The First Net Zero Road Scheme using ACLA®

In a breakthrough project for sustainable road construction, Low Carbon Materials (LCM) has partnered with Durham County Council and MGL Group to deliver the UK's first-ever net zero asphalt scheme using ACLA®. LCM is at the forefront of this challenge, providing innovative material solutions that can counteract the emissions associated with the production of carbon-intensive asphalt.

ACLA®, LCM's carbon-negative aggregate, was used by MGL Group to produce 220 tonnes net-zero binder course asphalt, which was used to resurface Elvet Hill Road in Durham, thereby removing and permanently storing nearly 12,000 kg of carbon dioxide. The success of Durham County Council's net zero resurfacing scheme highlights the transformative power of collaboration between local government, and industrial innovators like LCM and MGL Group.

Real-World Application of Net Zero Technology

LCM's carbon-negative aggregate (ACLA®) was seamlessly combined with local limestone and recycled materials including waste plastics, rubber, and Recycled Asphalt Planning (RAP). The adoption of a circular economy approach reduces the amount of waste going to landfill and diminishes the impact of quarrying on the environment. MGL Group's in-house companies Tynedale Roadstone produced the net zero asphalt, and Rainton Construction handled laying of the material.

Measurable Results and a Path Forward

LCM's carbon-negative technology is a game-changer for road construction and maintenance, and its implementation in this project, for the first time, demonstrates a clear commitment to a sustainable and low carbon future for infrastructure development. By leading the way with net zero asphalt projects, LCM offers an easy-to-implement solution for the construction industry at large. Further resurfacing projects by the same partnership are in the pipeline.

MGL GROUP

Low Carbon Materials

Durham County Council