**

   **d) Neither buyer nor manufacturer**

4. **If you are a manufacturer of industrial products, do you predominantly sell your products to UK buyers or export to other countries?** *Please select one:*

   **a) Predominantly sell to UK market**

   **b) Predominantly export to other countries**

   **c) UK and international markets of similar or equal importance**

**5. If you are a buyer of industrial products, do you predominantly buy products from UK or international manufacturers?** *Please select one:*

**a) Predominantly buy from UK manufacturers**

**b) Predominantly buy from international manufacturers**

**c) UK and international markets of similar or equal importance**

# Chapter 1 – Defining Low Emissions

## Context

In order to implement demand-side policies (Table 1), we will need a shared definition of 'low emissions products'. For the purposes of this Call for Evidence, we are starting with a working definition of products manufactured producing fewer, or even zero, greenhouse gas emissions. In order to implement policies, we will need a more specific definition. Where 'decarbonisation' or 'emissions' are mentioned, we are using this as shorthand for reducing wider greenhouse gases, not just carbon dioxide.

This shared definition will underpin any product standards and labelling, and support public and private buyers to make greener choices. Any definition that we set will likely need to be revisited over time to ensure that it remains relevant; we will respond to advances in decarbonisation technologies, tightening the definition to drive progress towards net zero.

We are seeking views on the following considerations for setting a definition:

a) Emissions scope – which emissions associated with the product are included in the assessment.

b) Stringency – how low emissions will need to be for a product to be considered 'low emissions'.

We are also seeking views on existing approaches to defining low emissions that have already been developed by industry or other organisations.

## Emissions scope

In order to set a definition, we will need to decide which emissions should be included in the assessment of industrial products. A broader scope would have a greater impact on reducing greenhouse gas emissions and ensure policies are as effective as possible. However, the broader the emissions scope, the greater the administrative burden, with a larger scope requiring additional emissions monitoring and coordination to share emissions data through the supply chain.

Emissions are categorised by the Greenhouse Gas (GHG) Protocol into different Scopes for reporting purposes. Scope 1 emissions relate to direct activities owned or controlled by an organisation; Scope 2 relate to an organisation's consumption of purchased electricity, heat, steam and cooling; and Scope 3 relate to other emissions released as a consequence of an organisation's actions that occur at sources not owned or controlled by the organisation. Figure 2 below summarises this division of emissions by scope, and more information is provided in the Annex (Table A1).
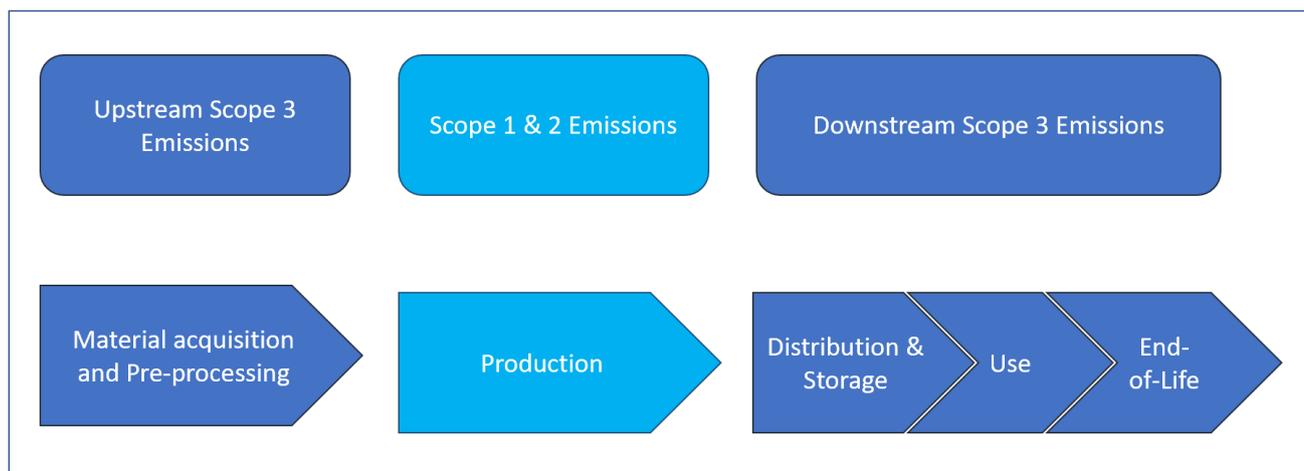
Figure 2: Division of product lifecycle emissions by scope

To incentivise emissions reductions throughout the supply chain, and grow the market for truly low emissions products, it may be important to include a broad scope of emissions in our definition. However, we want to set an initial definition that is practical for businesses to report against, finding a solution that is both sufficiently inclusive of emissions and workable in the near future. It may therefore be preferable for our initial definition to exclude some parts of the product lifecycle, for example, some Scope 3 upstream and downstream emissions.

We want to make the best use of all accurate and reliable emissions data already available, for example from Streamlined Energy and Climate Reporting and the new requirements from the Taskforce for Climate related Financial Disclosure. Practicalities around emissions reporting are discussed further in Chapter 3.

We are also interested in the best approach for evaluating the emissions of products that may be placed on the market multiple times. This could be by virtue of a value retention or circular economy process such as repair, remanufacture or recycling. We want demand-side policy to support uptake of second-life products, which have lower embodied emissions than their new or virgin equivalents. More broadly, we recognise that an emissions-only approach may have limitations for some sectors, and that there are other factors that might affect the climate impact of a product. We are interested in whether there are additional metrics of relevance to climate impact that should be included in assessments alongside embodied emissions, in order to maintain fairness.

We are considering how we may need to account for offsets (see glossary) in our definitions of low emissions products and we will consult stakeholders on this in future. Government recognises that some sectors will need offsets to reach net zero. However, we need to ensure that offsets are used in addition, and not as an alternative, to reducing emissions.

**6.   *Do you agree with the approach to the emissions scope set out above?**

**6.1    Does your business have estimates (either at the business level or the product level) of the split of emissions falling into Scope 1, Scope 2 and Scope 3? If so, please provide them.**

**6.2 What do you see as the optimal scope of emissions to be included in the definition of low emissions products in order for labelling and standards policy to be both effective and workable? Could the exclusion of some Scope 3 emissions create any negative impacts?**

**6.3 *Which, if any, Scope 3 emissions categories are essential for inclusion in the assessment for your sector/product(s)? Please specify why you think they should be included.**

**6.4 How should the emissions of 'value retained' products (see glossary) be evaluated to allow for comparison with new products?**

**6.5 *Are there any limitations of an emissions-only approach to assessing climate impact that may affect your sector/product(s)? Please specify any additional metrics that you think should be included.**

# Stringency

As well as deciding the emissions scope, we need to consider at what level our definition of 'low emissions' should be set.

Our current expectation is that more than one level of emissions could be needed. Different levels can be used for different purposes, and there is a trade-off between climate ambition and feasibility. An ambitious but achievable level of emissions that can be met through improving energy and material efficiency, for example, could be used as the basis of an early mandatory standard. Meanwhile, more stringent levels could be used to distinguish the best performers from high emissions competitors through one or more voluntary standards and a graded labelling system.

We envisage that the level of emissions will need to gradually become more stringent over time to ensure it continues to support progress towards net zero and responds to the changing emissions landscape in industry. Government would look to publish levels in advance to give assurance about the trajectory and allow businesses time to prepare. However, we also know emissions levels could quickly become outdated if new technologies emerge that drastically change emissions in the sector, and therefore there may need to be mechanisms to allow a rapid review of definitions in some circumstances.

