ALDERSGATE GROUP
LEADERS FOR A SUSTAINABLE ECONOMY

BRIEFING

# POWERING UP PUBLIC PROCUREMENT TO DRIVE UK INDUSTRIAL DECARBONISATION AND COMPETITIVENESS

MARCH 2026

## Executive summary


UK heavy industry is a critical pillar of the economy but faces mounting challenges from rising costs, global competition, and the need to decarbonise.[1] **The transition to low-carbon industry presents a major opportunity** to revitalise the sector while supplying the products, like steel and cement, required to decarbonise the wider economy, including public sector infrastructure. One underutilised policy lever for supporting this transition by creating demand is low-carbon public procurement (LCPP).

The core competitiveness challenge facing low-carbon industry is that incumbent industries have been optimised for production over decades, achieving substantial cost efficiencies. As a result, highly cost-competitive but carbon-intensive materials continue to dominate public and private procurement decisions. **Lower-carbon alternatives are likely to become increasingly competitive as demand scales**, enabling production efficiencies and energy intensity advantages to be realised.

LCPP refers to an approach in which public authorities move beyond lowest-cost selection and systematically embed carbon reduction objectives into contract design, evaluation criteria, award decisions. LCPP can act both as a push, encouraging incumbent firms to scale up low-carbon production, and a pull, supporting innovation and new market entrants. If designed effectively, **LCPP could create a strong and credible demand signal** that stimulates investment and accelerates cost reductions.

To date, UK government action has largely focused on asking public procurers to have regard to greener procurement principles, rather than introducing specific limits or mandates. In practice, particularly where budgets are constrained, this approach can result in cost considerations continuing to drive product choices, even when decarbonisation and wider environmental objectives are formally embedded in procurement frameworks.

The **successful delivery of lower-carbon outcomes depends on specific mechanisms to recognise embodied carbon and detailed implementation**. Translating policy ambition into contracts that deliver real emissions reductions requires government to act as an intelligent customer, with a clear understanding of the markets it is shaping. This includes clarity on what government is procuring, in what volumes and timeframes; an assessment of domestic supply capacity and long-term outlook; and an understanding of market opportunities and barriers such as high energy costs, infrastructure constraints, or limited access to finance. Moreover, LCPP may need to explicitly consider the strategic value of domestic content, balancing long-term domestic supply chain resilience and energy security against potential upfront cost increases and short-term supply constraints. Without this granular, market-informed approach, LCPP risks remaining rhetorical rather than transformative for UK industry.

Equally important in designing LCPP is the need to consider public sector capacity, capability and cost constraints, as well as the pressure to deliver public infrastructure at pace.

This brief draws on research from Cambridge Econometrics on the role of public procurement as a demand-side lever for low-carbon industrial products, alongside analysis from the Aldersgate Group on the current procurement policy landscape. It identifies gaps in existing policy and sets out recommendations to strengthen the design, targeting, and enabling conditions for LCPP.


## Key findings

- **Public procurement could play a catalytic role in creating early demand for low-carbon industrial products**, supporting innovation, investment and cost reduction through the 'learning by doing' effect while advancing industrial resilience and job retention.
- **Economic benefits to industrial businesses, and more widely for the UK, from LCPP are not guaranteed.** Domestic firms face issues such as competitive pressures from imports, uneven capacity to respond across firm sizes, uncertain access to enabling infrastructure and finance, and investment risks arising from policy uncertainty and lack of guaranteed long-term market advantage.
- Despite strong political interest, **existing procurement policies have yet to translate into meaningful impacts for industrial producers.** There is no clear central guidance on procuring products based on embodied carbon, nor mandatory whole-life carbon assessments or embodied-carbon limits for major projects.
- **Public procurement is increasingly expected to support decarbonisation**, increased circularity and the Modern Industrial Strategy, yet these agendas risk being developed in parallel rather than in a coordinated way.
- **LCPP is not a standalone solution:** its success depends on alignment with regulatory, finance, infrastructure, skills, and energy policy that enables domestic industry to respond to the demand signal.

# Recommendations

01

The Department for Business and Trade (DBT) and the Department for Energy Security and Net Zero (DESNZ) should **align public procurement more explicitly with industrial strategy and decarbonisation objectives**, using low-carbon public procurement to stimulate investment in modern UK manufacturing. Government should establish a standardised approach to low-carbon and circular procurement across public bodies, including consideration of domestic supply chain, to provide a credible demand signal and strengthen UK industry. This should be supported by clear guidance to ensure consistent, outcomes-focused implementation.

02

The Cabinet Office should **raise ambition by introducing mandatory whole-life carbon assessments and progressive embodied-carbon limits for major public projects**, using an outcomes-focused approach that allows flexibility in delivery. The government should seek to extend these requirements across the public sector, including for Local Authorities.

03

**Public procurers should use public sector projects as lead platforms** for innovative materials, sharing performance data openly to build confidence and support wider adoption.

04

DESNZ should **prioritise the development of an embodied emissions reporting framework and product classifications**, working closely with the EU and other trading partners to ensure alignment and interoperability.

05

The Cabinet Office should **build procurement capability across public bodies**, including through a procurement innovation function, and support this with targeted engagement to raise awareness among businesses, particularly SMEs.

06

DBT and Cabinet Office should **work across government to improve transparency** by publishing forward-looking public demand data for industrial products to support supplier investment planning, and policy design.

07

DESNZ should use **multi-criteria assessments** to identify strategic industrial products where targeted LCPP can deliver the greatest impact, aligned with cross-government priorities. **Where products are identified as strategic, government should consider implementing targeted LCPP measures**, such as progressively increasing minimum thresholds for low-carbon products within projects.

08

DESNZ and DBT should work collaboratively to **ensure LCPP interventions are carefully sequenced with wider industrial and decarbonisation policies** and tailored to sector readiness and market conditions.

# The role for low-carbon public procurement

To date, UK industrial decarbonisation policy has focused primarily on supply-side measures, such as the Emissions Trading Scheme (ETS) and innovation funding, with comparatively limited demand-side incentives. Yet demand for low-carbon industrial products, while still nascent, has substantial growth potential. Demand-side policies can stimulate low-carbon production and complement carbon pricing, innovation funding, and return on public investment.[2,3]

This policy briefing examines how government could adopt a more ambitious approach to LCPP to accelerate the transition to a low-carbon economy and support the objectives of the Modern Industrial Strategy and the Industrial Decarbonisation Strategy. Part 1 examine the role of LCPP and Part 2 explores the public procurement policy landscape, identifying existing gaps. Part 3 considers how LCPP could be applied across the UK, setting out cross-cutting design principles and recommendations. Part 4 assesses the factors influencing the likely effectiveness of targeted LCPP across industrial sub-sectors and highlights key considerations for policymakers. Part 5 situates LCPP within the wider policy landscape, identifying the enabling policies and conditions required for success.

The analysis draws on research commissioned by the Aldersgate Group and delivered by Cambridge Econometrics (CE), which examined the role of LCPP in accelerating competitive industrial decarbonisation in the UK. CE's supporting technical report details the qualitative and quantitative methods, data, assumptions and findings from a theory of change assessment and a multi-criteria analysis of selected industrial sub-sectors. A key limitation was the lack of sub-sector-level data on public procurement spending, which constrained assessment of the economic costs and benefits of LCPP.[4] This brief also draws on additional desk-based research and insights from a workshop with Aldersgate Group members.

