UK Concrete

Circular Economy Action Plan

mpa UK Concrete



About UK Concrete

UK Concrete is part of the Mineral Products Association (MPA), the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and industrial sands industries, and represents the UK's concrete industry.

The concrete and cement sector is a key part of a combined mineral products industry, which generates over £18 billion of turnover each year and directly employs 89,000 people, supporting a further 3.2 million jobs.

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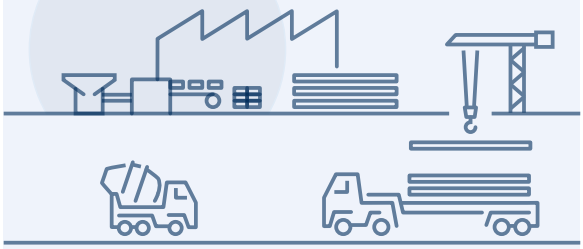

Industry generates over

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Over

500

quarries providing an abundant and **low carbon supply across the UK**

10 UK cement plants

to meet **UK construction needs**

Foreword

The transition to a circular economy is increasingly recognised as fundamental to addressing the climate, nature and resource challenges facing the built environment.

Across the UK, governments are signalling a shift towards circular approaches as a means of delivering long-term economic growth, improving resource security and accelerating progress towards net zero. Circularity is climbing up the political agenda, as Scotland and Wales advance their established circular economy strategies, Northern Ireland progresses its draft strategy, and the UK Government works with the Circular Economy Taskforce to set out a Circular Economy Growth Plan for England.

As the most widely used construction material in the UK, concrete has a critical role to play in this transition. When designed, specified and managed well, concrete enables long service lives, adaptability, reuse and high-value recycling – delivering significant whole-life carbon and resource efficiency benefits.

The UK concrete industry has a long history of working collaboratively to contribute to the circular economy. Since the development of the Resource Efficiency Action Plans (REAPs) in 2014 to minimise waste, the sector has demonstrated that shared ambition, transparent reporting and practical action can deliver meaningful progress through manufacturing, construction and end-of-life.

Building on more than a decade of progress, this Circular Economy Action Plan (CEAP) represents the next step in that journey. The plan provides an evidence-based framework with clear objectives, actions and metrics to ensure the UK concrete industry continues to lead by example and respond constructively to emerging policy and market expectations.

With approaches to circularity shifting from a focus on waste reduction towards keeping materials in use at their highest value for longer, the CEAP sets out the sector's commitment to retaining the highest possible value of concrete throughout its life cycle.

Importantly, the plan positions circularity not as a constraint, but as an opportunity to innovate, collaborate across value chains and deliver better outcomes for clients, communities and the environment. Achieving greater circularity depends not only on concrete producers, but on the collective actions of developers, designers, contractors, demolition professionals and policymakers.

The CEAP is intended to be a living framework. As new technologies emerge, policy evolves and stakeholder expectations change, the plan will continue to develop through engagement with the wider construction sector and government.

With the right support, consistent policy signals and shared commitment, the UK concrete industry can support the transition to a more circular economy through the delivery of a low-carbon, resilient and nature-positive built environment.

Introduction

In the updated UK Concrete Industry Sustainable Construction Strategy Framework published by the MPA in 2024, the sector set out its ambition to enable greater circularity across the built environment and encourage the retention of concrete's value throughout all stages of its life cycle. This Circular Economy Action Plan builds upon that commitment by setting out shared objectives, actions and metrics for the sector, aligned with both that ambition and with the direction of travel emerging through UK circular economy and industrial policy.

The importance of a circular economy for the built environment

The UK Government is committed to transitioning to a circular economy. Getting this right will require major changes throughout the economy but could significantly contribute to the Government's missions of kickstarting economic growth, making Britain a clean energy superpower and accelerating progress towards net zero. Through the establishment of the Circular Economy Taskforce and the intention to develop sector-specific roadmaps – beginning with the built environment – the Government has signalled a move away from a narrow focus on waste towards system-wide changes in how materials are designed, specified and used, with their value retained.

In the UK, greenhouse gas emissions from the manufacturing, transportation, construction, maintenance and disposal of building materials account for roughly 20% of built-environment emissions (40–60 $MtCO_2e$ annually)[1], with concrete and cement manufacturing accounting for around 6 million tonnes of CO_2[2]. Meanwhile, 61% of all waste generated in the UK comes from construction activities[3]. These impacts are increasingly being considered together in policy discussions around net zero, resource efficiency and long-term infrastructure resilience. Other objectives are also being considered to promote natural capital retention, including through *The UK's National Biodiversity Strategy and Action Plan for 2032.*

Circular economy strategies that extend the lifespan of existing concrete structures can deliver low-carbon solutions that help the UK meet its net-zero targets.

These include repurposing building stock[4], reusing and recycling materials from construction and other industries, and improving design efficiency. However, not all circular approaches automatically reduce carbon, and the two objectives must be considered together.