There are several methods we could use to set the stringency of a definition. It could be set comparatively to the wider market (e.g. identifying a percentage of worst performers who need to improve their emissions reductions) or calculated based on projected sector decarbonisation pathways. We welcome views from stakeholders on the best method of setting the level of stringency.

**7. *How do you think the level of emissions at which the definition of low emissions products is set should change over time?**

**7.1    *Do you agree it should become more stringent over time?**

**7.2    *Do you have any suggestions for how the level of emissions should be set?**

**7.3    *Do you have any suggestions for how a trajectory of increasing stringency should be shaped for your sector and how regularly any definition would need to be revisited?**

**7.4    How far in advance would you like government to give notice of this trajectory?**

**7.5    Do you have a suggestion of what an ambitious but achievable level of emissions would look like for your sector/product(s) through the 2020s? This can be expressed as a benchmark of embodied emissions or as conditions (for example, that the benchmark needs to be reasonable, given that deep decarbonisation technologies will not be readily available yet).**

As set out above, more stringent levels of emissions could be used to distinguish the best performers through one or more voluntary standards. Manufacturers choosing to meet these voluntary standards could certify or label their products to show that they are 'greener' than their competitors, and buyers could choose to favour these products. However, there is another trade-off to be considered; the higher the stringency of voluntary levels, the lower the uptake amongst manufacturers is likely to be. This could be mitigated by having a range of more stringent voluntary standards, and a graded labelling system, providing different levels of ambition for manufacturers to aim for.

**8.    Do you agree with the approach of setting more stringent emissions levels as the basis for voluntary standards, vs lower-stringency mandatory standards?**

**8.1    What methodology could be used to determine the stringency of these more ambitious definitions?**

**8.2    How could a range of low emissions levels for voluntary standards be used most effectively to drive industrial decarbonisation?**

## Setting definitions at a market, sector or product level

There are varying levels of granularity at which a definition of low emissions can be set. At the broadest level, government could look to establish market-wide definitions and assessment methodologies for low emissions, to enable buyers to compare products across sectors. For example, this could be a single definition for all industrial products used for a specific purpose.

Whilst potentially helpful for some buyers, market-wide definitions may not capture the necessary nuances for individual sectors or products, and could be less helpful for very specialised markets. Accounting for the differences in the way products are made would require tailoring the stringency of the definition to different sectors, products or categories of products. This may require setting different levels of emissions for different products within a

sector and would likely create greater administrative burden as granularity increased, especially for businesses producing multiple products.

We expect that definitions at the sector level will be most appropriate, and would like to gather stakeholders' views on whether there are methods of simplifying the emissions scope in order to set one definition that covers a broad range, or all, of the products in your sector. For example, the organisation Responsible Steel has proposed a cradle-crude[1] steel emissions scope. This enables them to cover all steel products with one benchmark, since all steel products go through the crude steel phase.

9. **Do you agree that sector-level definitions are likely to be the most appropriate level of granularity for demand-side policies?**

9.1 **Is there a method of simplifying the emissions scope in order to set one definition that covers a broad range, or all, of the products within your sector? (Such as the Responsible Steel cradle-crude steel approach)**

9.2 **Do you have a view on using market-wide assessment methodologies to allow buyers to compare products across sectors?**

# Existing definitions

Defining what is meant by 'low emissions' in the context of industrial products is not a new challenge. There is a range of existing efforts to define 'low emissions' for particular sectors and products that have been developed by other governments, industry groups, academics, NGOs and multilateral organisations. Some of the initiatives we are already aware of are listed in the Annex (Table A3).

For example, the Buy Clean California Act (2017) sets limits on the global warming potential of materials used in state infrastructure projects, including steel, glass and certain kinds of insulation. There are also emerging frameworks, such as the UK Green Taxonomy, that will set out technical screening criteria that specific economic activities must meet to be considered environmentally sustainable. Further details on the UK Green Taxonomy can be found in Greening Finance: A Roadmap to Sustainable Investing, published in October 2021.

Assessing other definitions of low emissions products will enable us to learn lessons, with the possibility of government adopting or endorsing existing definitions. We would like to hear from stakeholders about any schemes that have attempted to define 'low emissions' for any industrial sector or product. We are interested in efforts in the UK or other countries, led by governments, industry, NGOs or others.

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[1] Cradle-crude steel refers to a subset of lifecycle emissions, otherwise known as cradle-gate. Another lifecycle assessment approach is cradle-grave, which refers to all product lifecycle emissions. More information on this can be found here.

**10. What are your views of the existing efforts to define low emissions for industrial products, either in your sector/for the products you manufacture, or for wider industry? In submitting your evidence, please include the following:**

**10.1 Provide details of the definition/scheme (e.g. sector/product(s) it applies to, emissions scope, benchmark) and, where possible, links to further information and/or contact details.**

**10.2 Are you a member of the scheme or would you consider signing up to it? Why/why not?**

**10.3 In your opinion, should government consider adopting or endorsing this definition/scheme? Why/why not?**

# Chapter 2 – Sectoral and Product Scope

## Context

Demand-side policies for low emissions industrial products are at an early stage and need to be introduced in the optimal way to support decarbonisation. To limit complexity, it is likely that any new policy would apply to a small group of priority sectors or products at first, with more sectors or products added over time once systems are established.

Demand-side policies (Table 1) should be introduced consistently across targeted sectors and manufacturers of specific products, rather than applying only to large businesses over an emissions or turnover threshold. This approach is in-line with other product and operational standards, and labelling systems, such as those that cover health and safety or energy efficiency. We recognise that there are specific considerations for small and medium sized enterprises (SMEs), which have less administrative and financial resource. Chapter 3 explores potential ways to address this.

This chapter examines how new demand-side policies could be rolled out across industry and which policy levers are suited to each industrial sector. We are particularly interested in identifying which sectors and products could be early beneficiaries of new policy, and which could follow later. We are seeking views on the following:

- sectoral characteristics that may determine which demand-side policies are most suitable
- products within sectors that could particularly benefit from demand-side policies
- possible positive and negative knock-on effects for supply chains and the wider market

We discuss our expectations of how we might identify potential early beneficiaries of demand-side policy below. These are grouped into three sections: the current demand for low emissions products, the potential for new policy to support decarbonisation, and the effect demand-side policies might have on the wider supply chain. This chapter also explores the factors that contribute to buyers' procurement decisions and the application of policy to imported products.

## The current state of demand for low emissions products

There is increasing interest from buyers (both private and public) and investors in the climate impact of industrial products. This is reflected in the formation of international initiatives on emissions reporting and market development for low emissions products, such as through the Industrial Deep Decarbonisation Initiative work programme co-led by the UK and India, announced at COP26.

Demand for low emissions products may exist due to pressure from buyers for greener products, or from investors to meet corporate commitments. Product standards and emissions labelling could act as useful tools in this situation, for buyers who want better visibility of low emissions products and businesses that want to differentiate their products. This could be catalysed by direct public or private procurement, acting to instigate change and support businesses to make greener choices.

*Questions 11 and 12 are most applicable for trade associations. Relevant evidence is welcome from all respondents.*

11. **\*How are products bought and sold in your sector and what is the demand for low emissions products? Please share further evidence on the following:**

11.1 **\*When selling intermediate industrial products, which sectors does your sector predominantly sell to? What is the split between government and private sector demand?**

11.2 **\*When buying intermediate industrial products, which sectors does your sector predominantly buy from?**

11.3 **\*Is there demand for lower emissions products in your sector? Which type of customers does this come from?**

11.4 **Is existing demand for low emissions products sufficient for businesses to invest in decarbonisation in your sector?**

12. **Have some businesses in your sector already undertaken some level of decarbonisation? Could new demand-side policy help consumers distinguish between products with different climate impacts?**

# Potential for new policy to support decarbonisation

Manufacturing intermediate industrial products with significantly lower emissions will likely cost more in the early years following the transition. Demand-side policies can strengthen the private investment case for manufacturers and mitigate carbon leakage risk. This will in turn help the market to grow, bringing costs down as more manufacturers adopt low emissions technologies. Studies show that this transition should have a minimal impact on prices paid by end-consumers. Even based on current costs, using green steel in the manufacture of a car has been estimated to add less than 0.5% to the final cost of the vehicle,[2] and using deep-decarbonised cement is estimated to increase the cost of a residential building by a maximum of 1%[3].