BOX 1

### Theory of Change – the potential economic impacts of low-carbon public procurement

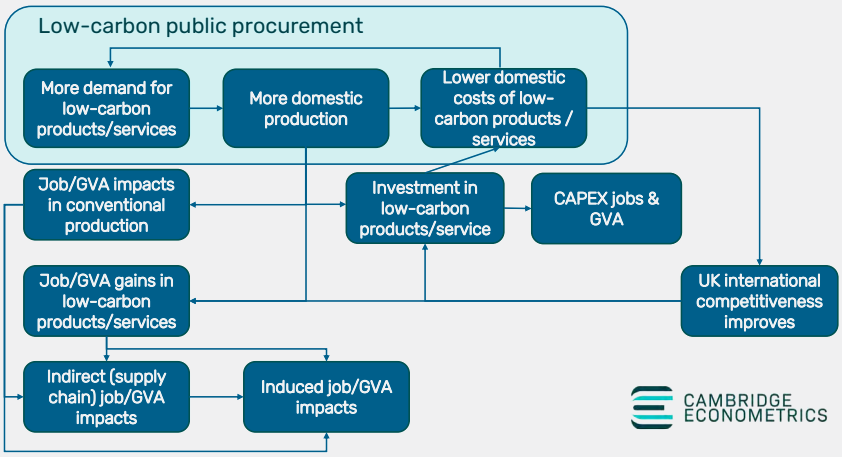
A low-carbon industrial product is an industrial product with significantly lower embodied carbon than standard alternatives. The term 'green' in relation to procurement and products is commonly used and may encompass a broader range of environmental considerations beyond embodied carbon. A lower-carbon product may be achieved through decarbonising production processes, improving material efficiency through design optimisation, increasing product reuse or recycling, or substituting materials with lower-carbon alternatives.

Product classification systems have been developed to define low-carbon products; however, there is no single universally agreed standard. Low-carbon products often carry a green premium - the additional cost compared to a standard, higher-carbon alternative. This premium exists because low-carbon technologies, materials, and production processes are often newer, less widely used, and therefore more expensive than conventional options.

LCPP has the potential to drive industrial change and economic growth through creating strategic demand for innovative low-carbon products. A Theory of Change assessment can be used to explore the pathways through which public procurement can stimulate market development, reduce costs, and encourage widespread adoption of cleaner technologies.

Cambridge Econometrics' Theory of Change diagram illustrates the potential impacts and pathways of low-carbon public procurement. It assumes domestic industry is stimulated by the demand signal from public procurement.

Theory of Change




The diagram illustrates how guaranteed demand for low-carbon products through public procurement could reduce uncertainty, signal that innovation is likely to be rewarded and encourage firms to invest in scaling production. As output increases, unit costs could fall through economies of scale and learning-by-doing, which may narrow the green premium and improve competitiveness. **Public procurement could therefore provide a critical early push for high-cost, early-stage technologies**, complementing carbon pricing and other demand-side measures to help accelerate commercial viability and improve their competitiveness against incumbents.

As costs decline, uptake by public and private buyers could increase, which may stimulate further domestic production and reinforce scale effects. Over time, falling prices could also benefit public purchasers,

potentially making low-carbon procurement increasingly cost-effective.

**LCPP could help unlock capital-intensive investment** in new or retrofitted production facilities and enabling infrastructure, which may generate direct impacts on employment and gross value added (GVA), including jobs across R&D, manufacturing, and construction. These investments could also create wider supply-chain and induced effects, potentially amplifying economy-wide growth.

By crowding in private investment, **LCPP could help position the UK as an early mover in low-carbon technologies**, which may support export opportunities and competitiveness in high-value supply chains. Given the UK's relatively limited competitiveness in traditional carbon-intensive industries, driven in part by import dependence and comparatively high energy and labour costs, low-carbon industrial production could represent a strategic opportunity to strengthen energy security, reduce exposure to fossil fuel imports, and support domestic employment and supply chains.

**Economic uncertainties**

- **Employment effects are uncertain.** While LCPP may create capital expenditure- (CAPEX) and wider infrastructure-related jobs, support job retention, and generate new roles, some low-carbon production processes may be more automated and therefore less labour-intensive.
- **Early-mover advantage is not guaranteed.** Early leadership in low-carbon production does not ensure long-term export competitiveness, particularly where other countries benefit from lower labour and energy costs or less stringent regulation.
- **Domestic capture of demand is uncertain.** This Theory of Change pathway assumes UK firms can meet increased demand from LCPP, yet domestic producers will compete with low-carbon imports. Mechanisms that value domestic content in procurement, alongside supporting investment in modernising UK industry and providing access to the required infrastructure could help address this risk. It is worth noting that under the World Trade Organization Government Procurement Agreement (GPA), environmental criteria may be incorporated into procurement processes, including performance-based requirements that support low-carbon materials. However, measures must be designed carefully to comply with the GPA's non-discrimination obligations.[5]
- **Uneven firm-level impacts.** Larger firms may be better positioned than SMEs to benefit from LCPP due to greater capacity to meet compliance requirements, such as emissions reporting and transition planning.

» **Policy change.** Policy that remains voluntary, target-based, or limited to high-level strategies without concrete regulatory underpinning creates uncertainty for business investment across industrial value chains, as it remains vulnerable to short-term political and economic pressures.

**Assessing the overall costs and benefits**

Low-carbon industrial products may be associated with a green premium, but these are likely to fall as production scales, helping overcome path dependency and improve competitiveness. While LCPP may initially increase tender costs and public spending, potentially adding to debt servicing pressures and short-term inflation, these impacts should be weighed against longer-term cost reductions and system-wide benefits for both public and private buyers, and the economy and environment more broadly.

Early investment is essential to avoid more costly, last-minute interventions. Although the UK faces competitiveness challenges in traditional heavy industrial production, maintaining industrial capacity remains critical for local economies and national resilience. Delayed action typically necessitates expensive, grant-heavy support, raising fiscal costs and reducing policy effectiveness.

The overarching objective is to strengthen economic resilience, including by mitigating future climate damages. Public infrastructure investment can be used strategically to advance decarbonisation and industrial objectives simultaneously, enhancing competitiveness, sustaining production capacity, and preserving industrial jobs. Well-designed policies such as LCPP can therefore align public investment with long-term economic and environmental returns.

*See Cambridge Econometrics (2026), Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical Report, for a full overview of the LCPP theory of change.*

## The current public procurement policy landscape

Whilst there is **clear appetite to use public procurement to support decarbonisation**, this has not yet translated into effective implementation. The 2021 Industrial Decarbonisation Strategy includes "Action 3.4: use public procurement to drive change," and the recent Carbon Budget and Growth Delivery Plan reiterates the government's intention to leverage public procurement spending to cut greenhouse gas emissions. Both documents refer repeatedly to using procurement to improve resource efficiency and support industrial decarbonisation.[6,7]

Internationally, the UK participates in the Industrial Deep Decarbonisation Initiative's (IDDI) Green Public Procurement Pledge committing to set ambitious, time-bound targets for purchasing low-emission steel, cement, and concrete.[8]

Recent updates under the UK Procurement Act 2023 more firmly embed social and environmental outcomes within the legal framework of public procurement. Some specific decarbonisation requirements have been introduced via revisions to the National Procurement Policy Statement and new Procurement Policy Notes (PPNs). These apply only to UK central government departments, their executive agencies, and non-departmental public bodies headquartered in England, as public procurement is a devolved matter. Local Authorities are required to "have regard to" these policies but do not have to follow them rigidly.

Despite this progress, there is no clear central government guidance on procuring products based on embodied carbon, nor mandatory requirements for whole-life carbon assessments for projects or embodied carbon limits for major projects. Barriers to LCPP include inconsistent definitions of "low-carbon," which limit comparability; fragmented approaches to setting commitments; and misconceptions about market availability and cost. The Department for Energy Security and Net Zero (DESNZ) is developing a policy framework to grow the market for low-carbon industrial products and has proposed voluntary procurement guidance for both the public and private sectors. **Box 2** provides further detail on the current low-carbon public procurement landscape, including existing policy measures and industry-led standards and frameworks.

One key barrier to LCPP has traditionally been the green premium associated with low-carbon products. However, the February 2026 update to the Treasury's Green Book (the guidance for appraising public spending) may enable a more ambitious approach by shifting emphasis from narrow cost–benefit thresholds to a broader assessment of public value, and giving greater weight to environmental, social and resilience outcomes.[9] The update strengthens the case for designing public procurement to prioritise sustainable and locally resilient supply chains over lowest upfront cost.

