

Acting on Climate
#LHLowCarbonTransition

ORIS: Using Data Technology to Reduce Road Carbon Footprint

What is the challenge?

Road infrastructure are key to connect people and enable trade but their environmental impact is important:

- 18.5% of global carbon emissions from road transportation
- 60,000 tons of resources per km of highway built

How can you better design roads to limit its impact on the environment?

Key figures

With ORIS:

- Up to 50% of carbon emissions reduction
- Road lifespan multiplied by x3
- 15 to 30% of cost reduction

Our solution

To help investors design more sustainable and low-carbon roads, LafargeHolcim has developed ORIS, a sourcing intelligence for road optimization. This digital platform assesses road design with a holistic view, from construction down to maintenance. For each project, it analyzes local resources available, expected traffic, weather conditions, etc. and offers a whole set of design solutions. Investors can then choose their preferred design, according to their expectations, including lowest carbon footprint, most local resources used, highest lifespan, lowest cost, etc.

For the benefits of all, using ORIS to optimize road projects has a considerable impact on a road project's carbon footprint (up to 50% reduction), on its lifespan (x3) and on its costs (-15% to -30%).



LafargeHolcim