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[2] Rootzén and Johnsson, Paying the full price of steel, 2016
[3] Rootzén and Johnsson, Managing the costs of $CO_2$ abatement in the cement industry, 2016

**13. Do you think that a voluntary product standard and/or product label would be sufficient to change buyers' behaviour? Why/why not?**

*N.B. impacts on mid-chain manufacturers are discussed in Question 15.*

Policies that improve the transparency of the emissions associated with industrial products, such as product labelling, could help procurement teams that want to reduce the climate impact of the products they buy, and reduce the administrative burden of doing so. These policies, combined with digital systems to make the information accessible, could save time and money for buyers of industrial products. We want to better understand buyers' decision-making processes and procurement strategies (for both budget-holders and procurement teams who buy industrial products), and how a product's green credentials can be given greater priority in these processes.

**14. How do the green credentials of a product feature in buyers' behaviour and purchasing decisions? Please consider:**

**For buyers of industrial products**

**14.1 Which factors are most important when making purchasing decisions?**

**14.2 Would you find an embodied emissions (e.g. carbon footprint, traffic-light) product label helpful? Would budget-holders factor it into procurement decisions (and how significant would it be)?**

**14.3 Have your budget-holders and/or procurement teams received training to help assess the climate impact of purchasing decisions? Do you feel equipped to assess the climate impacts of products?**

**For manufacturers and sellers of industrial products**

**14.4 Would you find an embodied emissions (e.g. carbon footprint, traffic light) product label helpful in differentiating your product from others in the market?**

**14.5 Has your sales team received training to help market the climate impact of your products?**

**For all respondents**

**14.6 Do you have other views on how the green credentials of a product could be given greater priority by buyers?**

**14.7 Bearing in mind your response to Q6.3 (Chapter 1), what other information or labelling would be helpful for differentiating and driving the market for products with a lower environmental footprint? This could include, or be instead of, embodied emissions.**

# Supporting decarbonisation across the manufacturing chain

Government is aware that industrial supply chains are often complex and there could be knock-on effects from introducing product standards or low emissions procurement approaches, for example. We are interested in gathering views on these. Possible effects could include changes in demand from businesses further down the supply chain, or increased demand for inputs such as recycled content for manufacturing industrial products. We will need to understand the implications for the wider market as we develop policy options.

15. **What impact could demand-side policy, such as low emissions product standards or procurement, have on your sector's supply chain, both upstream and downstream? Consider the following possibilities and include others if relevant:**

15.1 **Could the introduction of demand-side policies adversely affect the market for specific raw or recycled materials?**

15.2 **Could new policy drive cost increases for manufacturers further along the supply chain?**

15.3 **Could new policy create carbon leakage risk elsewhere in the supply chain? For example, through introducing new costs to parts of a sector that are not already protected through existing carbon leakage policies.**

15.4 **How might any impacts vary based on the stringency of the low emissions definition? How might any impacts vary between domestic and non-domestic supply chains?**

# Overarching approach to targeting policy

Having considered the points above, please use the questions below to share broader views on the scope of new demand-side policy.

16. **Do you agree that the factors discussed above are key to assessing which sectors should be targeted by demand-side policy?**

16.1 **Are there other sectoral characteristics you think need to be considered?**

16.2 **Would you say that some characteristics are more important than others?**

17. ***Would your sector be a suitable target for new demand-side policy over the next 5-10 years? When submitting evidence please consider:**

- **How this might vary dependant on policy lever.**

- **Where in your supply chain new demand-side policy would have the greatest benefit (for example, an upstream product/process that accounts for most of the embodied emissions in end-consumer products, or at the point of transaction).**

- **Which product markets for your sector will require the greatest policy influence to shift procurement to low emissions industrial products.**

# Coverage of imported products

To grow the market for low emissions products, demand-side policy must help mitigate the carbon leakage risk associated with low emissions production (i.e. higher costs). As set out in the Industrial Decarbonisation Strategy, this means that any mandatory policy would need to apply to domestically produced and imported products placed on the market as the default. This would come with emissions reporting challenges, which are discussed in Chapter 3.

There may be certain situations where a policy that is mandatory for UK products and voluntary for imported products could be helpful in the short term, with a view to making it mandatory for imports over time. This could be an opportunity to establish emissions reporting flows and verification systems, and limit complexity. For example, this could be suitable for a new product standard that sets a high, relatively achievable emissions limit that can be met without significant increases to costs, keeping the carbon leakage risk relatively low. Foreign manufacturers exporting to the UK could voluntarily submit their products for verification and UK buyers could voluntarily favour such products.

18. **Could a 'mandatory for UK products only' approach be a reasonable first step in rolling out new mandatory standards or labelling policy?**

19. **Under what circumstances, or for which products, is it essential to target both UK production and imports from the start?**

# Chapter 3 – Emissions Reporting and Verification

## Context

As set out in the Industrial Decarbonisation Strategy, we expect that knowing the emissions associated with industrial products, manufactured in the UK or entering the market from other countries, will form the bedrock of new demand-side policies (Table 1). Calculating product emissions will require regular reporting of production and emissions data.

As the transition to a low carbon economy accelerates, we expect that buyers of industrial products will want more and better climate-related information about the products they buy. A system that can deliver consistent, verified emissions reporting across industry can ensure that everyone has access to trusted data. This data would be used to assess a product's performance against definitions of low emissions and the associated demand-side policies.

This chapter considers the increased data transparency needed for the introduction of new demand-side policies. We are seeking views on the design of any new emissions reporting requirements, how we can make them proportionate, and views on existing emissions reporting systems operated by both government and the private sector.

## Towards an emissions reporting system

In designing any new emissions reporting system, it will be important to consider:

- Granularity: the level of detail required and whether some form of product averaging could be used

- Frequency: how regularly businesses are required to report emissions data

- Practicality: how easily businesses can comply with reporting requirements and how they fit with existing or planned requirements

- Imported products: obligations on UK importers of industrial products

- Verification: how the emissions will be checked and how data will be stored

### Granularity

The granularity of data reporting for any demand-side policies will depend on the scope of the definition of low emissions, as discussed in Chapter 1. Where reasonable, we are open to ideas on how to simplify emissions reporting whilst maintaining the required level of accuracy.

For example, using product averages instead of product specific data would allow industry to assign published emissions values to products based on the method of production and region

of origin. This would lower the compliance requirement for manufacturers. We could also simplify the requirement by applying this methodology to calculate Scope 3 emissions. However, this approach would create a risk that the most emissions-intensive manufacturers benefit from the investments made by the least emissions-intensive manufacturers. A challenge function, allowing manufacturers to submit product-specific data if they believe it would be beneficial to differentiate their products from the industry average, could go some way to mitigating this risk.

