CASE STUDY
Aggregate Industries supports in the creating the UK’s first ‘clean air’ substation

THE BACKGROUND
Aggregate Industries was approached by CRE8 Building & Maintenance Ltd. to provide a low-carbon concrete base for the installation of a new and sustainable substation in Glasgow.

Located in MacLean Square, across from the Scottish Event Campus where COP26 was recently held, the SP Energy Networks substation was set to trial new Siemens switchgear technology, which would allow it to operate free of sulphur hexafluoride (SF6) - commonly used as an insulator for electrical equipment across the UK. This technology is carbon neutral and is comprised of components from clean air with all humidity and impurities removed, so providing low carbon solutions at each stage of construction was vital in ensuring the project met its sustainable goals.

THE SOLUTION
To meet the desired sustainability credentials for the project and to ensure the product supplied met the required strength to support the installation of the technology, Aggregate Industries’ team created a bespoke low carbon concrete solution, with no compromise on the performance of a traditional C40 strength cement. It has up to 50% CO2 reduction compared to a standard concrete (CEM I) mix – making it the ideal solution for the installation of the new technology.

More than 7.5m3 of the concrete has been used in the substation base, ensuring sustainable solutions have been utilised at every step of construction to house the new technology.

Jamie McMeekin, Commercial Director at Aggregate Industries, said: “We were delighted to be chosen by CRE8 Building & Maintenance Ltd. to provide our industry-leading low carbon product on such an important project.

“Our ‘green’ range of products draw on new technology, our world class R&D facility and local expertise to create a low carbon range of products, which are a viable and green solutions that support in reducing environmental impacts of projects such as the SP Energy Networks’ clean air substation, and support in the decarbonisation of the construction industry as a whole.”

Find out more about the ECOPact range of low carbon concretes, at www.aggregate.com/ecopact