BOX 2

## Overview of low-carbon public procurement policy landscape in England

The UK Procurement Act 2023 (in force from 2025) establishes a new public procurement regime that embeds social and environmental outcomes within the legal framework, building on the concept of Social Value. Contracting authorities may incorporate environmental and social criteria into award decisions. The shift from "Most Economically Advantageous Tender" to "Most Advantageous Tender" provides greater flexibility to assess bids on environmental, social and innovation considerations alongside price.[10,11]

While this brief focuses on CO2 emissions, it is also important for public procurers to consider wider environmental impacts, including effects on nature, water resources and related environmental outcomes.

There is no universal mandatory carbon disclosure law for all public projects and no mandatory requirement to procure low-carbon products. A range of policies and standards exist that seek to encourage public procurement to take account of embodied and lifecycle carbon.

- **Government strategy commitments** - *The Carbon Budget and Growth Delivery Plan and the Industrial Decarbonisation Strategy* state the intention to use public procurement to support industrial decarbonisation.[12,13]
- **IDDI Green Public Procurement Pledge** - the UK has committed at Level 3, governments adopt progressively stronger requirements for low-carbon construction materials. Level 1 requires the disclosure of embodied carbon for cement, concrete, and steel in public projects by 2025. Level 2 adds a requirement for whole-life cycle assessments in public construction by 2030, with net zero emissions across public construction targeted for 2050. At Level 3, governments must require the procurement of low-emission cement, concrete, and steel for public projects by 2030, applying the highest possible ambition under national circumstances. Level 4 goes further, requiring from 2030 that a defined share of cement and/or crude steel for major "signature" projects comes from near-zero-emission production.[14]
- **National Procurement Policy Statement (updated 2025)** - Includes explicit net zero objectives. Contracting authorities must have regard to the NPPS under the Procurement Act 2023.[15]
- **PPN 06/21 – Carbon Reduction Plans (2023)** - Requires suppliers bidding for major government contracts (£5m+) to commit to net zero by 2050, publish a Carbon Reduction Plan,

and outline environmental management measures. Suppliers not meeting these requirements are ineligible.[16]

- **PPN 006 (Updated Feb 2025)** - Reinforces similar requirements for contracting authorities to consider suppliers' Carbon Reduction Plans.[17]
- **PPN 016: Carbon Reduction Contract Schedule (Updated Feb 2025)** - Provides standard terms and conditions for setting project-specific decarbonisation objectives and monitoring supplier performance.[18]
- **The Construction Playbook (Dec 2022)** - Advises central government contracting authorities to adopt whole-life carbon assessments for new public works projects on a "comply or explain" basis.[19] Requirements are not yet fully mandatory and methodologies vary.
- **DESNZ's 2025 consultation on a framework for growing the market for low-carbon products** - Proposes clearer government guidance for procuring industrial products based on embodied emissions, including an Embodied Emissions Reporting Framework, product classifications, and green procurement guidance for low-carbon steel, cement, and concrete. The procurement framework would roll out in three stages, from core guidance and data collection to best-practice carbon accounting and ultimately recommending low-carbon products. The guidance would be incorporated into the Government Buying Standards, initially as voluntary guidance that could become mandatory over time.[20]

Several industry-led standards and frameworks also influence public projects, including:

- **Building Research Establishment Environmental Assessment Method** (BREEAM) - Encourages the use of low-carbon materials in buildings.
- **PAS 2080** - Used in some public contracts to manage whole-life carbon in buildings and infrastructure, from design to decommissioning.
- **UK Net Zero Carbon Buildings Standard** - A unified methodology for verifying that a building meets UK net zero carbon goals.
- **Part Z** – An industry proposal to amend the Building Regulations 2010 to require whole-life carbon assessments and set embodied-carbon limits for major projects. It would introduce mandatory reporting first, followed by carbon limits once robust targets are established.

In parallel, the government is using public procurement to advance its Modern Industrial Strategy, which seeks to drive competitiveness, growth and regional prosperity by prioritising strategic sectors, such as advanced manufacturing, and recognising foundation industries as critical to economic resilience.[21] A range of demand-side measures are being used to support domestic industry, including exploration of a Market Demand Guarantee to stimulate UK production and the active Clean Industry Bonus, which incentivises offshore wind developers to invest in priority UK regions.[22,23] Early evidence suggests strong leverage, with every £1 of public funding through the Clean Industry Bonus crowding in £17 of private investment across UK manufacturing, supply chains and ports.[24]

In summer 2025, the Cabinet Office consulted on strengthening domestic competitiveness and resilience through procurement, building on the Procurement Act 2023. Proposals included enhanced support for SMEs and social enterprises, alongside targeted interventions to strengthen national capability and local jobs and skills.[25] The 2025 Autumn Budget reinforced this approach, committing to greater use of procurement to support both high-growth Modern Industrial Strategy sectors and foundation industries such as steel. Each department will appoint a Procurement Innovation Champion to lead delivery, supported by an Innovation Marketplace and a task-and-finish group to remove barriers to innovative procurement. Innovate UK has also launched an Advance Market Commitment for concrete, designed to stimulate private investment and establish a lead market in clean concrete technologies.[26]

The government is also developing a Circular Economy Strategy for England (led by the Department for Environment, Food and Rural Affairs), which is expected to prioritise resource efficiency, net zero and environmental outcomes, alongside economic growth and competitiveness. Greater material circularity also supports the decarbonisation of industrial products. Embedding circularity within public procurement presents an opportunity to drive innovation, infrastructure development and skills investment in the circular economy.

Public procurement should not operate in silos, particularly as government seeks to deliver multiple missions through this powerful policy lever. While the increased focus on using procurement to support domestic industry is welcome, both the Circular Economy Strategy and the Modern Industrial Strategy explicitly prioritise environmental objectives and the net zero transition. Procurement policy should therefore align closely with these aims, adopting a more ambitious approach to stimulating demand for low-carbon and circular industrial products and supporting UK firms to invest in modern, resource-efficient and low-carbon manufacturing.

# Key principles for applying low-carbon public procurement to the UK

Insufficient demand for low-carbon industrial products remains a major barrier to industrial decarbonisation. Using public procurement to anchor demand and create lead markets offers a significant opportunity to strengthen competitiveness in low-carbon production while enhancing economic security and resilience. This section sets out the key principles and prerequisites for effective LCPP, informing the design of future procurement policy.

## Prioritising low-carbon outcomes

Policy measures to embed decarbonisation criteria in public procurement, alongside voluntary low-carbon procurement initiatives in the private sector, remain nascent. Embodied carbon considerations remain a secondary and largely voluntary factor in public-sector procurement, leading to inconsistent and fragmented outcomes. **Cost continues to be the primary factor shaping purchasing decisions for industrial products**, followed by availability and familiarity. However, some evidence suggests that the cost impacts of low-carbon alternatives on the total project cost can be relatively modest; for example, recent EU analysis indicates that switching to low-carbon cement may increase total building costs by around 2%, well below the cost volatility associated with fossil fuels.[27] Given the swift development of technology and changing market dynamics of incumbent products, more up-to-date and UK-specific analysis is needed to understand the impact on overall project costs of LCPP.

The lack of clear government guidance on procuring products based on embodied carbon risks limiting the use of product-level LCPP and leading to inconsistent approaches across government departments and public bodies. While some organisations have adopted ambitious green public procurement practices and demonstrated positive outcomes (see **Box 3**), businesses report wide variation in requirements and expectations. This inconsistency can increase burdens on suppliers and frustrate firms that have invested early in low-carbon capabilities. **Greater consistency across public procurement would provide clearer signals to the market, improve certainty around future demand, and better support business investment decisions.**

Other jurisdictions have introduced mandatory whole life carbon assessments and emissions limits. For example, France and Denmark have set maximum thresholds, which aim to encourage innovation in low-carbon construction.[28]

- Government should strengthen existing public procurement requirements by **mandating whole-life carbon assessments for public projects and introducing progressively tightening**

**embodied-carbon limits for major developments**. Thresholds should be informed by carbon budgets and market readiness, including product availability and supply chain capacity. This approach would promote an outcomes-focused framework, giving procurers and contractors flexibility in how emissions reductions are achieved while ensuring consistent, measurable, and meaningful decarbonisation across the public estate.

- **Increase support for local authority LCPP to raise ambition and improve consistency across public procurement practices.** This would require considerable investment in skills and capabilities at various levels of governance, although effective use of digital systems and artificial intelligence may support scale-up.