20. **\*What are your views on how emissions reporting could be simplified? Please consider:**

- **The extent to which aggregated data (e.g. sector, sub-sector, company averages, product groups) would be accurate enough for demand-side policy to operate, in particular for scope 3 emissions.**

- **If adopted, how such 'simplifications' could be accounted for. For example, firms using more accurate data could be rewarded by being permitted to resubmit data on a less frequent basis.**

- **How we strike the balance between the accuracy of reporting and the effort required from businesses to comply.**

21. **Does your sector already compile aggregated products emissions data?**

21.1  **If so, who is responsible for compiling and sharing this data?**

## Frequency

The length of the reporting cycle will determine the accuracy and administrative impact on industry of any new demand-side policies. Existing schemes take a range of approaches (Annex Table A2, A3) and, at a minimum, businesses will need to submit data when a policy is introduced, and whenever there is a change to their operational emissions or to the stringency of the policy.

22. **To maintain accuracy and trust in the system, how frequently should product emissions data be reported? Please consider:**

- **Existing emissions reporting cycles that your business is subject to, both government and non-government led.**

- **The potential rate of decarbonisation within your sector (i.e. will there be many small emissions reductions over time, or one major reduction in emissions?).**

## Practicality

We know that any new data reporting will involve additional administrative challenges. Through engagement with manufacturers and buyers, we want to develop an accurate and accessible emissions reporting approach, including consideration of how a digital system could be

designed and used. Considering the range of existing schemes, we are open to views on the steps we could take to reduce the volume of new requirements, and whether any additional steps could be taken to support SMEs. We are interested in evidence that clearly sets out the impact of product level emissions reporting and whether some or all of this information is already submitted to schemes in a way that government could align with.

23. **For your sector, please submit evidence on the potential financial and administrative cost of mandatory product emissions reporting and verification for products sold in the UK.**

23.1 **Do you already collect the data required to measure emissions at product level?**

23.2 **If not, what would the potential administrative and financial impact be to do so?**

23.3 **What are your views on the practicality of measuring the product emissions of upstream and downstream inputs and processes in your business' supply chain, including those that occur overseas?**

## Imported products

Existing government reporting only extends to businesses operating in the UK. As discussed in Chapter 2, our intention is for demand-side policy to cover both domestically produced and imported industrial products placed on the market. In line with other government approaches (e.g. health and safety regulations, energy efficiency standards), we expect that the responsibility of supplying this data would fall to those that import or place products on the market, who in turn would be required to collect this data from the manufacturer of the product.

A system would be required to ensure that imported products are compliant with any new policy, and that emissions have been calculated in accordance with the domestic reporting framework. Due to the identical nature of low- and high-emissions industrial products, we expect that reporting and verification may need to happen before products are imported to the UK. We will work with our global trade partners on this methodology, including around the key challenge of verifying emissions data from other countries.

24. **\*What are your views on how the embodied emissions of imported industrial products should be reported?**

## Verification

Once reported, data would need to be verified and certified against any product standards, labelling, or procurement policy in place. For example, under the UK Emissions Trading Scheme, this is done by an independent verifier accredited by the UK Accreditation Service. Views on appointing a regulator or alternative certification body are welcome.

25. **What are your views on appointing a certification body?**

25.1 **Which organisations are active in your sector?**

**25.2** **Do you think there would be value in government alignment with these for new demand-side policy?**

# Current reporting schemes

Greenhouse gas emissions reporting schemes are well developed, whether run by government or the private sector, and there are several schemes that industrial businesses may already be subject to, or take part in voluntarily, on which new policy design could be based.

## UK government reporting schemes

It is likely that new data will be required from industry to accurately calculate the emissions of industrial products produced and traded in the UK. Understanding the links between existing schemes and potential new requirements will help us understand which data already collected through UK government and Devolved Administration reporting schemes (Annex Table A2) could be suitable.

**26. What are your views on existing government reporting schemes?**

**26.1** **Do you agree that existing reporting schemes do not provide the information necessary to calculate the emissions associated with industrial products produced and traded in the UK?**

**26.2** **What are the specific data gaps in existing schemes when it comes to assessing emissions associated with products?**

**26.3** **Do you have any additional views on how existing data could be used to calculate the emissions of industrial products?**

**26.4** **Do you have any additional opinions on existing government emissions reporting schemes that we should consider as we develop a new approach?**

## Other reporting schemes

Emissions reporting at the product level is well established in some sectors, and in some cases international standards already exist. There are many schemes already operating across industry, some in specific sectors and product groups, and others more generally (Annex Table A3). These schemes are often based on lifecycle assessment of products (see glossary), but there is no consistent methodology or definition of low emissions used across the schemes. We want to understand which reporting frameworks, beyond those run by UK government, industry currently engages with and why.

We realise that pure reporting schemes, such as Environmental Product Declarations, are not designed to determine whether a product can be considered green or not. Such schemes provide transparency about the environmental impact of inputs like steel or cement, as part of a lifecycle emissions analysis of a car or house, for example.

If a scheme exists that fulfils the reporting requirements of our new demand-side policy and is already adopted by parts of industry, government could endorse and expand such a scheme across other sectors or align our policy design with this approach. In line with our ambition to pursue joint international approaches to decarbonisation and carbon leakage mitigation, we are particularly interested in understanding which schemes are based on internationally recognised standards.

27. **In relation to existing non-government reporting schemes, please provide evidence where applicable on:**

- **Schemes operating in your sector or supply chain to monitor and verify the embodied emissions of intermediate and/or end-consumer industrial products, and whether you participate.**

- **The reporting framework and emissions scope covered by these schemes. Please be as specific as possible, including any internationally recognised frameworks, for example: 'BS EN 15804 EPD verification scheme, GreenBookLive, ISO 14025'.**

- **The proportion of your business's output (UK only) that is reported under such a scheme (please specify products and destination markets where possible).**

- **Why your business voluntarily reports product level embodied emissions. Or alternatively, why your business does not currently participate in voluntary emissions reporting schemes.**

28. **Do you believe there would be value in aligning any new demand-side policy data reporting framework with an existing voluntary emissions reporting scheme? If so, which? Please provide justification and how you assessed the benefits and limitations of the scheme.**

# Chapter 4 – Policy implementation

## Context

Government will be developing demand-side policies (Table 1) over the early 2020s, and these policies will evolve as we progress towards net zero. This chapter aims to gather stakeholder views on how demand-side policies can best be implemented. We want to understand:

- the role government can play in maximising the interest in demand-side policies from both manufacturers and buyers

- the best timing for the introduction of any new demand-side policy

- any wider considerations for the design of these policies, for example across businesses of different sizes or across different supply chains

This is the first step government is taking to gauge stakeholders' opinions on demand-side policies. There will be further opportunities for collaboration and engagement on implementation as policies are developed.

## Maximising interest in demand-side policies

We are interested in gathering stakeholders' views and expertise on how demand-side policies can best be designed for, and communicated to, industry and their buyers. Voluntary policies in particular will be more worthwhile if uptake is high; we want to ensure that these policies are designed to maximise the number of manufacturers that choose to use them and are easily understood by buyers.

### Manufacturers

For voluntary policies to work, government will need to convince businesses to sign up to them. There are several ways this could potentially be done, including:

- *Providing incentives:* For example, we could make participation in voluntary policies a requirement for access to UK government funding awards, or a requirement for businesses bidding for government contracts.

- *Designing policy in collaboration with stakeholders:* We are open to learning from stakeholders' experience and emulating or adopting good strategies to make compliance easy and user-friendly for all stakeholder groups, including SMEs.

- *Building trust:* We want to ensure that manufacturers trust the methodologies and processes underpinning policies. We are keen to understand the perceived risks for businesses and design our policies to mitigate them.

- *Communicating effectively:* We want to hear from stakeholders about how our policies can best be communicated to manufacturers of industrial products once the policy design is finalised, to ensure that our policies are widely recognised and understood.