Embracing circular economy principles, such as by keeping materials in use by maximising reuse and designing for disassembly, also features prominently in recommendations from the UK Green Building Council to reduce the embedded ecological impacts of building materials[5] and protect biodiversity.

The CEAP therefore represents a step-change in the way decisions are made across the design, manufacture, use and end-of-life of concrete and concrete products, providing a consistent, evidence-based framework that supports wider built-environment goals and emerging government policy priorities.

Circular concrete in action:

Innovating to achieve zero landfill

Tarmac has demonstrated a circular approach to concrete recycling through resurfacing works on the A12.

Recycled concrete arisings were processed locally into a specifically developed Cementitious Bound Granular Mixture (CBGM) aggregate product and reused within the same scheme, eliminating waste to landfill and reducing reliance on virgin aggregates.

In total, 54,000 tonnes of concrete were removed and recycled, 27,500 tonnes of which went back into the CBGM product that was used the A12.

Developed and validated in collaboration with National Highways, the approach meant that no materials were sent to landfill and approximately 150 tonnes of CO_2 was saved. Following this trial, the CBGM solution has now been implemented across other schemes, helping to shape industry best practice and demonstrating how the sustainable use of materials can deliver substantial environmental benefits.

[1] UK Green Building Council (2021) *Net Zero Whole Life Carbon Roadmap*

[2] Mineral Products Association (2025) *UK Concrete and Cement Industry Roadmap to Beyond Net Zero Progress Report 2025*

[3] Department for Environment, Food and Rural Affairs (2025) *UK Statistics on Waste*

[4] Rihner, M.C.S, Hafez, H., Walkley, B., Purnell, P., Drewniok, M. (2025) Thousand cuts: a realistic route to decarbonise the UK cement and concrete sector by 2050. *Sustainable Production and Consumption*

[5] UK Green Building Council (2026) *Embodied Ecological Impacts*

Context

This Circular Economy Action Plan is an evolution of work the industry has been championing for over 10 years.

Work to date: Resource Efficiency Action Plans (REAPs)

In 2014, the ready-mixed concrete and precast concrete sectors, partnered with the clay brick sector to publish the Resource Efficiency Action Plans (REAPs) for those products, supported by the Waste and Resources Action Programme (WRAP).

The main aims of the REAPs were to minimise material consumption and waste, minimise waste to landfill, reduce environmental impacts (water and CO_2) in production and use, maximise reuse, recycling and recyclability and define these in terms of SMART actions and targets. They covered five life cycle stages; manufacturing, transport and logistics, design for use and reuse, construction process and demolition.

Since 2014, activities aligned to these REAPs have been carried out across the sector and significant progress has been made against the objectives, as summarised below.

Life cycle stage	Main REAP objectives (2014)	Headline progress
Manufacturing	Minimise waste and resource use in production; reduce waste to landfill; reduce carbon, energy and water impacts; increase use of recycled and secondary materials	Waste to landfill reduced across ready mix, precast and brick sectors. Carbon emissions from cement and concrete production reduced by 63% compared to 1990 baseline and *Roadmap to Beyond New Zero* developed. Guidance on recycled and secondary materials expanded, including updating *Specifying Sustainable Concrete: Aggregates* (2025).
Logistics and packaging	Improve transport efficiency; reduce transport emissions; minimise packaging waste and improve reuse	Collection of transport distance and utilisation data established across sector, enabling benchmarking of delivery impacts. Increased focus on efficient vehicle fleets, driver training and safety.
Design for use and reuse	Enable resource efficient design; support use of Building Information Modelling (BIM), Environmental Product Declarations (EPDs) and responsible sourcing; design for durability, adaptability and end of life recyclability	MPA has published sector-average EPDs for 16 products and many manufacturers have published product specific EPDs to support design stage decision making. 96% of concrete and concrete products are certified to a recognised responsible sourcing scheme through BES 6001. The Concrete Centre provides guidance on material efficiency, whole life carbon and sustainable design.
Construction	Reduce waste on site; improve water efficiency; promote best practice in concrete use and installation	Best practice guidance developed and disseminated on appropriate concrete specification, placement, curing and workmanship. Water efficiency targets established and progress reported. Increased focus on reducing over ordering and site wastage through guidance and contractor engagement.
Demolition and end of life	Maximise reuse and high value recycling of concrete and masonry; improve dialogue with demolition sector; support deconstruction	Collaboration with the National Federation of Demolition Contractors (NFDC), promoting reuse and high quality recovery of demolition materials. The Concrete Centre has hosted events focused on making better use of recycled concrete and demolition waste.

Circular concrete in action:

Designing for adaptability at the London College of Fashion

For this building, the client wanted to achieve a 100-year lifespan.

