

Ecocem is Europe's largest independent producer of high performance, low carbon Ground Granulated Blastfurnace Slag (GGBS).

Ecocem GGBS is used as a replacement for Ordinary Portland Cement due to its higher long term strength, increased durability, and lower environmental impact. Strategically located across Europe, Ecocem operates four manufacturing facilities in France, Ireland and Holland with import terminals in the UK and Scandinavia.

ECOCEM & SOIL STABILISATION

Ecocem GGBS is fast emerging as the best solution for stabilising contaminants in soil due to its high strength, increased durability, and leachate reduction.

Ordinary Portland Cement has commonly been used for Soil Stabilisation however increased performance requirements for this type of application means Ecocem GGBS is now the best available technology for stabilising contaminants.



**Innovation
Powering
Sustainability**

THE BENEFITS OF GGBS IN CONCRETE

LEACHATE REDUCTION

The pH of Ecocem GGBS is lower than that of cement (10-11 compared to 13+ for cement). This lowers the pH of the stabilised matrix, which reduces the solubility of the contaminants and minimises leaching.

LOWER PERMEABILITY

The higher silica and lower lime content in Ecocem GGBS achieving a denser binder matrix formation resulting in lower porosity and improving physical immobilisation of contaminants.

INCREASED LONG TERM STRENGTH

Ecocem GGBS reaches a higher long term strength than Ordinary Portland Cement and extends the service life of project structures.

RESISTANCE TO SULPHATES & ACIDS

Ecocem GGBS has replaced the use of Sulphate Resisting Portland Cement (SRPC) due to its outstanding resistance to sulphates and acids. Ecocem GGBS can be used in concrete in all classes of aggressive ground conditions listed in the BRE Special Digest 1:2005 Concrete in Aggressive Ground Conditions.

LOWER ENVIRONMENTAL IMPACT

The carbon footprint of Ecocem GGBS is just 42 kg of CO₂ per tonne, whereas Ordinary Portland Cement is over 850 kg CO₂ per tonne. Ecocem GGBS is the only product to have a third party verified Environmental Product Declaration.

SECURITY OF SUPPLY

Ecocem's strategic locations and long term partnerships with the world's largest steel producers ensures continuous supply of high quality GGBS around Europe.

APPLICATIONS

- BROWNFIELD REMEDIATION
- PORT STABILISATION
- LAND RECLAMATION
- AGGRESSIVE GROUND CONDITIONS



CASE STUDY

PROJECT: Port of Gavle, Sweden
ECOCEM GGBS PERCENTAGE: 40%
CONTAMINATED SOIL: 1,000,000 m³

To increase sea transport capacity for Gavle, the port implemented an expansion plan which included a significant soil stabilisation project. To facilitate the extension of the Port, Ecocem GGBS was used to stabilise contaminants in the soils due to their high levels of Zinc, Mercury,

The key characteristics of GGBS - its ability to immobilise contaminants, both chemically and physically, as well as its low environmental impact – make it the optimum choice for stabilising contaminated sediment for all project types.

TECHNICAL ADVICE

Ecocem's highly qualified team of technicians with years of experience in innovative cementitious products will work with you throughout your project.

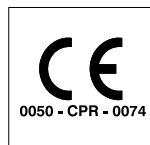
Ideally located across Europe, Ecocem can provide on-site support and assistance to all of their customers.

FOR MORE INFORMATION PLEASE CONTACT

Gavin O'Riain on +44 7808 193 821 and/or goriain@ecocem.ie

CERTIFICATION

Ecocem has been rigorously tested in accordance with the EN 197-2 Cement - Part 2: Conformity evaluation and the EN 15167-2: Ground Granulated Blast furnace Slag and has been issued with an EC certificate of conformity by an EU Notified Body and carries the CE mark.



**Innovation
Powering
Sustainability**

Version No: 181

Ecocem Ireland Ltd., Block F1, East Point Office Park, Dublin 3

T IRL +353 (0)1 678 1800 | UK +44 (0) 845 434 8191 E technical@ecocem.ie W www.ecocem.ie