29. **How should voluntary demand-side policies be designed and communicated to maximise uptake amongst manufacturers? Please consider:**

- **Methods to incentivise uptake and build trust amongst manufacturers.**

- **How we can make the design of any scheme desirable to participate in and user-friendly. Design aspects that have worked well or lessons from other schemes are welcomed.**

- **The support required for businesses to adopt voluntary demand-side policies and whether there are key groups who may need particular support to onboard new practices.**

- **Any barriers that might reduce uptake and how these could be overcome.**

- **Your preferred methods of engagement on the design and rollout of demand-side policies, e.g. consultations, informal or formal meetings, workshops, etc.**

## Buyers

Buying behaviour and procurement practices can play an important role in creating demand for low emissions industrial products. Our vision for demand-side policies is to enable buyers of industrial products to reduce their climate impact and use their spending power to support decarbonisation up the supply chain. We need to carefully consider how information about the climate impact of products is communicated to them, including through:

- *Giving buyers better information:* Any labelling system would need to be easily understood by buyers to enable comparison of embodied emissions across products. Ideally, we want a system that is comprehensible and user-friendly for end-consumers as well as business consumers, but government recognises that these two groups have different interests and may need different levels of information.

- *Building trust:* Establishing buyer trust in a labelling scheme would be paramount, and certification of any product would need to be verified by an independent third party. Trust and understanding could also be built through public awareness campaigns and direct engagement that explains the labelling methodology and processes.

- *Supporting buyers through procurement:* We want to understand both the opportunities and barriers faced by the private sector in increasing their green procurement practices, and what government can do to support this. We are open to approaches including facilitating buyers' alliances, public pledges or communications campaigns, and knowledge and skills support.

- *Communicating Effectively:* We are interested in how we can best communicate demand-side policies to buyers of industrial products. Options include tailored

engagement, forums to share knowledge and best practice, public awareness campaigns or new online information and guidance portals.

**Using public procurement:** Green procurement is a government priority, as demonstrated by the National Procurement Policy Statement, which places emphasis on tackling climate change and improving supplier innovation. Businesses bidding for major government contracts must set out a carbon reduction plan and commit to achieving net zero by 2050. Public procurement is subject to policy that differs across Devolved Administrations. More information on these policies can be found in the Wales procurement policy statement, the Scotland procurement policy note and the Northern Ireland procurement policy note.

30. **How should demand-side policies be designed and communicated to maximise uptake and understanding amongst buyers? Please provide your views on:**

    - **Methodologies for communicating information via labelling that you think would work in this context, or have worked well in other schemes.**

    - **Mechanisms of engagement, and how we can ensure buyers trust and understand how to use the new policies.**

    - **Actions government could take to facilitate a shift towards lower carbon private procurement amongst buyers of industrial products outside of standards and labelling (e.g. formation of buyers' alliances or other methods of combining purchasing power, methods of enabling buyers to share information, knowledge and best practice on green procurement).**

    - **Any views on how government could make schemes desirable to participate in.**

31. **In your view, are there further environmental criteria or sustainable practices that public contracting bodies could consider in individual commercial processes? Please provide examples and explain how these could support a market for low emissions industrial products.**

# Getting the timing right

Although we are convinced of the importance of introducing demand-side policies to drive progress towards net zero by 2050, we are aware that timing is crucial. Introducing these policies too early or too late could have consequences in terms of the pace of emissions reduction and ability of businesses to comply.

We set out an indicative timeline in the Industrial Decarbonisation Strategy (reproduced in the Introduction of this Call for Evidence) indicating the sequence in which we think demand-side policies could reasonably be introduced. In some sectors, where decarbonisation technologies are not yet available, we may need to introduce demand-side policies more slowly, whereas in others these policies may enable faster decarbonisation, through unlocking investment. More information about the decarbonisation plans of businesses will enable us to tailor demand-side policies to different sectors more effectively, and ensure that demand-side policies do not require too significant an emissions reduction in too short a timeframe.

32. **\*When would demand-side policies ideally be introduced to best support decarbonisation of your sector or business? Please consider:**

- **How the delivery timeline might need to vary for each policy (e.g. introducing voluntary policies prior to mandatory ones, which voluntary policies would be most helpful in the short-term, when public procurement could be most supportive etc.).**

- **For manufacturers – the likely decarbonisation pathway for your business and the wider domestic and international sector. For buyers - when you would like to begin purchasing low emissions products.**

- **Whether you would like to see early rollout of any demand-side policies in some sectors, followed by broader adoption across industry.**

- **Whether the early roll-out of demand-side policies would be a suitable method to incentivise improving energy and/or resource efficiency measures for your sector or business. Please specify which policies.**

## Other considerations

We know that for manufacturers to take part in demand-side policies effectively, there are a number of other factors we will need to take into consideration. Other than the timing and resource-related considerations above, we welcome views from stakeholders on any impacts demand-side policies could have across businesses and supply chains, and how we can mitigate any risks you may foresee.

33. **What other factors should government take into account when designing demand-side policies? Please submit evidence on:**

- **Any other schemes or policies which affect your sector that could interact with demand-side policies (e.g. ecodesign and energy information, producer responsibility schemes and deposit return scheme for drinks containers).**

- **How the introduction of demand-side policies may impact your business.**

- **Suggested mitigations against any risks that you foresee.**

# Call for Evidence questions

1. **\*What type of organisation do you represent? Please select one:**

   **a) Private sector business / for profit organisation: large**

   **b) Private sector business / for profit organisation: SME**

   **c) Trade association or other industry body**

   **d) Academic institution**

   **e) Non-Government Organisation (NGO)**

   **f) Private individual**

   **g) Other**

2. **\*Do you represent or hold expertise on a specific industrial sector? If yes, which sector?**

3. **\*Do you / your organisation manufacture or purchase industrial products as defined on page 9 of this document? Please select one:**

   **a) Manufacturer of industrial products**

   **b) Buyer of industrial products**

   **c) Both buyer and manufacturer**

   **d) Neither buyer nor manufacturer**

4. **If you are a manufacturer of industrial products, do you predominantly sell your products UK buyers or export to other countries? Please select one:**

   **a) Predominantly sell to UK market**

   **b) Predominantly export to other countries**

   **c) UK and international markets of similar or equal importance**

5. **If you are a buyer of industrial products, do you predominantly buy products from UK or international manufacturers? Please select one:**

   **a) Predominantly buy from UK manufacturers**

   **b) Predominantly buy from international manufacturers**

   **c) UK and international manufacturers or similar or equal importance**

**CHAPTER 1**

6. *Do you agree with the approach to the emissions scope set out in Chapter 1?

6.1 Does your business have estimates (either at the business level or the product level) of the split of emissions falling into Scope 1, Scope 2 and Scope 3? If so, please provide them.

6.2 What do you see as the optimal scope of emissions to be included in the definition of low emissions products in order for labelling and standards policy to be both effective and workable? Could the exclusion of some Scope 3 emissions create any negative impacts?

6.3 *Which, if any, Scope 3 emissions categories are essential for inclusion in the assessment for your sector/product(s)? Please specify why you think they should be included.

6.4 How should the emissions of 'value retained' products (see **glossary**) be evaluated to allow for comparison with new products?

6.5 *Are there any limitations of an emissions-only approach to assessing climate impact that may affect your sector/product(s)? Please specify any additional metrics that you think should be included.

7. *How do you think the level of emissions at which the definition of low emissions products is set should change over time?

7.1 *Do you agree it should become more stringent over time?

7.2 *Do you have any suggestions for how the level of emissions should be set?

7.3 *Do you have any suggestions for how a trajectory of increasing stringency should be shaped for your sector and how regularly any definition would need to be revisited?