To deliver this, an exposed concrete frame provided large, adaptable internal spaces that can be reconfigured with minimal intervention. By avoiding applied finishes and using the structure as the final surface, the design reduces material use and future waste.

The inherent thermal mass and robustness of concrete further enhance operational efficiency and longevity, supporting sustained building use over time. This longevity was achieved whilst exceeding the client's target to reduce embodied carbon by 15%.

From the REAPs to a Circular Economy Action Plan

In 2024, the MPA published the *UK Concrete Industry Sustainable Construction Strategy Framework*, which focuses on the sector's journey to 2030. It sets out five commitments responding to the climate and biodiversity emergency covering carbon, the circular economy, the natural environment, social outcomes and metrics.

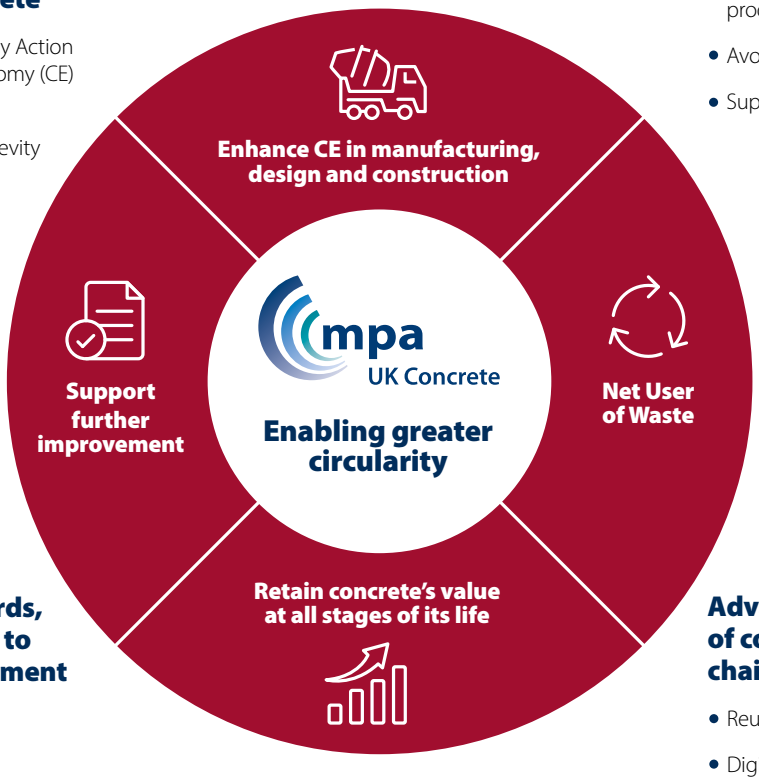
The circular economy commitment is to enable greater circularity across the built environment using concrete and to encourage the retention of concrete's value throughout all stages of its life cycle. This commitment is supported by four pillars, illustrated below.

Enhance circularity through manufacture, design and construction using concrete

- Evolve existing Resource Efficiency Action Plans (REAPs) into a Circular Economy (CE) action plan
- Design and manufacture for longevity and adaptability
- Guidance for resource efficiency

Remain a net user of waste

- Upcycling waste and the use of by products, and recovered materials
- Avoiding waste
- Supporting innovation



Develop metrics, standards, and policy requirements to support further improvement

- Metrics development
- Standards evolution
- Policy and stakeholder requirements

Advance the retention of concrete in the supply chain at its highest value

- Reuse of existing structures
- Digitisation to help future recovery and reuse
- Higher value end of life scenarios

This Circular Economy Action Plan (CEAP) has been created to respond directly to the commitment in the framework to evolve the REAPs into a CEAP. It does this through:

- Enhancing existing objectives within the REAPs where significant progress has been made,
- Emphasising and expanding objectives relating to the retention of value throughout all life cycle stages,
- Incorporating new concepts such as Digital Product Passports,
- Refining the scope to focus on the flow of physical resources, as carbon and water are clearly addressed in other parts of the framework, and
- Strengthening the governance and accountability.

Circular concrete in action:
Closed-loop aggregates

Cemex has demonstrated a closed-loop approach to recycling aggregates through its work on Cardiff Council's Channel View regeneration project in partnership with Dauson Environmental Group and Wates.

Demolition arisings from the site are processed into high-quality crushed concrete aggregates and then returned to Cemex for use in new ready-mixed concrete on the same development. This model is enabled by significant improvements in recycled aggregate quality, which allows compliance with relevant standards without increasing cement content, providing customers with verified, lower-impact solutions.

A current snapshot

Concrete is already playing a key role in supporting a more circular economy.

Concrete's long service life, structural resilience and low maintenance requirements allows buildings and infrastructure to remain in productive use for decades, reducing the need for frequent replacement and avoiding the repeated consumption of new materials. The retention, adaptation and reuse of concrete structures represents some of the highest-value applications of circular economy principles in action and can deliver the greatest whole-life carbon benefits.

