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Denis O’Callaghan, Business Performance Director - Tarmac

SOLUTIONS

SUSTAINABLE CONSTRUCTION

Introducing CEVO Asphalt a New Generation of Lower Carbon Asphalt

Tarmac has launched CEVO Asphalts, a new engineered solution designed to make Net Zero road construction a practical reality. CEVO brings together advanced binder technology, circular economy principles, and low energy manufacturing. Together this significantly reduces the carbon footprint of roadbuilding while maintaining performance and durability.

For the first time, highways authorities and contractors can specify a proven set of materials and construction techniques that work together to deliver Net Zero roads without relying on carbon offsetting.

Engineering Carbon Reduction Into Every Layer

At the heart of the CEVO approach is its ability to reduce carbon emissions from the asphalt materials themselves by up to 45% when compared with traditional hot mix asphalts. These reductions are driven by three core technologies:

Advanced bio binders, made from renewable plant-based sources, which lower embodied carbon and can lock CO₂ into the asphalt structure

Warm mix asphalt production, which reduces energy demand and emissions during manufacturing and laying



Higher recycled asphalt planings (RAP) content, which cuts the need for virgin aggregates and bitumen while conserving natural resources

This combination allows CEVO Asphalts to address both immediate and long-term carbon impacts within the road lifecycle.

Supporting Net Zero Ambitions on Major Projects

When deployed alongside wider decarbonisation measures, such as electric vehicles and plant, CEVO Asphalts have already demonstrated carbon reductions of up to 80% on major highways schemes. The UK’s lowest-carbon resurfacing trial on the A64 in North Yorkshire has shown how these technologies can be applied successfully to deliver a genuine Net Zero road solution.

Tarmac’s PAVE Technology Solutions further strengthen the CEVO approach through innovations in pavement design and construction, including smooth ride planning, echelon

paving and automation. These enhancements support improved energy efficiency, reduce whole life carbon and extend pavement life by reducing maintenance interventions.

**Durability and Client Value:
Longer Life, Lower Carbon**

A defining feature of CEVO Asphalts is their durability. The range incorporates advanced polymers, recycled content including RAP, and AgeSafe polymer-modified bitumen, which extends pavement life by around 20 percent and reduces future maintenance needs. Durable roads mean fewer interventions, lower lifecycle emissions and better value for asset owners, aligning long-lasting performance with low carbon innovation.

“The construction and maintenance of roads make a substantial contribution to the built environment’s carbon footprint.

With increasing pressure on local authorities and highways contractors to address this challenge, the demand for credible, low carbon solutions has never been more urgent. We’re proud to be leading the charge with Tarmac CEVO Asphalts, which is designed to help clients meet their Net Zero goals, without offsetting or compromising performance or durability.”

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Looking Ahead

The launch of CEVO Asphalts marks a major milestone for more sustainable construction in the UK. By combining renewable binder technology, circular material flows, energy efficient production, and digital optimisation, CEVO gives clients a practical, credible pathway to Net Zero roads.

As more authorities and contractors look for durable low carbon options, CEVO will help shape the next generation of resilient, high performance road networks across the country.