TARMAC

ACT
SUSTAINABILITY STRATEGY

“Bio Ultiflex has been designed to deliver lasting performance in a variety of locations from rural roads to heavily trafficked motorways, and as Multipave has proved in its CRBM solution, this is the perfect surface course to support sustainability strategies.”

Gabrielle Fairweather, Aggregates and Asphalt Account Manager - Tarmac

SOLUTIONS

SUSTAINABLE CONSTRUCTION

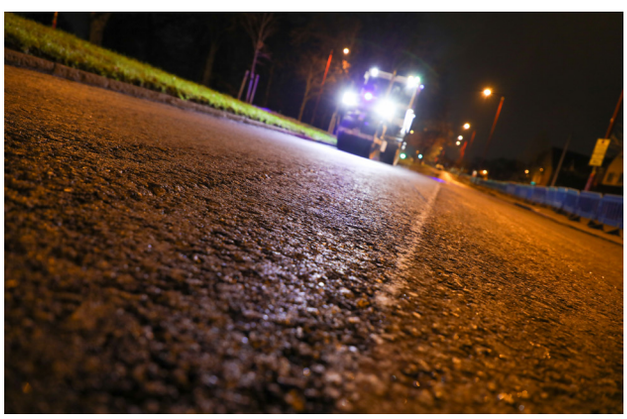
A Collaborative Approach to More Sustainable Road Renewal

A 4,500m^2 carriageway reconstruction project in Blackpool has demonstrated how partnership between Multipave and Tarmac can unlock meaningful carbon reduction through innovative material choices and smarter logistics. The scheme set a new benchmark for more sustainable road construction, bringing together recycled content, low carbon binders and circular design principles to deliver a high performance and environmentally responsible solution.

Combining Recycled Materials and Low Carbon Surfacing

At the heart of the project was 735 tonnes of Cold Recycled Bound Material (CRBM) produced by Multipave at its Leyland recycling facility. Created using waste planings taken directly from the existing carriageway, the CRBM showcased a circular approach that keeps valuable materials in productive use.

To complete the pavement structure, Tarmac supplied Bio Ultiflex, a high performance and low carbon surface course. Incorporating high PSV aggregates and a polymer modified binder, Bio Ultiflex provided the durability needed to withstand demanding traffic conditions while supporting Blackpool Council’s ambition to reduce carbon in essential maintenance work.



Smarter Logistics for Lower Emissions

Throughout the scheme, Multipave and Tarmac worked together to optimise material movements to maximise efficiency and strengthen the project’s carbon reduction outcomes. Waste planings removed from site were backhauled on the same wagons delivering CRBM, significantly reducing vehicle journeys compared with traditional base layer installation. This integrated approach helped cut transport emissions almost in half and demonstrated how simple operational changes can deliver substantial carbon benefits.

Multipave noted the importance of this efficiency, with the company’s Technical and Innovation Manager, Stuart Bradshaw, saying:

“This project presented significant challenges, not least because of the condition of the existing carriageway,

but we're delighted to have developed a more sustainable solution in every way. From the material itself that keeps waste materials in productive use, to the smart transport planning, we've delivered advancements in sustainability that help to set a new benchmark for environmentally responsible road maintenance."

Stuart Bradshaw, Technical and Innovation Manager - Multipave

A Combined Solution Delivering Long Term Value

This is the second project where Multipave and Tarmac have delivered a combined CRBM and Bio Ultiflex solution. The latest generation of CRBM includes a biogenic additive that locks carbon into the material structure, while mixing at ambient temperatures offers notable energy and carbon savings over traditional hot mix asphalt.

Together, the combined materials helped achieve:

34.9% reduction in total carbon emissions

40% lower material production emissions (A1–A3)

62.4% reduction in material transport emissions (A4)

35% reduction in emission intensity per square metre

For customers like Blackpool Council, and other local authorities looking to reduce the carbon impact of roads maintenance, the project demonstrated how integrated, lower carbon approaches can deliver both performance and sustainability benefits.

Gabrielle Fairweather, Aggregates and Asphalt Account Manager for Tarmac, added:

"Bio Ultiflex has been designed to deliver lasting performance in a variety of locations from rural roads to heavily trafficked motorways, and as Multipave has proved in its CRBM solution, this is the perfect surface course to support sustainability strategies. More than that, Bio Ultiflex is only available for installation by accredited contractors who have full access to our expert training, advice and technical support, or by our own expert Contracting division. This ensures it is laid to the highest industry standards, and we're delighted to have worked closely with Multipave once again on this pioneering project in Blackpool."

Looking Ahead

The Blackpool scheme shows how combining recycled materials, accredited lower carbon surfacing and intelligent logistics can make a measurable difference to whole life carbon. The success of this project reflects a growing appetite for circular, lower carbon solutions and reinforces the value of close collaboration between material suppliers, contractors and local authorities.

As demand for more sustainable road construction continues to rise, the lessons learned from this project offer a strong template for future schemes seeking both robust performance and reduced environmental impact.