

Challenges:

One of the biggest sustainability challenges faced by Shotcrete Services Ltd relates to the carbon intensity of cement. Approximately 8 percent of global emissions come from cement manufacture, equating to around 1.7 billion metric tonnes of carbon dioxide in 2021. As a sprayed concrete specialist with a high cement content, Scope 3 emissions associated with cement account for more than 90 percent of the organisation's carbon footprint.

IN NUMBERS

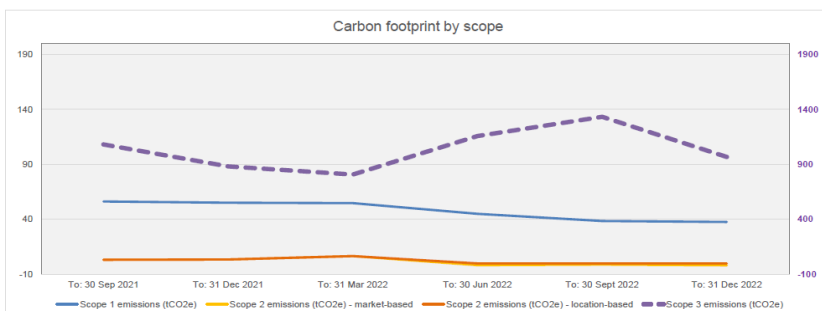
Scope 1: 176
Scope 2: 9
Scope 3: 4267
Total: 4452

As a result, concrete innovation and environmental performance pricing sit at the centre of the carbon reduction strategy and supporting plans. For example, the Ecoshot sprayed concrete innovation is exploring the replacement of up to 80 percent of CEM1 with Ground Granulated Blast Furnace Slag for use in tunnelling applications.

Impact:

Shotcrete Services Ltd has developed a detailed quarterly picture of environmental impact by using the Supply Chain Sustainability School's Carbon Calculator since 2021. This has supported significant progress in reducing resource use and waste, including the installation of energy efficient LED lighting in offices, reuse of washout water from concrete mixer trucks, and recovery of oils from sprayed concrete plant.

The Carbon Action Group meets monthly to monitor Environmental Management System performance, certified to ISO 14001, and to review progress against the Carbon Action Plan. The organisation will continue to promote the use of Ground Granulated Blast Furnace Slag in sprayed concrete and to innovate both process and practice, supported by the insight and resources provided by the Supply Chain Sustainability School.



Fact box

SHOTCRETE

Company

Shotcrete Services Ltd

No of employees

25

HQ

Swattenden Lane, Cranbrook, Kent, TN17 3PS

Website

<https://www.shotcrete.co.uk/>

Main contact

Jo Bligh
jo.bligh@shotcrete.co.uk

Services

Specialist sprayed concrete services and ready mixed concrete, including site batched mobile concrete plants and specialist plant hire and servicing.

About

Shotcrete Services Ltd is a leading practitioner in sprayed concrete, undertaking work on civil engineering projects such as tunnelling and buildings throughout the UK. This service is complemented by concrete batching plants that produce and deliver ready mixed concrete across the Weald of Kent for commercial and agricultural projects, as well as site batched concrete for major infrastructure projects such as HS2.

Assessments

The assessments and reports are user friendly and have been helpful in identifying knowledge gaps.

Action Plan

The Action Plan has been instrumental in documenting the organisation's sustainability journey and demonstrating progress to stakeholders.

E-learning modules

The e-learning modules have been particularly valuable in opening up insight into demanding subject matter, supporting Shotcrete Services Ltd to identify further opportunities to mitigate environmental impacts.

Value gained:

The Supply Chain Sustainability School has been a vital support for a small business such as Shotcrete Services Ltd, where access to subject matter experts is often limited. Through structured learning pathways and engaging e-learning modules, sustainability knowledge has been embedded across the organisation.

The impact is visible throughout the business, from wellbeing initiatives and workplace improvements to informed discussions with potential early adopters of world leading carbon saving innovations. The Supply Chain Sustainability School has strengthened knowledge and understanding, leading to tangible improvements in environmental performance. With Gold membership in sight, this progress provides clear differentiation from competitors and strengthens long term competitive advantage.

Future proofing:

Shotcrete Services Ltd will continue to expand sustainability knowledge across its specialist activities with the support of the Supply Chain Sustainability School's resources. The organisation aims to clearly express both social and environmental value to customers and local stakeholders in real economic terms through continued innovation and tangible contributions.