

“As a business, we remain fully committed to developing sustainable construction materials and our innovative rubber modified asphalt is another fantastic example of the innovation we continue to invest in, to improve the environmental performance of our roads.”

Brian Kent, National Technical Director

**Planet**

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ZERO**

## Increased recycling

### Recycled rubber and reclaimed asphalt planings (RAP)

Tarmac engaged with Lancashire Council as part of their Highways Decarbonisation Strategy in order to introduce more sustainable materials into their standard road maintenance activities.

The aim was to use materials with lower carbon emissions but also to maintain or enhance durability and pavement life and. After exploring the range of material options, they decided to take a multi-faceted approach, by incorporating higher proportions of recycled materials and secondary materials, while using the latest warm mix binder technology.

ULTIPAVE R was trialled on a local resurfacing scheme in Padiham, to the north-east of Burnley. **ULTIPAVE R** is an asphalt that incorporates recycled rubber from old tyres and uses warm mix asphalt technology to reduce carbon emissions during production typically by around 8-10% compared to the equivalent. In addition to delivering carbon savings, using recycled rubber crumb in the mix helps to avoid export of waste car tyres that cannot be recycled in the UK: approximately one car tyre per tonne of asphalt or 750 tyres per kilometre of road, depending on layer thickness.

To further enhance sustainability, the lower layers of the carriageway could also be recycled using a cold foam mix process. This would enable around 95% of the old road to be processed and reused as a new base course material.



Resurfacing work took place on the Abingdon Road using the recycled foam mix asphalt base and 160 tonnes of **ULTIPAVE R** surface course. The client was delighted with the finish and the significant carbon savings achieved.