7.4 How far in advance would you like government to give notice of this trajectory?

7.5 Do you have a suggestion of what an ambitious but achievable level of emissions would look like for your sector/product(s) through the 2020s? This can be expressed as a benchmark of embodied emissions or as conditions (for example, that the benchmark needs to be reasonable, given that deep decarbonisation technologies will not be readily available yet).

8. Do you agree with the approach of setting more stringent emissions levels as the basis for voluntary standards, vs lower-stringency mandatory standards?

8.1 What methodology could be used to determine the stringency of these more ambitious definitions?

**8.2    How could a range of low emissions levels for voluntary standards be used most effectively to drive industrial decarbonisation?**

**9.  Do you agree that sector-level definitions are likely to be the most appropriate level of granularity for demand-side policies?**

**9.1    Is there a method of simplifying the emissions scope in order to set one definition that covers a broad range, or all, of the products within your sector? (Such as the Responsible Steel cradle-crude steel approach)**

**9.2    Do you have a view on using market-wide assessment methodologies to allow buyers to compare products across sectors?**

**10. What are your views of the existing efforts to define low emissions for industrial products, either in your sector/for the products you manufacture, or for wider industry? In submitting your evidence, please include the following:**

**10.1   Provide details of the definition/scheme (e.g. sector/product(s) it applies to, emissions scope, benchmark) and, where possible, links to further information and/or contact details.**

**10.2   Are you a member of the scheme or would you consider signing up to it? Why/why not?**

**10.3   In your opinion, should government consider adopting or endorsing this definition/scheme? Why/why not?**

**CHAPTER 2**

**11. * How are products bought and sold in your sector and what is the demand for low emissions products? Please share further evidence on the following:**

**11.1   *When selling intermediate industrial products, which sectors does your sector predominantly sell to? What is the split between government and private sector demand?**

**11.2   *When buying intermediate products, which sectors does your sector predominantly buy from?**

**11.3   *Is there demand for lower emissions industrial products in your sector? Which type of customers does this come from?**

**11.4   Is existing demand for low emissions products sufficient for businesses to invest in decarbonisation in your sector?**

**12. Have some businesses in your sector already undertaken some level of decarbonisation that new demand-side policy could help consumers distinguish between products with different climate impacts?**

13. Do you think that a voluntary product standard and/or product label would be sufficient to change buyers' behaviour? Why/why not?

14. How do the green credentials of a product feature in buyers' behaviour and purchasing decisions? Please consider:

**For buyers of industrial products**

14.1 Which factors are most important when making purchasing decisions?

14.2 Would you find an embodied emissions (e.g. carbon footprint, traffic-light) product label helpful? Would budget-holders factor it into procurement decisions (and how significant would it be)?

14.3 Have your budget-holders and/or procurement teams received training to help assess the climate impact of purchasing decisions? Do you feel equipped to assess the climate impacts of products?

**For manufacturers and sellers of industrial products**

14.4 Would you find an embodied emissions (e.g. carbon footprint, traffic-light) product label helpful in differentiating your product from others in the market?

14.5 Has your sales team received training to help market the climate impact of your products?

**For all respondents**

14.6 Do you have other views on how the green credentials of a product could be given greater priority by buyers?

14.7 Bearing in mind your response to Q6.3 (Chapter 1), what other information or labelling would be helpful for differentiating and driving the market for products with a lower environmental footprint? This could include, or be instead of, embodied emissions.

15. What impact could demand-side policy, such as low emissions product standards or procurement, have on your sector's supply chain, both upstream and downstream? Consider the following possibilities and include others if relevant:

15.1 Could the introduction of demand-side policies adversely affect the market for specific raw or recycled materials?

15.2 Could new policy drive cost increases for manufacturers further along the supply chain?

15.3 Could new policy create carbon leakage risk elsewhere in the supply chain, for example through introducing new costs to a part of a sector that are not already protected through existing carbon leakage policies?

15.4 How might any impacts vary based on the stringency of the low emissions definition? How might any impacts vary between domestic and non-domestic supply chains?

16. Do you agree that the factors discussed above are key to assessing which sectors should be targeted by demand-side policy?

16.1 Are there other sectoral characteristics you think need to be considered?

16.2 Would you say that some characteristics are more important than others?

17. *Would your sector be a suitable target for new demand-side policy over the next 5-10 years? When submitting evidence please consider:

- How this might vary dependant on policy lever.

- Where in your supply chain new demand-side policy would have the greatest benefit (for example, an upstream product/process that accounts for most of the embodied emissions in end-consumer products, or at the point of transaction).

- Which product markets for your sector will require the greatest policy influence to shift procurement to low emissions industrial products.

18. Could a 'mandatory for UK products only' approach be a reasonable first step in rolling out new mandatory standards or labelling policy?

19. Under what circumstances, or for which products, is it essential to target both UK production and imports from the start?

CHAPTER 3

20. *What are your views on how emissions reporting could be simplified? Please consider:

- The extent to which aggregated data (e.g. sector, sub-sector, company averages, product groups) would be accurate enough for demand-side policy to operate, in particular for scope 3 emissions

- If adopted, how such 'simplifications' could be accounted for. For example, firms using more accurate data could be rewarded by being permitted to resubmit data on a less frequent basis

- How we strike the balance between the accuracy of reporting and the effort required from businesses to comply

21. Does your sector already compile aggregated products emissions data?

21.1 If so, who is responsible for compiling and sharing this data?

22. **To maintain accuracy and trust in the system, how frequently should embodied emissions data be reported? Please consider:**

- **Existing emissions reporting cycles that your business is subject to, both government and non-government led**

- **The potential rate of decarbonisation within your sector (i.e., will there be many small emissions reductions over time, or one major reduction in emissions?)**

23. **For your sector, please submit evidence on the potential financial and administrative cost of mandatory embodied emissions reporting and verification for products sold in the UK.**

23.1 **Do you already collect the data required to measure emissions at product level?**

23.2 **If not, what would the potential administrative and financial impact be to do so?**

23.3 **What are your views on the practicality of measuring the embodied emissions of upstream and downstream inputs and processes in your business' supply chain, including those that occur overseas?**

24. ***What are your views on how the embodied emissions of imported industrial products should be reported?**

25. **What are your views on appointing a certification body?**

25.1 **Which organisations are active in your sector?**

25.2 **Do you think there would be value in government alignment with these for new demand-side policy?**

26. **What are your views on existing government reporting schemes?**

26.1 **Do you agree that existing reporting schemes do not provide the information necessary to calculate the emissions associated with industrial products produced and traded in the UK?**

26.2 **What are the specific data gaps in existing schemes when it comes to assessing emissions associated with products?**

26.3 **Do you have any additional views on how existing data could be used to calculate the embodied emissions of industrial products?**

26.4 **Do you have any additional opinions on existing government emissions reporting schemes that we should consider as we develop a new approach?**

27. **In relation to existing non-government reporting schemes, please provide evidence where applicable on:**

- **Schemes operating in your sector or supply chain to monitor and verify the embodied emissions of intermediate and/or end-consumer industrial products, and whether you participate**

- **The reporting framework and emissions scope covered by these schemes. Please be as specific as possible, including any internationally recognised frameworks, for example: 'BS EN 15804 EPD verification scheme, GreenBookLive, ISO 14025'**

- **The proportion of your business's output (UK only) that is reported under such a scheme (please specify products and destination markets where possible)**

- **Why your business voluntarily reports product level embodied emissions. Or alternatively, why your business does not currently participate in voluntary emissions reporting schemes.**

28. **Do you believe there would be value in aligning any new demand-side policy data reporting framework with an existing voluntary emissions reporting scheme? If so, which? Please provide justification and how you assessed the benefits and limitations of the scheme.**

**CHAPTER 4**

29. **How should voluntary demand-side policies be designed and communicated to maximise uptake amongst manufacturers? Please consider:**