When concrete structures do reach the end of their useful life, their material value is far from lost. Virtually no concrete goes to landfill in the UK. Instead, it is crushed and recycled, often as aggregate. This circular use of resources reduces the demand for raw materials, and potentially lowers the carbon footprint of new projects.

The concrete sector's contribution to circularity extends well beyond its own products. By-products and other recovered materials can be used as supplementary cementitious materials in concrete, preventing them from going to landfill.

Cement's contribution to the circularity of concrete

In 2023, 54.1% of fuel used by the cement sector comprised of waste material. The sector is uniquely placed to consume hard-to-recycle waste as fuel through co-processing.

This involves simultaneously recovering energy and recycling the mineral content of the waste-derived fuels and alternative raw materials (ARMs) used. An example is refuse-derived fuels (RDFs), a type of non-recyclable household and business waste that is diverted from landfill and processed to produce a clean, non-hazardous alternative fuel used at every UK cement plant. The ARMs used include recycled gypsum from plasterboards, quarry washings and recovered porcelain tiles.

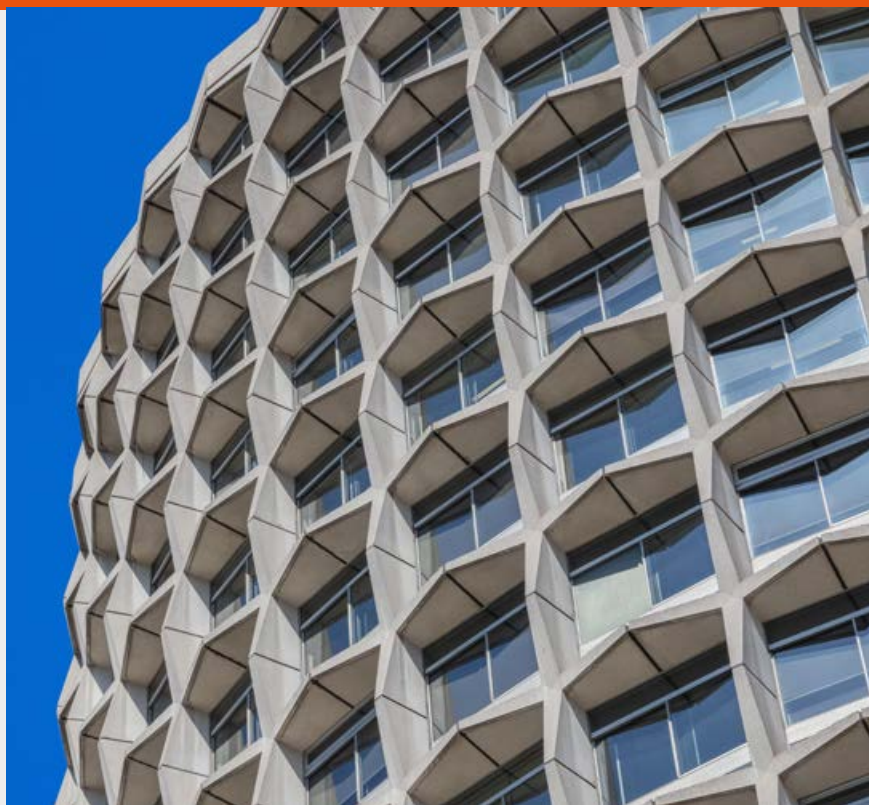
Circular concrete in action:

Retaining concrete in Space House, London

The inherent properties of concrete enabled the high-quality refurbishment and transformation of Space House in London.

The building's robust hybrid structure of in-situ and precast concrete provided the strength and integrity needed to accommodate additional floors and modern services with minimal structural intervention. Durable, well-preserved concrete surfaces were retained and exposed, reducing the need for additional finishes while supporting flexible, future reconfiguration. In addition, the upper most section of precast concrete cladding panels were removed and reused as part of the façade extension.

In total, 16,500m^3 of concrete was reused, equivalent to approximately 10,000 tonnes of embodied carbon. This approach highlights how the longevity, strength and adaptability of concrete structures underpin their continued use in a circular built environment.



Overview

This plan sets out objectives and actions across the key life-cycle stages of concrete and its use in the built environment. The UK concrete industry will take direct action in those areas where it has control, while providing leadership, influence and support across stages of the life cycle where responsibility sits with others in the value chain.

Scope

This CEAP establishes a common set of objectives, actions and targets for the UK concrete industry covering ready-mixed concrete, precast structures and facades, precast paving, precast drainage and masonry.

It covers the whole life cycle of concrete and concrete products: manufacturing, transport and logistics, design, construction and demolition and reuse.