BOX 3

## Example of high-ambition public procurement policy in practice

### The Greater London Authority Responsible Procurement Policy[29,30]

The Greater London Authority (GLA) Group procures around £9.5bn of goods and services each year. Delivery is guided by its Responsible Procurement Policy and Implementation Plan, supported by a Central Responsible Procurement Team that provides leadership and advice across GLA bodies. The policy prioritises supplier diversity, good work and skills, and environmental improvement, with a particular focus on opening supply chains to small and diverse-owned businesses. Since April 2018, the GLA Group has spent over £3.5bn with micro, small and medium-sized enterprises.

The Mayor's target for London to reach net zero by 2030 is embedded within the Responsible Procurement programme, particularly in high-emissions areas such as construction. All suppliers bidding for contracts over £5m are required to produce a Carbon Reduction Plan, creating a platform for structured engagement with major suppliers and signposting to guidance and external support. This requirement was expected to apply to more than 100 contracts tendered across the GLA Group in 2023–24.

Capability-building has supported delivery. **Transport for London** has trained 263 procurement staff in carbon literacy, strengthening its ability to embed and assess low-carbon requirements. This has contributed to tangible outcomes, including the Surrey Quays Station upgrade, which cut emissions by nearly 40% against its initial design target through application of the PAS 2080 standard for reducing infrastructure supply chain emissions. Other GLA bodies have also

delivered measurable savings. The **Metropolitan Police Service** avoided 312 tonnes of $CO_2e$ across refurbishment projects by reusing materials such as floor tiles, carpet tiles and heaters.

Separately to public procurement, the GLA sets planning requirements which influence private sector practices. Under the London Plan 2021, the GLA requires Whole Life Carbon (WLC) assessments and Circular Economy (CE) Statements for large or strategically significant applications that must be reviewed by the Mayor. WLC assessments quantify and seek to reduce emissions across the full lifecycle of a building, while CE Statements demonstrate how developments minimise waste and maximise material reuse in line with circular economy principles.[31]

**The NHS Net Zero Supplier Roadmap[32]**

In 2020, the **National Health Service (NHS)** became the first healthcare system globally to commit to net zero and published a dedicated strategy. Since then, NHS Carbon Footprint emissions have fallen by 14%, and by more than 68% since 1990. A significant share of emissions sits within the goods and services the NHS procures.

To address this, the NHS published its Net Zero Supplier Roadmap in 2021, setting out clear expectations for supplier decarbonisation to 2030. From April 2022, all new NHS procurements applied a 10% weighting for net zero and social value. This was followed in April 2023 by implementation of Cabinet Office Procurement Policy Note 006, requiring suppliers bidding for contracts above £5m per year to publish a Carbon Reduction Plan (CRP). From April 2024, this requirement was proportionately extended across all new NHS procurements.

Looking ahead, from 2027 suppliers will be required to publicly report emissions, targets and reduction plans covering relevant Scope 1, 2 and 3 emissions. From 2028, new product-level requirements will be introduced to provide carbon foot printing for individual products supplied to the NHS, with scope and methodology developed in collaboration with suppliers and regulators.

## Navigating multiple procurement policy priorities

There is an opportunity to better align the government's Industrial Strategy with decarbonisation. Strategic use of public procurement provides a practical mechanism to link these agendas, as demonstrated in the EU (see **Box 4**). An aligned approach must account for domestic industrial capabilities and carefully manage the interaction between competition induced through LCPP and the risk that existing firms are unable to respond

to low-carbon demand signals due to investment barriers such as high electricity costs or infrastructure constraints.

As described in Box 4, the EU's public procurement approach, alongside the wider Industrial Accelerator Act, includes prioritising domestic content to strengthen industrial competitiveness. While this can support domestic industry, it may also introduce risks (particularly in the short-term), including higher upfront project costs, supply chain constraints, and potential international trade implications. A proportionate and market-sensitive approach is therefore needed when considering domestic content mechanisms. A balance must be struck in the design of procurement policy, between addressing the economic impact uncertainties associated with LCPP (identified in **Box 1**) and the ongoing role of strategic international trade partnerships, while also ensuring public projects remain affordable and can be delivered at pace during a period of constrained public finances and accelerated infrastructure investment.

Beyond decarbonisation and industrial support, public procurement can also deliver wider objectives, including social value and circular-economy outcomes such as resource efficiency. While these objectives may often be complementary, trade-offs will arise alongside budget constraints and delivery timelines. Poorly defined or competing requirements risk increasing burden and uncertainty for suppliers. Clear, consistent procurement guidance is therefore essential, particularly on how embodied carbon considerations are weighted against other criteria such as local economic benefits. A standardised approach to low-carbon and circular public procurement across public bodies would send a strong and credible signal to the supply chain.

- Government should **conduct an impact assessment of more ambitious, multi-outcome public procurement to identify risks, opportunities, and trade-offs.** The findings should inform a standardised approach to low-carbon and circular procurement across public bodies, including the role of domestic content prioritisation, to provide a clear and credible demand signal and strengthen UK supply chain investment.
- Government should **develop clear procurement guidance to support consistent implementation**, enabling an outcomes-focused and flexible approach while providing procurers and contractors with the clarity needed to prioritise emissions reduction, circularity, and strategic supply chain objectives.

Project costs are a critical area for scrutiny, and public procurement would benefit from a more comprehensive approach to cost assessment. This should include better quantification of social and economic benefits and consideration of total cost of ownership across the asset lifecycle, from upfront capital and operational costs to deconstruction and disposal. Incorporating these longer-term costs and benefits can strengthen the case for more circular and resource-efficient products.

BOX 4

## The EU's Clean Industrial Deal

Launched in February 2025, the EU's **Clean Industrial Deal (CID)** positions decarbonisation as a driver of competitiveness, growth and resilience across the EU. A key legislative initiative under the deal is the **Industrial Accelerator Act (IAA)**, which targets emissions reductions in heavy industry while also promoting circularity and supply-chain resilience.[33] The European Commission adopted and published the IAA as an official legislative proposal in early March 2026.[34]

The IAA aims to combine demand-side and supply-side measures to accelerate industrial decarbonisation. On the demand side, it seeks to stimulate markets for low-carbon industrial products through tools such as ecolabels, public procurement incentives, non-price tender criteria, and minimum EU content requirements. Public sector buyers will be encouraged to prioritise resilience, sustainability and innovation alongside cost, ensuring public spending supports high-quality job creation and industrial innovation. The EU will also draw on experience from implementing the **Net Zero Industry Act**, which aims to scale up manufacturing capacity for net-zero technologies and includes comparable demand-side measures, including through public procurement.

A revision of the **2014 EU Public Procurement Directives** is also planned, with proposals expected by the end of 2026. The revised framework will clarify and consolidate procurement rules and allow contracting authorities at all levels to apply sustainability, resilience and "**Made in Europe**" criteria in strategic sectors. A decision on whether to include friendly third countries, such as the UK, in the 'Made in' measure was delayed in early March.

The private sector will also be encouraged to adopt green procurement practices, including through whole-life carbon performance standards.[35]

On the supply side, the IAA will also focus on accelerating permitting processes and supporting industrial clusters to crowd in investment.

The proposal will now be considered by the European Parliament and the Council, and may change during the legislative process.

## Supporting the use of innovative low-carbon products

Innovative low-carbon or circular industrial products, such as recycled steel and low-carbon cement, can carry perceived risks due to their limited track record in construction. Uncertainty around performance, compliance, and liability could increase insurance costs, complicate certification, and discourage project teams from specifying unfamiliar materials. LCPP help address these barriers by providing early demonstration opportunities and generating robust performance data under real-world conditions. This evidence could support the development of British Standards, approved material lists, and insurance approaches, helping to reduce perceived risks and enable wider use. Developments such as the UK's Flex350 performance-based code illustrate how new standards could enable the safe specification and wider use of low-carbon cement, helping to bridge the gap between material innovation and practical application.[36,37]

By sharing performance data openly, public procurement could also accelerate industry confidence and replication. Greater transparency could help regulators, insurers, and contractors assess material suitability, while repeated use in public projects could establish track records and improve market acceptability. Over time, this could reduce risk premiums, support private sector adoption, and help innovative low-carbon materials become established as standard construction options.