- **Methods to incentivise uptake and build trust amongst manufacturers.**

- **How we can make the design of any scheme desirable to participate in and user-friendly. Design aspects that have worked well or lessons from other schemes are welcomed.**

- **The support required for businesses to adopt voluntary demand-side policies and whether there are key groups who may need particular support to onboard new practices.**

- **Any barriers that might reduce uptake and how these could be overcome.**

- **Your preferred methods of engagement on the design and rollout of demand-side policies, e.g. consultations, informal or formal meetings, workshops, etc.**

30. **How should demand-side policies be designed and communicated to maximise uptake and understanding amongst buyers? Please provide your views on:**

- **Methodologies for communicating information via labelling that you think would work in this context, or have worked well in other schemes.**

- **Mechanisms of engagement, and how we can ensure buyers trust and understand how to use the new policies.**

- **Actions government could take to facilitate a shift towards lower carbon private procurement amongst buyers of industrial products outside of standards and**

**labelling (e.g. formation of buyers' alliances or other methods of combining purchasing power, methods of enabling buyers to share information, knowledge and best practice on green procurement).**

- **Any views on how government could make schemes desirable to participate in.**

31. In your view, are there further environmental criteria or sustainable practices that public contracting bodies could consider in individual commercial processes? Please provide examples and explain how these could support a market for low emissions industrial products.

32. *When would demand-side policies ideally be introduced to best support decarbonisation of your sector or business? Please consider:

- **How the delivery timeline might need to vary for each policy (e.g. introducing voluntary policies prior to mandatory ones, which voluntary policies would be most helpful in the short-term, when public procurement could be most supportive etc.).**

- **For manufacturers - the likely decarbonisation pathway for your business and the wider domestic and international sector. For buyers - when you would like to begin purchasing low emissions products.**

- **Whether you would like to see early rollout of any demand-side policies in some sectors, followed by broader adoption across industry.**

- **Whether the early roll-out of demand-side policies would be a suitable method to incentivise improving energy and/or resource efficiency measures for your sector or business. Please specify which policies.**

33. What other factors should government take into account when designing demand-side policies? Please submit evidence on:

- **Any other schemes or policies which affect your sector that could interact with demand-side policies (e.g. ecodesign and energy information, producer responsibility schemes and deposit return scheme for drinks containers).**

- **How the introduction of demand-side policies may impact your business.**

- **Suggested mitigations against any risks that you foresee.**

# Glossary

| Term | Definition |
|---|---|
| **Buyers** | Individuals or organisations that purchase industrial products, such as those in the construction or automotive sectors. |
| **Carbon leakage** | The displacement of production, and associated greenhouse gas emissions, in ways that would not have happened if the pricing (or regulation) of emissions across jurisdictions was implemented in an equivalent way. |
| **Circular Economy** | An approach to managing resources that involves products and materials being kept in use for as long as possible, extracting maximum value from them. It means products and materials are reused, repaired, remanufactured, recycled or regenerated whenever possible and appropriate. |
| **Consumption emissions** | Emissions that are associated with consumption spending on goods and services, wherever in the world these emissions arise along the supply chain, and those which are directly generated by households through private motoring and burning fuel to heat homes. |
| **COP** | COP stands for 'Conference of the Parties' and refers to the decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC). In November 2021, the UK hosted the 26th annual session of the Conference of the Parties to the Convention, or 'COP26', in Glasgow. |
| **Decarbonisation** | A process of reducing the greenhouse gases we release into the atmosphere. |
| **Demand-side policies** | Government actions that aim to increase overall demand for a product or service through growing the market. In the case of this Call for Evidence, we are focused on mandatory and voluntary product standards, product labelling, and public and private procurement approaches for low emissions industrial products. [Table 1: Summary of Potential Demand-Side Policy Options Explored in the Industrial Decarbonisation Strategy](#) provides further detail. |
| **Embodied emissions** | The sum of all the emissions produced in the manufacture, use and end of life stages of a product, outside of operational emissions. This includes (but is not limited to) emissions from the extraction and transportation of raw materials, and the manufacturing processes used to create the final product. |
| **Emissions Trading Scheme (ETS)** | Provides a long-term carbon price signal for UK heavy industry, aviation and power sectors to incentivise sector decarbonisation |

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| | and support the UK to meet its legally binding carbon reduction targets. |
| **End consumer** | The end-user or consumer of a product that is not sold on or used in the manufacture of another product. |
| **End-consumer product (or 'finished' product)** | A product which, once purchased, is consumed or used directly by the purchaser and is not sold on or used in the manufacture of another product. |
| **Energy efficiency** | When something performs better using the same amount of energy or delivers the same performance for less. The principle of energy efficiency can be applied to many things: buildings, products, appliances, manufacturing processes, to name a few. |
| **Environmental Product Declaration (EPD)** | A independently verified report that communicates what a product is made of and how it impacts the environment across its entire life cycle. |
| **Greenhouse Gas (GHG) Emissions** | Addition to the atmosphere of gases that are a cause of global warming, including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. |
| **Industrial Deep Decarbonisation Initiative (IDDI)** | A global coalition of public and private organisations working to standardise carbon assessments, establish public and private sector procurement targets, incentivise investment into low-carbon product development and design industry guidelines, to stimulate demand for low emissions industrial products. |
| **Industry** | Businesses and organisations involved in manufacturing, refining, coke production and mining. |
| **Intermediate industrial product (or 'semi-finished' product)** | A manufactured product which goes on to be used in the manufacture of a final product. Examples include steel, cement and glass. (Some products can be both an intermediate product and an end-consumer product.) |
| **Lifecycle assessment** | Lifecycle assessment is a cradle-to-grave or cradle-to-gate analysis technique to assess environmental impacts associated with all the stages of a product's life, from raw material extraction through materials processing, manufacture, distribution, and use. |
| **Low emissions products** | Products manufactured producing fewer, or even zero, emissions. This is a working definition for the purpose of this Call for Evidence, per the discussion in Chapter 1. |
| **Mandatory Product Standards** | Regulations requiring products to meet certain criteria in order to be placed on the market. |
| **Manufacturers** | Businesses that manufacture industrial products, such as steel or glass firms. |

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|---|---|
| **Net Zero** | Refers to a point at which the amount of greenhouse gas being put into the atmosphere by human activity in the UK equals the amount of greenhouse gas that is being taken out of the atmosphere. |
| **Offsets** | A reduction in greenhouse gas emissions – or an increase in carbon storage e.g. through land restoration or planting trees – to compensate for emissions that occur elsewhere. |
| **Product labelling** | A mark or label on a product's packaging which conveys information to the consumer about the product's unique value. For example, a label might signal that a product has been certified as meeting a particular standard. |
| **Sector** | A grouping of businesses that procure or sell similar products (e.g. the chemicals sector). |
| **Small and Medium Sized Enterprises (SMEs)** | Businesses with fewer than 250 employees and an annual turnover under €50 million. |
| **Supply chain** | The entire process of making and selling goods, which may involve intermediate products transferring between businesses who undertake different manufacturing stages, before becoming end-consumer products |
| **Value-retained products (VRP)** | Activities that involve or enable the extension of a product's service life beyond its original expected lifespan. These processes include reuse, repair, refurbishment, and remanufacturing. Key enablers to VRP include design and manufacture to enable continued use, and business model innovation such as "through-life engineering services", sharing and servitisation. After a VRP, the same form as the original product is retained, thus displacing the emissions associated with production of a new product with only the lower emissions associated with the VRP.<br><br>Value can also be retained in the economy after products reach end-of-life and are disposed, for example by recovering and reusing the constituent materials from which they are made, including via recycling processes. |
| **Voluntary buyers' alliance** | Two or more organisations combining their purchasing power in order to achieve value for money. |
| **Voluntary Product Standards** | Voluntary product standards establish a recommended specification for a particular aspect of a product. Manufacturers can choose whether to meet this standard. Those that do, receive certification which demonstrates to consumers the quality or value the product has, which differs from others on the market. |

# Annex Tables

## Table A1. Emissions Scopes

**Emissions Scopes** are a way of categorising different greenhouse gas emissions sources for reporting purposes.

- **Scope 1 (direct emissions):** emissions from activities owned or controlled by an organisation. For example, emissions from combustion in owned or controlled boilers, fuel used in company vehicles, and emissions from chemical production in owned or controlled equipment.