Development and evolution of the CEAP

The creation of this action plan has been coordinated by the MPA, steered by the UK Concrete Circular Economy Task Group (UKC CE TG). Cross-sector industry input was commissioned by the MPA and provided by a consortium consisting of members of Net Positive Solutions Ltd, Green Thinking Ltd and The University of Leeds.

Steps taken included conducting a horizon scan, gathering industry input via webinars and workshops with members, and consultation with supply chain representatives, including members of the MPA aggregates and cement product groups.

The current iteration of the CEAP is intended to evolve as the industry continues to make progress towards enabling greater circularity and the political landscape changes. There are some areas where targets have yet to be determined. Wider consultation is planned to support the development of these targets, ensuring views from the construction industry are included.

Governance, roles and responsibilities

The MPA, as a trade association, is responsible for managing progress against CEAP objectives and actions with its members, as well as influencing the plan's implementation across the built environment sector. The UK Concrete Circular Economy Task Group (UKC CE TG) will be responsible for delivering the majority of the actions and ensuring that progress is tracked and that actions remain effective, as well as adding or adjusting actions over time.

Collaboration and support

To enable the sector to deliver the actions identified in this plan, a supportive policy environment is critical to provide scale and pace by removing barriers and creating a level playing field for circularity. Collaboration across the built environment supply chain, including designers, contractors, clients, regulators and other stakeholders will be essential to achieving these objectives. The MPA will continue to engage with standards bodies and industry groups to further these ambitions. External parties interested in collaborating on any of the themes within this plan are encouraged to contact the MPA. The CEAP is a living framework and will evolve through the development of more detailed targets and actions as policy changes and industry continues to innovate.

HS2 Ltd

Circular concrete in action:

Optimising resource use at the Colne Valley Viaduct

Refinement of the viaduct's deck profile and pier geometry reduced overall material demand, with small design efficiencies delivering significant savings at scale.

The cross section of the deck was reduced by one metre, which subsequently enabled the concrete piles to be 10-15 metres shorter than the original design. The use of fair-faced concrete as the finished surface removed the need for applied finishes, reducing additional material and maintenance requirements. Standardised formwork also enabled reuse during construction, further supporting a resource-efficient, circular approach. The project's final embodied carbon was 28%, or 63,300 tonnes, lower than the outline design.

Circular concrete in action:

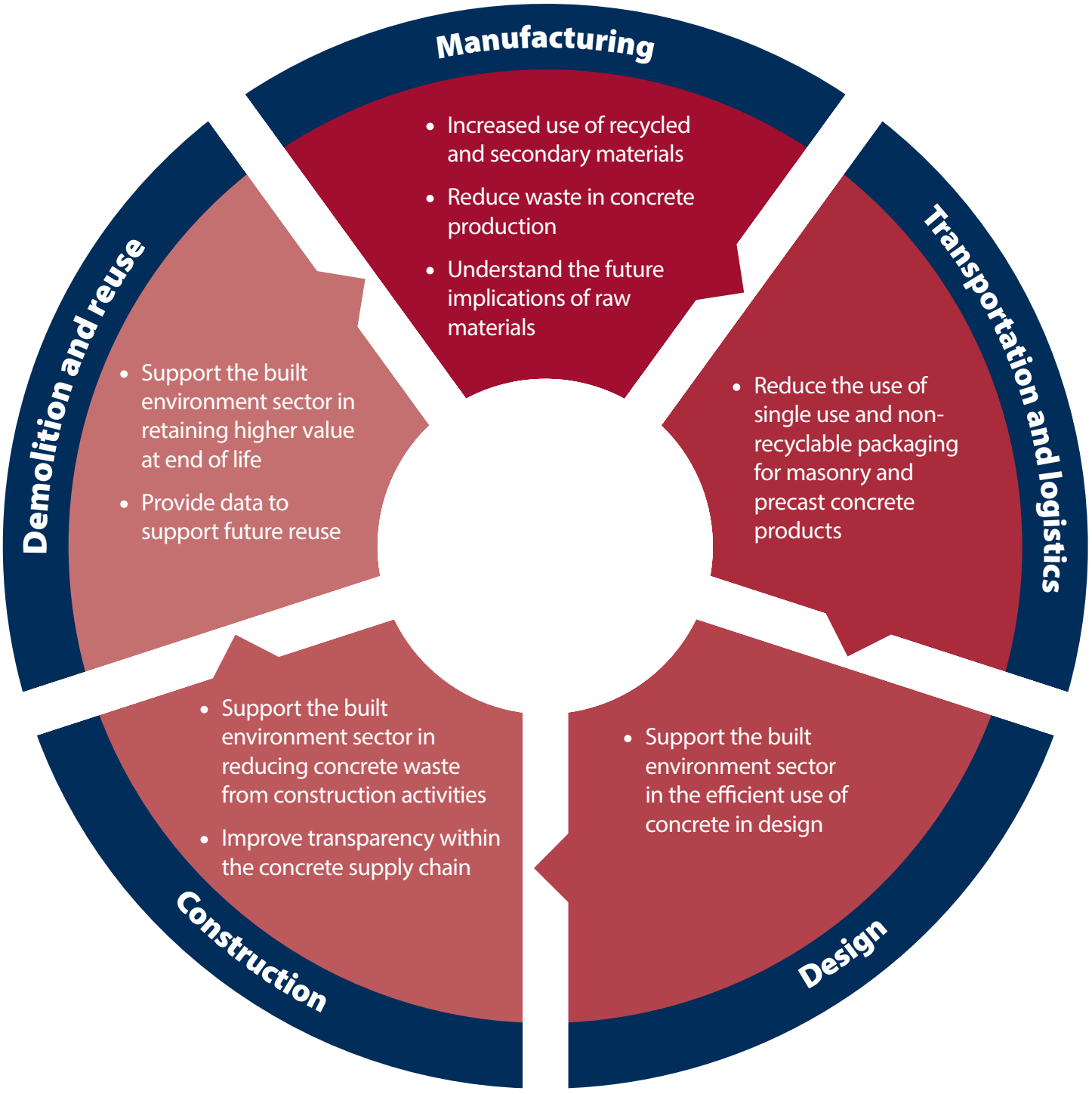
Recycling concrete fines

A cross-industry, Innovate UK-funded trial led by the Materials Processing Institute, involving Holcim UK, the MPA, Mott MacDonald and Aston University, has demonstrated the circular potential of recycled concrete fines (RCF).

A ready-mixed concrete was successfully produced using cement containing approximately 20% RCF, replacing the equivalent amount of more carbon-intensive clinker. This innovation provides a high-value end use for demolition waste that would otherwise be discarded, while reducing the embodied carbon of cement and supporting the transition to lower-carbon circular concrete production.

Objectives

The actions and metrics are focused on working towards nine objectives, distributed across all stages of concrete's life cycle, shown in the diagram below.



The detailed action plans that follow detail how the UK concrete industry intends to deliver against these objectives.

Monitoring and reporting

The UK concrete industry is committed to continuously sharing its progress towards enabling greater circularity across the built environment.

The concrete sector has been reporting its sustainability performance since 2009, including waste minimisation and resource efficiency. To build on this, several additional metrics are identified within this CEAP. The table below presents the indicators and current performance, where known.

Circular Economy metrics for the UK concrete industry

Objective	Performance indicator	Current snapshot (2023 data) for pre-existing indicators
Manufacturing		
Increase use of recycled and secondary materials	Proportion of recycled or secondary materials in the cement combination in concrete (The definition of this metric has evolved and therefore a new baseline needs to be established)	The most recent data point reports that the amount of additional cementitious materials as a proportion of total cementitious materials used is 30.6%.
	Proportion of recycled or secondary materials as a proportion of total concrete aggregates (Current metric retained)	4.7%
Reduce waste in concrete production	Waste to landfill as a proportion of production output (kg/tonne) (Current metric retained)	0.3 kg/ tonne
	Waste generated during manufacturing operations as a proportion of production output (kg/tonne) (Existing metric for precast and masonry being expanded to include ready-mix concrete)	Precast concrete and masonry reported 37kg/tonne. A new baseline including ready-mix concrete will be established.
Remain a net consumer of waste	Tonnes of recovered waste and by-products used by the sector per tonne of waste sent to landfill. Greater than 1 indicates the sector remains a net consumer of waste (Current metric retained)	285 tonnes
Transportation & Logistics		
Reduce the use of single use and non-recyclable packaging for masonry and precast concrete products	Proportion of packaging materials supplied that are widely recyclable (New metric)	N/A (new metric)
	Proportion of packaging supplied that has a takeback scheme (New metric)	N/A (new metric)
Design		
Support the built environment sector in reducing concrete waste from construction activities	Proportion of producers that provide tools or guidance to support their customers with accurate ordering (New metric)	N/A (new metric)
	Proportion of producers that offer a takeback scheme for surplus concrete/concrete products (New metric)	N/A (new metric)

Progress against these metrics will be included in the annual sustainability data reports published by the MPA on behalf of the sector: www.sustainableconcrete.org.uk/reports.
In addition, updates on implementation and key achievements will be shared on the UK Concrete website.

Manufacturing, transportation and logistics actions

Manufacturing and transportation are the lifecycle stages where concrete producers have most control over the inputs and processes that take place.

Increased use of recycled and secondary materials

Increasing the use of recycled and secondary materials contributes to the circular economy by utilising waste and by-products from other industries and reducing unnecessary extraction of primary raw materials.

Opportunities to increase recycled and secondary material use in concrete are focused on the two core constituents: cementitious materials and aggregates.