- Government should **ensure public sector projects can act as lead platforms for innovative materials**, sharing performance data openly to build confidence and support wider adoption.

## Enabling the measurement and comparison of products

A major barrier to low-carbon procurement across both the public and private sectors is the difficulty of comparing products and accounting for embodied emissions. This reflects technical challenges including data-gaps and quality issues, complex supply chains and methodologies, inconsistent standards, and the cost and resource demands of measurement, alongside limited market and regulatory pressure. In particular, there is no clear consensus on product-level embodied carbon measurement, with different methodologies favouring different production approaches, or product classification.

Low-carbon public procurement provides a practical testbed for embodied emissions accounting and product standards across sectors such as buildings, infrastructure, and vehicle fleets. It can generate policy learning ahead of mandatory regulation, support voluntary private-sector uptake, and inform the design of future product standards prior to wider regulatory rollout.

## An embodied emissions reporting framework

As highlighted in the recent DESNZ consultation, an embodied emissions reporting framework (EERF) - designed to provide consistent, standardised methods for companies to measure, report, and verify the greenhouse gas emissions embedded in industrial products -would help address information gaps and enable buyers to make informed purchasing decisions. The proposed database, analytical tools, and central portal for guidance and datasets would further enable more effective and efficient public procurement.[38]

- We recommend that government **prioritises the rapid development and deployment of an EERF**, with an initial focus on adoption by public procurers.[39]

It is welcome that the government has recognised the importance of alignment and interoperability between the proposed EERF and existing schemes such as the UK Emissions Trading Scheme and the Carbon Border Adjustment Mechanism. Product-level carbon accounting must be navigable for businesses, with administrative burdens minimised wherever possible. The proliferation of multiple, non-aligned frameworks risks increasing trade frictions and placing UK firms at a competitive disadvantage in export markets, particularly the EU. Interoperability with EU and other big economies approaches is therefore especially important, given its role as the UK's largest trading partner and the presence of many UK businesses operating across both jurisdictions.

- The UK government should therefore work closely with the EU, alongside other key trading partners, to **pursue greater alignment and interoperability in product-level carbon accounting**, supporting both economic competitiveness and decarbonisation objectives.

## Product classification

Product classifications set thresholds and bands to differentiate low- and high-emission products. The aim is to support consumer choices and green procurement policies. The government is designing its guidance around product classifications with aims to align best practice and support compatibility.

- The government should **adopt a graduated approach to product classification**, such as the A–G scale, to support incremental decarbonisation rather than a binary distinction between low- and high-carbon products.

Like the EERF, international misalignment on product classification risks

creating trade friction and putting UK businesses at a disadvantage. Alignment in classification systems would improve the visibility of UK-produced low-carbon industrial products in international markets and ensure they are treated on a level playing field with domestic products. This is particularly important in the EU context, where comparable low-carbon procurement policies and embodied carbon regulations are being developed.

## Improving skills, capacity, and market confidence

A key barrier to effective LCPP is limited market knowledge, confidence, and skills among both procurers and suppliers. Aldersgate Group members report that low-carbon producers have to invest significant effort in building visibility, understanding, and trust in their products across a range of stakeholders from architects to contractors to procurers. This can be particularly challenging for SMEs. Successful implementation of LCPP will depend on public procurers having the information (including supply chain data), capability and confidence needed to apply low-carbon criteria effectively and to engage with innovators early in the design and specification stages.

Policymakers should assess the barriers faced by public bodies in implementing LCPP. Existing low-carbon procurement measures, including those delivered through Procurement Policy Notes (PPNs), provide an opportunity to evaluate how the existing requirements are being applied at the public institution and project level, and to identify lessons for future policy design. Public bodies that have taken more ambitious approaches, such as the Greater London Authority and the NHS, can offer valuable insights to inform the development and scaling of effective LCPP policy.

The announcement in the 2025 Autumn Budget that each department will appoint a Procurement Innovation Champion to set and deliver innovation priorities was a welcome development. However, these champions should also have a requirement to champion low-carbon industrial products in line with wider government decarbonisation policy. There is an opportunity for engagement and guidance approaches for low-carbon procurement to be tested in the public sector before the government puts resources to encouraging widespread private sector uptake.

- Government should undertake broad engagement, potentially led by the Procurement Innovation Champion, to identify the barriers faced by public procurers and suppliers in delivering effective outcomes, and to draw practical lessons for improvement. This process should also include engagement with the private sector suppliers.
- **Government should build knowledge, skills, and capacity across departments and public institutions by establishing a procurement innovation lab.** Working with departmental

Procurement Innovation Champions and counterparts across the public sector, the lab would develop a more sophisticated understanding of industrial product markets and support an outcomes-focused approach to procurement that prioritises decarbonisation, innovation, economic resilience, and resource efficiency.

- There may also be opportunities to **learn lessons from international examples of low-carbon or green public procurement.** The government should seek knowledge sharing opportunities with jurisdictions where low-carbon public procurement is being implemented.

Engagement, awareness raising and knowledge sharing with business is key for ensuring the success of demand side policies.[40]

- Changes to public procurement policy should be supported by a **coordinated engagement campaign** to raise awareness in the private sector, particularly among SMEs.

## Proving clarity on public sector demand for industrial products

A key factor in enabling LCPP to support domestic industry and decarbonisation is providing industrial producers with a clear, predictable and long-term market demand signal. This is vital for justifying investment business cases, not just in terms of investment in decarbonisation but for workforce and production investment.

The government has sought to provide greater long-term visibility of public investment through the 10-Year Infrastructure Strategy. It outlines planned infrastructure projects and sets out a specific set of reforms and objectives relating to public procurement, particularly aimed at making procurement simpler, more strategic, and more supportive of UK supply chains and delivery capacity. The Infrastructure Pipeline's interactive portal, launched in July 2025, provides information on publicly funded and financed projects and programmes delivering the strategy - including timelines, scale, funding status, location, and procurement routes - helping businesses plan and invest with greater confidence. The National Infrastructure and Service Transformation Authority (NISTA) has also been tasked with assessing how public procurement can be further improved.[41]

- Government should **introduce an efficient evaluation and reporting framework to track how departments and public bodies perform** against the objectives of the public procurement policy, including carbon performance, domestic sourcing, circularity, and cost. This would enable government to assess effectiveness, identify gaps, and refine policy where needed.

The Infrastructure Strategy recognises that, as a major buyer of steel, cement, and concrete, government can use public procurement to support the transition to more sustainable and innovative industrialised construction techniques.

One of the most significant challenges to understanding the role of public procurement in driving potential sub-sector outcomes is the lack of data on public-procurement of specific sub-sector products. This is reported on in an Industrial Deep Decarbonisation initiative report in 2024 and found in Cambridge Econometrics report for the Aldersgate Group.[42,43] Publishing forward-looking information on public sector demand would significantly support procurement planning and send clear market signals to industrial sub-sectors. Recent progress in publishing the UK government's steel requirements over a ten-year horizon has been widely welcomed by the steel sector, enabling clearer assessment of domestic production capacity, potential market gaps, and investment opportunities.[44]

- Government should seek to **take a broader view of sub-sector public procurement**, seeking to understand other sectors beyond steel, cement and concrete where public procurement could be a powerful decarbonisation, growth or supply chain resilience lever.
- Government should publish detailed spend data at the sub-sector product level to enable both policymakers and external stakeholders to undertake economic analysis that informs policy decisions.
- Government should **extend this transparency by publishing forward-looking demand data for other industrial sub-sectors**, sending clear market signals and supporting ongoing analysis to inform future procurement policy.

## Sector variation

This brief has primarily focused on the application of LCPP at the project level. However, there may be an opportunity to adopt a more strategic, sub-sector approach aligned with wider government priorities, including the Modern Industrial Strategy and the Industrial Decarbonisation Strategy.

This could include public procurement mandates for low-carbon industrial products, such as minimum thresholds for the proportion of procured products classified as low carbon, or product standards that exclude the most carbon-intensive options. This would need to be supported by business engagement, clear guidance, and a phased approach, with thresholds increasing over time in line with market developments.