- **Scope 2 (indirect emissions):** emissions associated with an organisation's consumption of purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of an organisation's energy use, but occur at a source not owned or controlled by the organisation (e.g. a power plant).

- **Scope 3 (other indirect):** emissions as a consequence of an organisation's actions that occur at sources not owned or controlled by the organisation and are not classed as Scope 2 emissions. This includes both upstream and downstream emissions.

  - **Upstream emissions:** e.g. business travel by means not owned or controlled by the organisation, waste disposal or the embodied emissions of materials or fuels purchased by an organisation.

  - **Downstream emissions:** e.g. processing of sold products, use of sold products and the end-of-life treatment of sold products.

- **Product Lifecyle Emissions:** all the emissions associated with the production and use of a specific product from cradle to grave, including emissions from raw materials, manufacture, transport, storage, sale, use and disposal i.e. Scope 1, 2 and 3 combined.
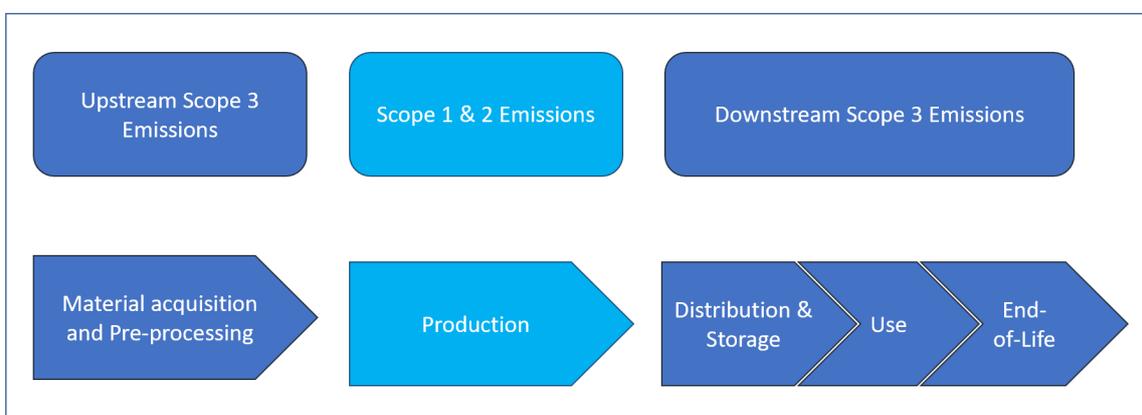
Figure 2: Division of product lifecycle emissions by scope

# Table A2. Business, energy and emissions reporting schemes operated by UK government or Devolved Administrations (non-exhaustive list)

| UK Government Scheme | Reporting Requirements (simplified) | Participation | Reporting Period |
|---|---|---|---|
| **Annual Business Survey (ABS)** | Financial data (GVA, turnover, expenditure)<br>Purchases (goods, materials, services)<br>Employment | Mandatory (selected businesses) | Annual |
| **Climate Change Agreements (CCAs)** | Emissions reduction target, target year and baseline year<br>Facility throughput (units processed)<br>Energy use at target unit by fuel type (e.g. electricity, gas)<br>Actual production level | Voluntary | 2 years |
| **Energy Label** | Energy use and product activity (intensity metric dependent on product, e.g. kWh per 1000h use) | Mandatory (energy-using products) | Per product, standards rescaled as required |
| **Energy Savings Opportunity Scheme (ESOS)** | Company-level energy consumption and costs<br>Energy efficiency opportunities | Mandatory (large companies) | 4 years |
| **Procurement Policy Notice (PPN 06/21)** | Carbon Reporting Plan<br>Waste generation<br>Upstream and downstream transportation and distribution<br>Employee commuting, business travel | Mandatory (when bidding for government contracts >£5m) | Per project |
| **Scottish Pollutant Release Inventory (SPRI)** | Annual releases of specified pollutants to air and water<br>Waste output | Mandatory (SEPA-regulated industrial facilities) | Annual |
| **Streamlined Energy and Carbon Reporting (SECR)** | Company-level annual emissions<br>Scope 1 and 2 required<br>Scope 3 voluntary<br>Company specific emissions intensity ratio | Mandatory (large companies) | Annual |

| Taskforce on Climate-related Financial Disclosures (TCFD) | Climate related risks and opportunities<br><br>Company-level Scope 1-3 emissions | Mandatory (large companies, phased 2023-25) | Annual |
| --- | --- | --- | --- |
| UK's Carbon Footprint (published by DEFRA) | UK territorial emissions<br><br>UK consumption emissions by product category (from products imported to the UK) | Data aggregated from other government schemes | Annual |
| UK Emissions Trading Scheme (UK ETS) | Emissions from installations<br><br>Monitoring approaches and plan, identified data gaps | Mandatory (Energy Intensive Industries and large installations) | Annual |

# Table A3. Emissions reporting, standards and labelling schemes not operated by UK government or Devolved Administrations (non-exhaustive list)

| Private Sector / International Scheme | Reporting Requirements (simplified) | Participation | Reporting Period |
| --- | --- | --- | --- |
| Building Research Establishment's Environmental Assessment Method (BREEAM) | Project-level life cycle impacts and costs of materials (inc. embodied and operational emissions)<br><br>Materials and quantities<br><br>Installed energy and water consuming products<br><br>Third-party verified impact data, e.g. EPDs compliant with BS EN 15804, ISO 14025) | Voluntary (some local authorities mandate use) | Per project, with follow up |
| Environmental Product Declarations (EPDs) | Environmental impact assessment with product category rules for a wide range of products<br><br>Based on lifecycle analysis but reporting frameworks vary<br><br>Metrics include environmental impacts (not limited to): global warming potential, ozone layer deletion, | Voluntary | 5 years |

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|---|---|---|---|
| | acidification and eutrophication potential, fuel resource depletion potential<br><br>Based on internationally recognised standards (e.g., ISO 15804) | | |
| **EU Ecolabel** | Dependent on product group<br><br>Life cycle analysis data (ISO 14024)<br><br>Not always emissions related<br><br>Some national governments mandate EPDs for businesses making green claims about products | Voluntary | Standards reviewed every 3-5 years |
| **Leadership in Energy and Environmental Design (LEED)** | Material lifecycle impacts and costs<br><br>Materials and quantities<br><br>Operational efficiency (energy, water)<br><br>Third-party verified material impact data (e.g. EPDs) | Voluntary (some local authorities mandate use) | Per project |
| **Nordic Swan Ecolabel** | Dependent on product group (59 groups included)<br><br>Assessment against harmful materials and processes<br><br>Not always emissions related | Voluntary | Standards reviewed every 4 years |
| **PAS 2080 – Carbon Management in Infrastructure** | Full lifecycle carbon emissions reporting and management in infrastructure projects<br><br>Target setting, baselines | Voluntary | Per project |

This Call for Evidence is available from: https://www.gov.uk/government/consultations/towards-a-market-for-low-emissions-industrial-products-call-for-evidence

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