

Nano Science, Technology and Industry Scoreboard

Concretene: NERD Raises £8m for Graphene-enhanced Concrete

2023-01-05 Nationwide Engineering Research and Development (NERD) has raised £8m in seed funding as it looks to commercialise a graphene-enhanced building material called Concretene.

NERD, a company founded by <u>Nationwide Engineering Group</u>, developed Concretene with the goal of creating a stronger and more sustainable product than traditional concrete.

The company did this by adding a graphene formulation into the hydration process of concrete development. NERD said that when deployed on active construction projects, Concretene was as much as 30-50% stronger than standard concrete.

Developed by NERD in partnership with the University of Manchester's Graphene Engineering Innovation Centre (GEIC), the product acts similarly to normal concrete from the perspective of construction firms, meaning the implementation of Concretene is non-disruptive to the industry. The production of cement, a key ingredient in concrete, is estimated to contribute to 8% of global CO2 emissions.

"As professional civil engineers, we understand how the construction industry designs and uses concrete," said Robin Hibberd, joint managing director of Nationwide Engineering Group.

"From the outset, it was clear that Concretene had to be non-disruptive and align with existing codes and standards. Using revolutionary nanomaterial technology, developed with our partners at the GEIC, we have been able to create a brilliant new material product that is easy for the industry to adopt."

The funding came from the venture capital firm LocalGlobe.

"Graphene offers huge potential across industry and with Concretene, the teams at Nationwide Engineering and GEIC have unlocked this potential in a way that could transform construction and physical infrastructure," said Robin Klein, co-founder of LocalGlobe.

The company says it has more than 50 clients across transport, construction, energy, and government bodies have signed up to use Concretene for upcoming projects.

Read the <u>original article</u> on UKTech News.