Media Release



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LafargeHolcim and IBM join forces to further develop ORIS – the first digital materials platform for sustainable road solutions

LafargeHolcim announces it will work with IBM Services to further develop the first digital platform for road design optimization, ORIS. The solution can reduce road project costs by up to one-third and carbon emissions by up to half while tripling road durability and usage lifespans.

ORIS allows decision-makers, road infrastructure authorities and project investors to improve road construction and sustainability and reduce inefficiencies through smart project design. This is especially timely as governments design stimulus packages to revive economic activity post COVID-19 while also responding to the impact of climate change.

An average of 700,000 kilometres (435,000 miles) of new roads are being built globally every year. Improving road quality and resilience will help reduce the massive amount of carbon emissions attributed to transportation. Because roads vary depending on location, climate, vehicle types and traffic volumes, it is a complex challenge to define the most sustainable and cost-effective mix of building materials and technologies early in the design phase. ORIS assesses road pavement designs from different perspectives and recommends efficient construction and maintenance patterns with local materials availability and capabilities. ORIS is supporting public policies that conserve natural resources, enabling a more local and circular economy in road construction.

"We are accelerating the digitalization of our solutions for sustainable and high-performance construction," said Marcel Cobuz, Region Head of Europe, Member of the Executive Committee with responsibility for innovation at LafargeHolcim on a global level. "With global solutions like ORIS, we are committed to leading the way in low-carbon and circular construction as well as responsible natural resource consumption for roads and beyond. We have already entered into pilots with different partners such as road authorities, international financing institutions and engineering firms to use ORIS in both developed and emerging markets."

LafargeHolcim will leverage IBM's portfolio of digital platforms, hybrid clouds, digital design services, as well as IBM's expertise in machine learning, artificial intelligence, industrial Internet-of-Things and data analytics to enhance even further its materials knowledge in cement and ready-mix concrete products, as well as its solutions and products, including precast concrete, asphalt, mortar and building solutions.

"Data-driven solutions and digital technologies have the potential to transform road construction towards more sustainable, circular, low-carbon, low-resource and cost-efficient techniques. ORIS is instrumental in recommending appropriate and tailored approaches to road-building, thus minimizing costs, environmental impacts and project delays," says Hervé Rolland, Vice President, Industrial solutions, IBM Europe. "IBM Services help businesses establish the right industry-relevant platforms that support rapid digitization, standardization and simplification, as well as vertically integrating both industrial and business operations."

About LafargeHolcim

LafargeHolcim is the global leader in building materials and solutions and active in four business segments: Cement, Aggregates, Ready-Mix Concrete and Solutions & Products. Its ambition is to lead the industry in reducing carbon emissions and shifting towards low-carbon construction. With the strongest R&D organization in the industry, the company seeks to constantly introduce and promote high-quality and sustainable building materials and solutions to its customers worldwide - whether individual homebuilders or developers of major infrastructure projects. LafargeHolcim employs over 70,000 employees in over 70 countries and has a portfolio that is equally balanced between developing and mature markets.

More information is available on www.lafargeholcim.com.

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More information on ORIS is available on https://www.lafargeholcim.com/oris or on LinkedIn

About IBM

IBM iX is the global business design arm of IBM Services, and works at the intersection of strategy, creativity and technology to help clients digitally reinvent their businesses. IBM has been involved in the Industrial Sector for decades, and has re-invented Industrial offerings to add services, software, data handling, cloud, Al and blockchain capabilities. IBM's focus is to support the industrial industry in managing data as a strategic asset; helping the industry to capture, monetize and secure it, all on the road to embracing Industry 4.0 and support the move towards the digital construction of the future. IBM is a full-service industrial partner focused on user experiences using technology for transforming various functions across the construction ecosystem. IBM's portfolio features a set of offerings targeting enterprise & operations transformation, technologies, outsourcing, SAP implementations and helping clients use their data to their specific strategic advantage. For further information visit: www.ibm.com/services/ibmix/