The sector has reported for many years on the use of additional cementitious materials (GGBS, fly ash, etc.), as a proportion of total cementitious materials used (currently approximate 30% cement replacement). The use of these materials is beneficial in supporting carbon reduction objectives, and also supports a circular economy as these materials are by-products from other industries. In the coming years it is anticipated that a greater range of cement additions may become available, both from primary and secondary sources such as recycled concrete fines, limestone and calcined clay. There may also in the future be secondary sources of clinker. Recognising this evolution, the metric has been refined to focus on the secondary aspect of the sources of these materials.

Reporting the proportion of recycled and secondary aggregates as a proportion of total concrete aggregates has also been a key part of the sector's established sustainability reporting. These materials include recycled aggregates and crushed concrete aggregates as defined in BS 8500-1, as well as manufactured or natural aggregates in accordance with BS EN 12620, where their raw materials are by-products or recovered from waste. To encourage best practice and inform specification guidance, the sector will work with colleagues in the aggregates sector to establish an appropriate target for the use of recycled and secondary materials as aggregate in concrete.

Reduce waste in concrete production

Reducing waste in concrete production helps minimise the environmental impact of manufacturing and supports more resource-efficient operations. The sector has a strong track record: in 2023, only 0.3 kg of waste per tonne of production was sent to landfill, with a long-term target of zero waste to landfill by 2030.

Future efforts will focus on reducing the waste associated with the batching and manufacturing of concrete, masonry and precast products, including inbound packaging, rejects, and ancillary items. This is already a KPI for precast concrete and masonry products, which will now be expanded to include ready-mixed concrete. Through sharing best practice and engaging with their supply chains, concrete producers will identify additional opportunities to prevent waste and enhance circularity throughout manufacturing operations.

Understand future circularity implications of raw materials

Understanding the circularity implications of new raw materials ensures that innovations in concrete remain durable, recyclable and reusable throughout their life cycle. While conventional recycling processes are well established, developments such as novel cement additions, admixtures, or reinforcement may affect future recovery potential. The sector will come together to build upon manufacturers' individual experiences to assess these impacts and identify interventions required to maintain high levels of material retention, reuse and recycling.

Reduce the usage of single use and non-recyclable packaging for masonry and precast concrete products

Reducing single-use and non-recyclable packaging helps to prevent construction site waste and supports a more circular delivery of concrete products.

Ready-mixed concrete is typically delivered without packaging, whereas precast and masonry products often require protective packaging during transport. The sector will explore further provision of reusable or returnable packaging or ensure that packaging is easily recyclable, thereby lowering the environmental impact of construction activities.

Circular concrete in action:

Utilising reclaimed calcined clay

The Re-C3 project, led by the Mineral Products Association (MPA) with funding from Innovate UK demonstrated that UK reclaimed clays and finely ground brick powder can be used as calcined clays in cement and concrete manufacturing.

Building upon this research, project partner Forterra, have pioneered a solution whereby crushed brick waste from their London Brick factory at Kings Dyke is fine-milled by LKAB Minerals to create calcined clay. This calcined clay is being incorporated as a substitute for cement in their concrete products, starting with aggregate blocks. This approach diverts waste streams while reducing reliance on virgin raw materials and energy-intensive production processes to produce a lower carbon product.

Manufacturing and Transportation Action Plan

Action	Responsible party	Timeframe
Increased use of recycled and secondary materials		
Establish and monitor performance against a revised metric on the proportion of recycled and secondary materials in the cement combination content.	UKC CE TG	Establish baseline 2027 Monitor progress from 2028
Produce guidance on the role of cement additions in a circular economy.	TCC	2026
Establish and work towards achieving an appropriate target for the proportion of recycled and secondary materials used as aggregates in concrete.	UKC CE TG	Establish target 2027 Report progress from 2028
Update guidance to continue the education on the appropriate specification of recycled and secondary aggregates in concrete.	TCC	2027
Reduce waste in concrete production		
Establish and report against a new metric for the total waste generated as a proportion of production output.	UKC CE TG	Establish baseline 2027 Monitor progress from 2028
Establish and work towards achieving an appropriate target for waste generation reduction.	UKC CE TG	Establish target 2027 Monitor progress from 2028
Develop best practice guidance on minimising waste generation during production.	UKC CE TG	2028
Understand future circularity implications of raw materials		
Conduct a gap analysis to look at existing testing methods, requirements and recycling techniques for concrete containing new constituents after initial use to identify if any further research is needed.	UKC CE TG	2027
Develop an assessment protocol, aligned to evolving standards on extended producer responsibility, to be used as part of the due diligence process when considering incorporating new materials within concrete.	UKC CE TG	2028
Reduce the usage of single use and non-recyclable packaging for masonry and precast concrete products		
Establish and monitor performance against a new metric on the proportion of packaging materials supplied that are widely recyclable. (The definition of 'widely recyclable' is green-rated in accordance with UK Extended Producer Responsibility reporting.)	UKC CE TG	Establish baseline 2027 Monitor progress from 2028
Establish and monitor performance against a new metric on the proportion of packaging supplied that has a takeback scheme.	UKC CE TG	Establish baseline 2027 Monitor progress from 2028

UKC CE TG = UK Concrete Circular Economy Task Group, TCC = The Concrete Centre

Design, construction, demolition and reuse actions

The UK concrete industry has set out a number of actions that can facilitate the use of their products aligned to circularity principles.

