

Concrete Action



responsibly sourced

this is concrete

ACTION ON MATERIALS

low carbon

this is concrete

ACTION ON CARBON

This is Concrete, the sustainability campaign for concrete, would like to share with you some of the actions and achievements of the concrete industry, based on the Concrete Industry Sustainable Construction Strategy and annual industry performance reports.

If you would like to know more about the concrete industry's sustainable construction strategy to 2020 and beyond, how it addresses sustainability issues and the industry's performance in measuring and managing its role in our sustainable built environment visit www.sustainableconcrete.org.uk.

If you would like to get involved by sharing case studies and your experiences then contact us on Twitter [@thisisconcrete](https://twitter.com/thisisconcrete) and online at www.thisisconcrete.co.uk

1. SOURCE RESPONSIBLY

Concrete is a local product with a local supply chain and this helps in demonstrating the traceability and ethical sourcing of products. Around 90% of UK concrete and reinforcement is certified to BES 6001 of which 99% has received the 'Very Good' or 'Excellent' rating.

2. CHOOSE LOW IMPACT MATERIALS

The longevity, durability and low maintenance benefits of concrete mean that concrete provides a low impact form of construction. To support the measurement of sustainability performance over the whole life, the concrete industry is committed to providing Life Cycle Assessment data.

3. DO MORE FOR LESS

Concrete offers a wide range of solutions for construction projects. For example in buildings the use of a post-tensioned concrete frame or a precast hollowcore slab can reduce the amount of concrete required without compromising performance.

4. TALK TO SUPPLIERS

Concrete is supplied in a wide variety of forms and products. Talk to manufacturers about their innovative products and processes. To assist with knowledge and advice on concrete for the entire supply chain, The Concrete Centre provides best practice guidance at

www.concretecentre.com

5. CARBON REDUCTION TARGETS

The concrete industry has set CO₂ reduction targets for production and reports annually on performance. From 1990 to 2012 the concrete industry has reduced the embodied CO₂ of a standardised or baseline mix of concrete by 23% and has set a target to achieve 30% reduction by 2020.

6. DESIGN FOR LOW CARBON

Designers can help to determine the embodied carbon dioxide of concrete through specification and can minimise the operational energy of buildings by utilising concrete's thermal mass. Guidance on the *Specification of Sustainable Concrete* and thermal mass is available from The Concrete Centre.

7. CUT CARBON EVERYWHERE

Concrete is a UK manufactured product that is locally sourced; reducing the transport CO₂ of a construction project. The concrete industry has committed to a Low Carbon Freight initiative to measure and manage transport CO₂.

8. PLAN FOR LONGEVITY

Concrete is inherently durable and flexible. Proven examples such as Elizabeth Court, Hampshire, The Angel Building, London and Park Hill, Sheffield demonstrate the long-term advantages of the re-use of a concrete frame – saving materials, cost and carbon. These, and other, case studies are available at www.thisisconcrete.co.uk



ACTION ON WASTE

9. DESIGN OUT WASTE

Designers can determine the material efficiency of their projects through specification, including the use of exposed concrete to minimise the use of finishing materials. Guidance on *Material Efficiency* and visual concrete are available from The Concrete Centre.

10. MINIMISE WASTE

The concrete industry is a net user of waste and consumed 62 times more recovered and waste material than the waste it sent to landfill. Concrete is also 100% recyclable.

11. PUT WASTE TO GOOD USE

The concrete industry, as well as recycling its own process waste, uses by-products, secondary materials and material diverted from the waste stream to reduce its demands on primary raw materials and energy. By-products including fly ash from power stations and ground granulated blastfurnace slag (GGBS) from the steel industry have less embodied CO₂ than cement and can have a positive effect on the appearance and performance of concrete.

12. OPTIMISE RESOURCE EFFICIENCY

Working in partnership with WRAP, the concrete and masonry industries are developing Resource Efficiency Action Plans. These plans will inform best practice for the efficient use of resources throughout the lifecycle of concrete, with performance published in the industry's annual performance report.



ACTION ON BIODIVERSITY & WATER

13. PROTECT AND ENHANCE BIODIVERSITY

The concrete industry makes a significant contribution to biodiversity and nature conservation through the management and restoration of their sites of mineral extraction. By 2020 the target is that 100% of these sites will have Biodiversity Action Plans.

14. WE ASK THE EXPERTS

The industry is working with local communities, conservation organisations, and Government to further improve biodiversity performance and create a forum for developing best practice for monitoring, reporting and enhancing biodiversity.

15. WATER CONSUMPTION – MEASURE IT, MANAGE IT

The concrete industry currently measures its mains water consumption. However the industry also recycles and re-uses water. To better understand water collection and usage the industry has committed to developing a Water Strategy, comprising targets for reduction and optimisation of consumption.

16. USE WATER SAVING TECHNOLOGY

Designers can use water saving technology to both capture rainwater and to manage run-off. Pervious pavements and sustainable urban drainage (SUDS) are all made possible by concrete products.



ACTION ON WELLBEING

17. TARGET ZERO HARM

The concrete industry is committed to achieving continuous improvement and in 2009 a more rigorous Health & Safety metric of Lost Time Injuries (LTIs) was adopted to support the commitment to ZERO harm. The industry target is a reduction of 50% in LTIs from 2009-2014.

18. DESIGN WITH PEOPLE IN MIND

Concrete in use has performance credentials such as thermal mass, fire resistance, acoustic performance, durability, flood resilience; all of which contribute to a built environment that is resilient to climate change and buildings that deliver occupant safety and wellbeing.

19. PROTECT AND ENHANCE COMMUNITIES

Being a UK manufactured product, and an important employer in rural communities, concrete production sites are situated throughout the UK and are part of the local community. The industry works together with the community to mitigate any potentially adverse impacts of this manufacturing activity. The 2020 target is for 100% of sites to have Community Liaison Programmes.

20. DEVELOPING SKILLS AND COMPETENCIES

Having a skilled, competent and informed workforce is essential and the concrete industry measures the proportion of employees whose training is monitored and managed within certified management systems such as ISO 9001, ISO 14001, BS OHSAS 18001 and others. 2012 data shows that 90% of employees are part of such schemes.