A more tailored approach is already emerging for steel. The government has signalled the strategic role of public procurement in supporting the UK steel sector, including through commitments made at the 2025 Autumn Budget and plans to publish a dedicated Steel Strategy. DESNZ has also indicated a more sub-sector-specific approach in its recent consultation on growing markets for low-carbon industrial products, with a focus on steel, cement and concrete, while inviting views on other candidate sub-sectors.

International experience suggests this approach is viable. Other jurisdictions, including Ireland, have adopted more targeted, sub-sector-specific LCPP frameworks (see **Box 5**). A strategic approach of this kind would also be supported by other recommendations set out in this brief, including improved publication and use of demand data and EERF and product classifications.

- The government should **explore its role as a strategic procurer of industrial products and develop a multi-criteria assessment** to identify good candidates for LCPP in the UK.

BOX 5

### International low-carbon public procurement examples

**Canada – Federal Buy Clean Policy**

Canada's Buy Clean Policy mandates reporting of embodied emissions and whole-building life-cycle assessments (LCAs) for major buildings and infrastructure projects. From 2025, major construction projects must achieve a 30% reduction in the embodied carbon of structural materials through the use of recycled and lower-carbon materials, material efficiency, and performance-based design. The policy prioritises transparency and standardised assessment to drive

innovation, investment, and the adoption of cleaner construction technologies. These requirements are supported by complementary programmes and tax incentives to stimulate domestic production of low-carbon products.[45]

**Ireland – Targeted low-carbon public procurement of industrial products**

Published in April 2024, Ireland's Green Public Procurement Strategy and Action Plan 2024–27 aims to support the transition to a low-carbon, circular economy. The strategy sets 12 targets across nine sub-sectors, embedding sustainability requirements into public procurement.

The strategy mandates the use of recycled materials in public procurement, including 100% recycled paper for printing and photocopying, and a minimum of 20% recycled content in polyester fibre products by 2027.

In the construction sector, public bodies are required to reduce embodied carbon in both projects and materials under the Public Sector Mandate and GPP framework. Best-practice carbon management approaches are promoted, including avoiding over-specification of materials. For new infrastructure and building projects above defined budget thresholds, the policy requires the production or procurement of whole life-cycle greenhouse gas (GHG) assessments, ensuring emissions are considered across the full project lifespan.

Concrete used in public projects must generally include at least 30% clinker replacement in line with IS EN 206 standards. High-carbon CEM I cement is discouraged and may only be used where a suitably qualified professional provides a technical justification acceptable to the procurer.[46,47]

## Exploration of applying low-carbon public procurement to industrial sub-sectors

Government must act as an intelligent procurer when adopting a sub-sector approach, balancing policy objectives with current and future industrial capability and the role of public procurement within each market. Identifying suitable products therefore requires a multi-dimensional assessment that considers the public sector's market presence, relevant economic factors, and sectoral carbon intensity.

To identify potential candidates for LCPP, Cambridge Econometrics developed a multi-criteria assessment using a scoring matrix and a shortlist of eight industrial subsectors selected based on carbon intensity, the public sector's share of demand, and other relevant product characteristics. This approach enables comparison across multiple indicators to identify prodcts that score strongly overall and may therefore be well suited to future LCPP.

**Table 1** presents the results of the multi-criteria assessment, with scores from 1 to 5 and colour-coded for ease of interpretation. Lower scores indicate weaker performance against a given criterion, while higher scores indicate stronger performance. The assessment combines both qualitative and quantitative criteria. Further detail on the methodology, results, and sources is provided in the Cambridge Econometrics report.[48]

While the scoring matrix, presented as a heatmap, facilitates comparison across criteria, it should not be interpreted as an objective or prescriptive ranking of products. The indicators are not directly comparable in terms of overall suitability, and their relative importance may vary depending on policy objectives. Nevertheless, the matrix provides valuable insights into product characteristics in a public procurement context and can help inform future decisions on sub-sector prioritisation and the design of LCPP mandates.

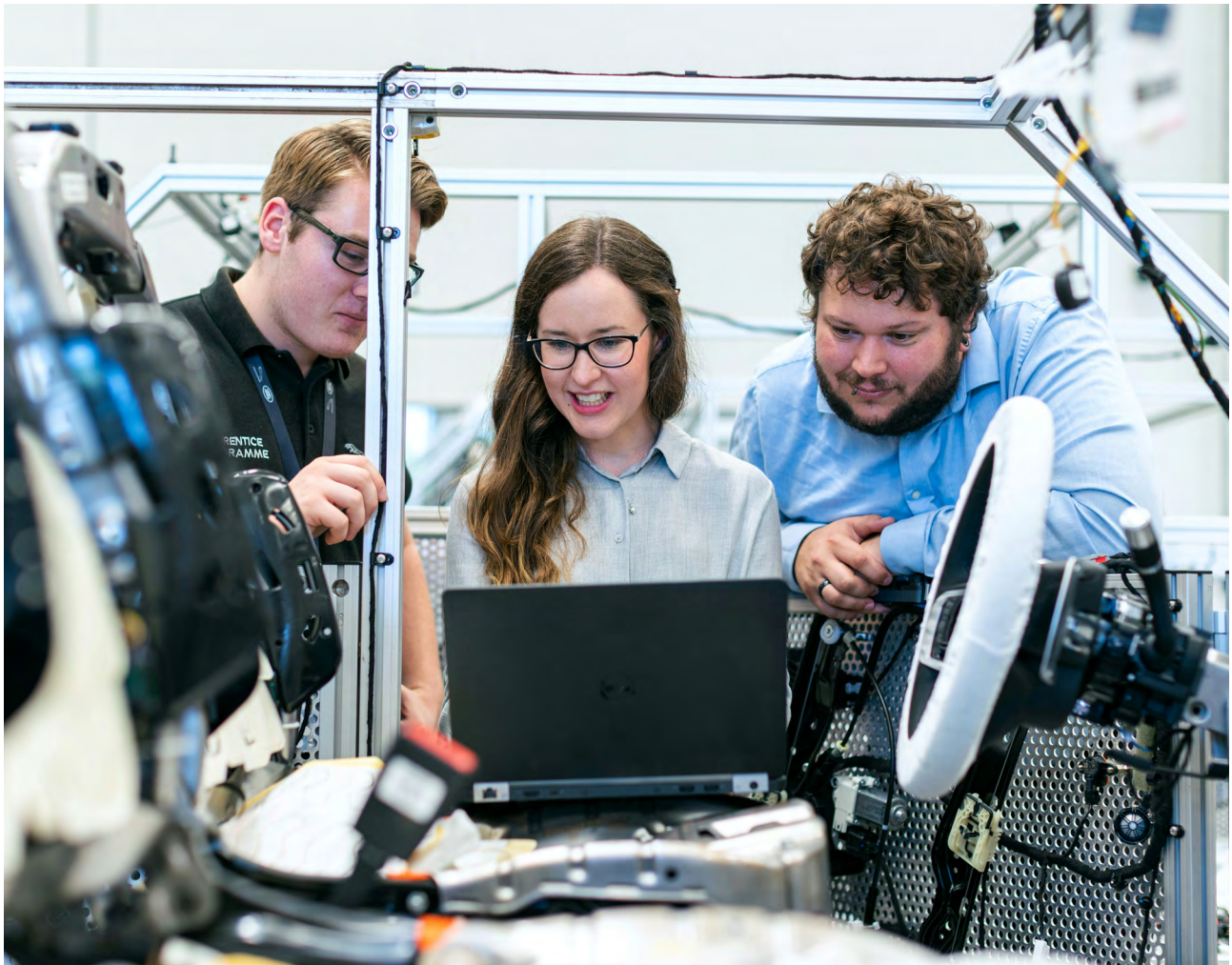


TABLE 1
**MULTI-CRITERIA ASSESSMENT FOR INDUSTRIAL SUB-SECTORS AGAINST**

| | Criteria | Steel | Cement | Plastics | Glass | Ceramics | Asphalt mix | Paper | Aluminium |
|---|---|---|---|---|---|---|---|---|---|
| CURRENT GOVERNMENT INVOLVEMENT | Public procurement size | 1 | 1 | 1 | 1 | 1 | 5 | 2 | 1 |
| | Policy alignment | 5 | 5 | 3 | 4 | 3 | 3 | 3 | 4 |
| ECONOMIC IMPACT | UK domestic production | 3 | 3 | 4 | 2 | 1 | 1 | 3 | 1 |
| | Export | 3 | 1 | 3 | 2 | 1 | 1 | 2 | 2 |
| NEED OF DEMAND-SIDE SUPPORT BY GOVERNMENT | Carbon leakage exposure | 5 | 5 | 3 | 4 | 5 | 4 | 4 | 5 |
| | Cost difference | 3 | 4 | 4 | 3 | 4 | 2 | 2 | 3 |
| DECARBONISATION FEASIBILITY | Ease of emissions monitoring | 5 | 5 | 4 | 5 | 5 | 3 | 5 | 5 |
| | Decarbonisation potential | 4 | 2 | 3 | 4 | 2 | 3 | 4 | 3 |
| | Carbon intensity | 5 | 5 | 1 | 2 | 3 | 1 | 3 | 3 |

