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## PRESS RELEASE

# SACYR USES ECOFRIENDLY ADDITIVES IN AUTOVIA DEL ERESMA (SEGOVIA) PAVEMENT

- **Bioroad is an asphalt additive made of a processed byproduct of olive oil (alpechin), other vegetable oils and graphene.**
- **With Bioroad, asphalt mixtures are made at lower temperatures, which entails energy savings and a reduction of the carbon footprint. This way it is also safer to handle.**

**Madrid, July 18, 2023.-** Sacyr Concesiones has used [Bioroad, an additive developed by UNICO GREEN](#), to pave two sections of the Autovia del Eresma road, A-601, in Segovia. Bioroad is a liquid additive that allows to produce semi-hot asphalt mixes. **Bioroad** also provides longer durability to asphalt mixtures and improves production, application, and compaction processes, with no production cost increase.

What differentiates this additive from others able to lower the production temperatures is that Bioroad is ecofriendly, because the formulation includes 30-50% of recycled vegetable oils, and 20-30% of olive oil byproducts, such as alpechin. Functionality of these byproducts is achieved thanks **to graphene nanotechnology**.

Bioroad allows to produce semi-hot asphalt mixtures at 120-140 °C, which is around 40 °C less the usual production temperature. Producing at a lower temperature translates into **reduced energy consumption rates and a lower carbon footprint**. Moreover, it is **safer for workers to handle the substance on application**.

At the appropriate dose, Bioroad allows to produce **durable asphalt mixture**, that is, mixtures that can be stored in bulk and applied after long periods of time in storage.

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Moreover, there are other Bioroad ranges that can be mixed to produce 100% recycled asphalt.

“This action on Autovia del Eresma allowed us to confirm that Bioroad can reduce production temperatures in our mixtures by 40°C, working on the range of semi-hot mixtures and that it is in fact possible to correctly apply and compact said mixtures, resulting in more durable mixtures”, explained **Carlos Rodriguez**, Highways director for Sacyr Concesiones Spain.

The Autovia del Eresma **sections where Bioroad has been applied** were the “Carbonero Norte” (E-85) link exit road going to Segovia to the Carbonero El Mayor municipality and at the service road to the rightmost edge between the road to Cuellar and the “Villa y Tierra de Cuellar” link (E-57).

**Autovía del Eresma** is a Sacyr Concesiones (51%) operation and maintenance P3 project over the Segovia section of Autovia A-601 running between km 56+363 (Cuellar) and km 105+140 (Valseca). This section, connecting Valladolid and Segovia through a high-capacity road, is strategic for the region.

The P3 company has a full action plan from 2023 to 20326, including the milling of the current pavement, and repaving around 11 km of the main road, several backroads on seven bypasses and two service roads in Cuellar and Carbonero el Mayor.

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