Support the built environment sector in the efficient use of concrete in design

How concrete is used in buildings and infrastructure strongly influences its contribution to a circular economy. The concrete sector will continue to provide up-to-date guidance and tools to designers and specifiers, highlighting strategies to reduce material use and site waste, enable adaptability and maximise reuse potential. Case studies demonstrating successful circular design approaches will complement this guidance.

Support the built environment sector in reducing concrete waste from construction activities

Reducing concrete waste at the construction stage helps to prevent unnecessary material loss. Surplus can be avoided through providing tools or guidance to support customers with accurate ordering.

The sector can also make sure there is provision for these materials to be reused or recycled at their highest value. This could be through establishing take-back schemes or supporting redistribution hubs. This presents an ideal opportunity for the concrete sector to partner with other organisations.

Improve transparency within the concrete supply chain

Enhancing transparency in the supply chain supports environmental stewardship and enables a circular flow of materials.

The concrete sector already demonstrates strong responsible sourcing practices, with over 96% of production certified to BES 6001. As traceability requirements and digital material tracking evolve, the sector will explore ways to provide greater visibility of material flows and support initiatives such as material passports.

Support the built environment sector in retaining higher value of materials at their end of life

Preserving value at the end-of-life stage ensures that the retention, reuse and recycling potential of concrete is realised. The concrete sector will support built environment professionals to improve the circularity of concrete at the end of its life by collaborating with aligned organisations, with the aim of promoting strategies for retaining the highest material value.

Provide data to support future reuse

Providing data enables informed decisions across the life cycle of concrete to be made. Material passports and other digital datasets are becoming increasingly important for maintenance, repair, reuse, and recycling, as well as providing information on composition and sustainability credentials. Digital product passports (DPPs) will start to become mandatory for a number of product categories over the next 3 years. The concrete sector will proactively explore how to make appropriate information accessible to stakeholders, helping to embed circularity throughout the built environment.

Guidance, tools and case studies

The Concrete Centre, part of the Mineral Products Association, provides material, design and construction guidance to enable all those involved in the design, use and performance of concrete and masonry to realise the potential of these materials.

Its Circular Economy Concrete Compass offers guidance, tools, and case studies that help designers and specifiers use concrete efficiently, enable reuse and extend material life. All resources are available here: www.concretecentre.com/CircularEconomy.

Design, Construction, Demolition and Reuse Action Plan

Action	Responsible party	Timeframe
Support the built environment sector in the efficient use of concrete in design		
Promote guidance, tools and case studies relating to efficient material design.	TCC	Annually
Collaborate with wider built environment sector to understand material efficiency and develop metrics or benchmarks where appropriate.	UKC CE TG	On-going
Update guidance on designing to enable concrete to be retained at its highest value (durability, maintenance, standardisation of components, disassembly, digital product passports, reprocessing).	TCC	2026
Update guidance on material efficiency and designing out site waste including reducing finishes, designing for component sizes and offsite construction methods.	TCC	2027
Investigate what product refinements or standards could further support future reuse.	UKC CE TG	On-going
Support the built environment sector in reducing concrete waste from construction activities		
Establish and monitor performance against a new metric on the proportion of producers who provide tools or guidance to support their customers with accurate ordering.	UKC CE TG	2027 (based on 2026 data)
Monitor UK construction waste data.	UKC CE TG	On-going
Establish and monitor performance against a new metric on the proportion of producers who offer a takeback scheme for surplus concrete/concrete products.	UKC CE TG	2027 (based on 2026 data)
Raise awareness of efficient installation techniques.	TCC	2027
Improve transparency within the concrete supply chain		
Conduct research to identify emerging trends and requirements in relation to the transparency and traceability of concrete.	UKC CE TG	2027
Support the built environment sector in retaining higher value of materials at their end of life		
Increase awareness of recyclability and reusability potential of concrete and concrete products at their end of life.	TCC	2026
Provide data to support future reuse		
Engage with emerging national and international standards to clarify data requirements for concrete and concrete products.	MPA Concrete	On-going
Provide guidance to members on what's required for digital product passports.	MPA Concrete	Expected 2027 (depending on status of standards development)
Provide guidance to specifiers on what's appropriate to expect in a digital product passport for ready mix concrete, masonry and precast concrete products.	TCC	Expected 2027 (depending on status of standards development)

UKC CE TG = UK Concrete Circular Economy Task Group, TCC = The Concrete Centre

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