*Results of the multi-criteria assessment showing performance scores ranging from 1 to 5 for each criterion.*
*Scores are colour-coded to facilitate interpretation, with lower scores indicating weaker performance and higher scores indicating stronger performance.*

# Discussion and considerations for policymakers

## The criteria

The first category, *Current government involvement*, is particularly important, as limited public sector demand in a given product area would constrain the potential impact of an LCPP policy. Alignment with existing government priorities is also essential for justifying intervention. The second category, *Economic impact*, considers domestic production and export levels, which are critical for identifying products that play a significant role in the current and future UK economy. This category interacts closely with the first, as the scale of UK production and exports may strongly influence government involvement, including motivations related to economic growth and security.

The third category, *Need of demand-side support*, assesses whether substantial demand-side intervention is required to stimulate market growth. For example, higher cost differentials between high- and low-carbon versions of the product strengthen the case for policy intervention. However, policymakers may also prioritise sub-sectors where quicker or more cost-effective emissions reductions can be achieved through public procurement. The fourth category, *Decarbonisation feasibility*, examines the emissions reduction potential of switching to low-carbon products and considers technology readiness levels, ensuring that LCPP policies contribute meaningfully to the UK's emissions reduction targets.

These criteria are not exhaustive. The assessment could also have considered additional factors, such as the availability and use of product-level emissions reporting standards and classifications, exposure to international substitution, or the presence of programmes supporting low-carbon innovation within specific sub-sectors.

- Using multiple criteria helps policymakers navigate complexity, identify trade-offs and opportunities, and target intervention effectively. **Criteria selection should be aligned with cross-government priorities** to ensure policy coherence and impact.

## The scoring results

Steel and cement score highly across most indicators, making them the strongest candidates for future LCPP among the products assessed. By contrast, asphalt mix and ceramics score lower overall, suggesting they may be weaker candidates based on the criteria assessed and methodology applied. Overall, products with a high share of government demand and recognised strategic economic and geopolitical importance may be best suited to LCPP interventions.

- **Steel** is a strong candidate for low-carbon public procurement due to its economic significance, high carbon intensity, and exposure to carbon leakage. Although steel production is emissions-intensive, viable decarbonisation pathways exist, with further innovation ongoing, and the sector aligns closely with current UK industrial, trade and decarbonisation policy priorities. While total public procurement volumes are a small proportion of the UK total output (~6% in 2022), government buyers have sufficient market influence to support decarbonisation through targeted intervention and demonstrate procurement leadership, enabling the private sector to follow with confidence at scale.
- **Cement** is a strong candidate for low-carbon public procurement due to its high carbon intensity, domestic production base, and policy relevance. Although it is less internationally traded than steel, it faces growing carbon leakage risks and is difficult to fully decarbonise, with carbon capture and storage (CCS) technologies being costly. However, decarbonisation can be supported through alternative materials, new low-carbon cement chemistries, low-carbon energy use, and efficiency improvements. While public procurement represents a limited share of total demand, public sector buyers retain sufficient market influence (~5% of total output in 2022) to support decarbonisation.
- **Plastics** have a relatively lower carbon intensity and higher tradability than the other industrial products explored here. However, given that the ETS only covers part of manufacturing emissions and excludes most downstream emissions, it is difficult to monitor embodied carbon consistently or apply standardised methods. A range of decarbonisation options exists, including recycling, use of low-carbon energy and less mature approaches such as bio-based plastics and CCUS. High domestic production and export levels (£9.5 billion average yearly export value between 2022 and 2024), combined with low carbon intensity, result in a moderate risk of carbon leakage. More broadly the chemical sector is highly complex and so the success of LCPP would likely require appropriate targeting and nuanced policy-making.
- **Glass and ceramics** show similar profiles, with moderate carbon intensity, small domestic industries, and limited public procurement shares. Both sectors are covered by the UK ETS - supporting standardised emissions monitoring- but remain highly exposed to carbon leakage due to their tradability. Decarbonisation is constrained by the need for very high production temperatures, with electrification or alternative fuels offering potential pathways. For ceramics in particular, industry fragmentation and long-lived fossil-fuel-based assets increase the need for demand-side government support. Both sectors are strategically important to UK infrastructure and manufacturing, making targeted LCPP a potentially effective tool for supporting industrial competitiveness and decarbonisation objectives.

- **Asphalt** differs from other products due to its very high public procurement share (close to 100% of total output in 2022) and limited domestic production. Despite its low emissions intensity and minimal export exposure, asphalt remains vulnerable to carbon leakage and is not directly covered by the UK ETS, complicating emissions monitoring. While near-term emissions reductions are relatively straightforward, full decarbonisation is technically challenging due to reliance on fossil-fuel-based bitumen. Low-carbon alternatives are being trialled but require scaling. In the case of asphalt, LCPP could be used alongside supply side measures to develop new domestic capability.
- **Paper** sits mid-range among the assessed products, with a moderate carbon intensity and a relatively higher public procurement share (~17% of total output in 2022). Domestic production is substantial, and emissions are regulated under the UK ETS. When combined with its tradability, paper faces a meaningful but comparatively lower carbon leakage risk. Decarbonisation is relatively achievable, as emissions mainly stem from energy use and can be reduced through recycling and a shift to low-carbon energy sources.
- **Aluminium** sits mid-range among the assessed products and aligns well with current policy priorities as a critical material. While domestic production, exports, and public procurement demand (~5% of total output in 2022) are relatively limited, aluminium is highly energy-intensive and faces a very high risk of carbon leakage. Decarbonisation potential is strong, particularly through increased recycling, as aluminium can be recycled repeatedly without significant loss of material quality.[49]

**Government must act as both an intelligent customer and a strategic policymaker**, carefully timing product-targeted LCPP interventions to align with wider industrial and decarbonisation strategies, sector capability and market readiness, particularly given the business uncertainty currently facing many industrial firms. For products with high potential for recyclability and reuse, public procurement presents a particularly strong opportunity to align decarbonisation policy with circular economy policy, and particularly in the case of paper, to also consider impacts on nature.

## Low carbon public procurement in the wider policy ecosystem

Across both project-level and product-focused applications, LCPP requirements must be sufficiently ambitious and robust to deliver a credible demand signal. However, given the globally entrenched nature of high-carbon production systems, overcoming structural and behavioural barriers requires interventions across multiple parts of the system. While clear demand-side measures can significantly strengthen the business case for decarbonisation, LCPP is not a standalone solution; integrating procurement with regulation, financial incentives, and enabling policies is essential to unlock investment, maintain competitiveness, and accelerate deep industrial decarbonisation.[50]

### Creating a level playing field

The UK ETS incentivises emissions reductions by domestic producers, while the forthcoming UK Carbon Border Adjustment Mechanism (CBAM) aims to address carbon leakage by applying an equivalent carbon price to imports. The UK and EU are currently negotiating linkage of their ETSs, which could enable mutual CBAM exemptions. As the carbon price rises in line with the UK's net-zero-aligned cap, these measures will become increasingly impactful. However, successful outcomes, namely decarbonised and competitive industrial businesses, are contingent on access to finance and infrastructure, otherwise industry will simply face a stick with no carrot.

International interoperability of definitions and standards is critical to enabling UK export opportunities for low-carbon products by reducing trade frictions, supporting access to global markets, and creating a level

playing field that strengthens investment certainty and drives sector-wide decarbonisation.

### Transition finance and access to financial support

Industrial decarbonisation is capital-intensive, and limited access to finance can constrain investment. Strategic public finance can reduce the cost of capital, crowd in private investment, and support the development and transformation of low-carbon industrial facilities. Public grant funding, for example the Industrial Energy Transformation Fund, has played an important role in addressing upfront costs, while policy certainty and targeted public investment, including through institutions such as the National Wealth Fund, could help create a more attractive investment environment for private finance.

### An enabling operating environment

High operational costs, particularly electricity prices, remain a major barrier to industrial electrification. Targeted interventions to narrow the cost gap between electricity and gas are critical to enabling the investment case for businesses.

Uncertainty around the timing and location of electricity, hydrogen, and CCS infrastructure continues to constrain business planning and investment. Government must provide clarity and ensure delivery at pace through effective planning and permitting, with place-based policies supporting both industrial clusters and dispersed sites.

Skills and workforce capacity, spanning product chemistry, materials testing, manufacturing, carbon accounting, procurement, finance, risk management, insurance, project design and delivery, are critical to industrial transition. The adoption of low-carbon processes and digital technologies will require new capabilities, with industry competing for talent across sectors. A coherent government skills strategy is therefore essential to support business planning and investment.

### Wider-demand side measures

Beyond LCPP, government should consider additional measures to deliver strong demand for low-carbon products and extend low-carbon procurement beyond the public sector. Mandatory minimum limits on embodied carbon content or recycled content for both final products (such as buildings and vehicles) and intermediate goods (including steel, cement, chemicals, and glass), alongside targeted mandates and incentives, could play a central role in driving private-sector uptake. These instruments are particularly valuable where public procurement represents a limited share of total demand, allowing government to create lead markets in sectors with strong private-sector potential but constrained current supply. Regulatory approaches and mandatory standards are most effective where a level playing field is required and where technology readiness and market confidence are sufficiently advanced to deliver a strong and credible demand signal.

# Conclusion

Demand-side policies such as LCPP can play a critical role in supporting industrial decarbonisation while strengthening long-term competitiveness, resilience, and energy security. By providing a credible and sustained market signal, LCPP can influence investment decisions and catalyse change beyond the public sector. However, its effectiveness depends on the presence of complementary policies that make decarbonisation technically and economically viable, requiring a whole-system approach informed by international experience and past lessons.

This brief has highlighted the potential of LCPP not only to reduce embodied emissions, but also to advance wider objectives such as industrial resilience, domestic innovation and value creation, and circular-economy outcomes. While expanding procurement criteria beyond carbon can enhance policy impact, it also increases complexity, underscoring the need for clear guidance, strong engagement, and an outcome-focused approach for both procurers and suppliers.

A range of LCPP models are available, from project-level requirements to more strategic, product-focused interventions. Applying clear criteria to identify priority products can help target effort where procurement is most likely to deliver impact. Ultimately, success will depend on robust policy design, sufficient resources, and effective implementation, including skills development, knowledge sharing, and practical delivery processes. Enabling infrastructure and strong alignment across industrial, trade, circularity and decarbonisation policy, as well as interoperability with key international partners, will be essential to minimise burdens on business and maximise the contribution of LCPP to UK climate and industrial objectives.

# REFERENCES


1 Aldersgate Group (2025). Next steps for UK industrial decarbonisation policy in 2025.

2 Aldersgate Group (2025). Next steps for UK industrial decarbonisation policy in 2025

3 Cambridge Econometrics (2026). Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical report.

4 Cambridge Econometrics (2026). Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical report.

5 WTO (2024). Work programme on sustainable procurement.

6 DESNZ (2025). Industrial decarbonisation strategy.

7 DESNZ (2025). Carbon budget and growth delivery plan (Section 14 Report).

8 Industrial Deep Decarbonisation Initiative.

9 HM Treasury (2026). The Green Book. UK Government guidance on appraisal.

10 Cabinet Office (2025). Guidance: Assessing Competitive Tenders.

11 Government Commercial Function (2026). The Procurement Act 2023: A short guide for suppliers.

12 DESNZ (2025). Carbon budget and growth delivery plan (Section 14 Report).

13 HM Government (2021). Industrial Decarbonisation Strategy.

14 Industrial Deep Decarbonisation Initiative.

15 Cabinet Office (2025). National Procurement Policy Statement.

16 Government Commercial Function (2023). Procurement Policy Note 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts.

17 Cabinet Office (2025). PPN 006: Technical standard for Completion of Carbon Reduction Plans.

18 Cabinet Office (2025). PPN 016: Carbon reduction contract schedule.

19 HM Government (2022). The Construction Playbook.

20 DESNZ (2025). Growing the market for low carbon industrial products: policy framework.

21 DBT (2025). The UK's Modern Industrial Strategy.

22 DBT (2025). The UK's Modern Industrial Strategy.

23 DESNZ (2025). Funding boost for Clean Industry Bonus as bids smash expectations.

24 DESNZ (2025). Record renewables auction supports 7,000 jobs and £3bn investment.

25 Cabinet Office, 2025. Public Procurement: Growing British industry, jobs and skills.

26 HM Treasury (2025). Budget 2025.

27 E3G and ITA (2025). Building the EU's Clean Industrial Future: Unlocking Investment through Lead Markets.

28 OECD (2025). Zero-Carbon Buildings in Cities - A Whole Life-Cycle Approach.

29 Greater London Authority, (2024). GLA Group Responsible Procurement Progress Report 2023-24.

30 Greater London Authority, (2025). The GLA Group Responsible Procurement and Social Value Policy.

31 The Institution of Structure Engineers (2023). International drivers of low carbon structural design.

32 NHS, 2025. Five years of a greener NHS: progress and forward look.

33 European Commission (2025). Clean Industrial Deal.

34 European Parliament (2026). Industrial Accelerator Act.

35 European Commission (2025). Clean Industrial Act helps public buyers move towards non-price criteria.

36 BSI (2024). BSI Flex 350 v2.0:2024-09.

37 Material Evolution (2024). Paving the way for ultra-low carbon concrete: Flex350.

38 DESNZ (2025). Growing the market for low carbon industrial products: policy framework.

39 Aldersgate Group (2025). Aldersgate Group response: A policy framework to grow the market for low-carbon industrial products.

40 Cambridge Econometrics (2026). Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical report.

41 HM Treasury (2025). UK Infrastructure: A 10 Year Strategy.

42 Sibal A and Hasanbeigi A, 2024, The Scale and impact of green public procurement of steel and cement in Canada, Germany, the UK and the US.

43 Cambridge Econometrics (2026). Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical report.

44 DBT (2025). Steel public procurement 2026.

45 Government of Canada (2025). Greening Government Strategy: A Government of Canada Directive.

46 Government of Ireland (2025). Buying greener: Green public procurement strategy and action plan.

47 Department of Enterprise, Tourism and Employment (2025). Procurement guidance for public bodies: Reducing embodied carbon in construction.

48 Cambridge Econometrics (2026). Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical report.

49 Cambridge Econometrics (2026). Assessing the role of public procurement in scaling markets for low-carbon industrial products - Technical report.

50 Aldersgate Group (2025). Next steps for UK industrial decarbonisation policy in 2025.

ALDERSGATE GROUP
LEADERS FOR A SUSTAINABLE ECONOMY

Author: Beth Barker

With thanks to the Aldersgate Group Secretariat, Aldersgate Group members, and Cambridge Econometrics.

Images by Josh Beech (cover) via Unsplash, UK Government (p.3) via Flickr, RUT MIIT (p.8) via Unsplash, UK Government (p.22) via Flickr, ThisisEngineering (p.25) via Unsplash, UK Government (p.30) via Flickr.

Published March 2026