



# ECO Pact

The Green Concrete

**SUSTAINABLE CONSTRUCTION  
STARTS HERE**

# GREENER CONSTRUCTION STARTS WITH THE RIGHT MATERIALS

Concrete is the most reliable and widely used building material in the world, with a whole host of advantages. Technical benefits such as stability, heat and fire protection mean people choose it over and over again for today's ever-improving infrastructure and impressive buildings.

That's why, as the demand for more sustainable solutions and developments in research increase, we're on-hand offering a comprehensive range of products to meet the evolving needs of our customers – without compromise.



## MEETING UK TARGETS

In 2019, the UK agreed a ground-breaking target of net zero carbon emissions by 2050.

Putting clean growth at the heart of the country's industrial strategy, this ambitious target could change how we live and work for generations. But to achieve this, businesses, local authorities and households will all need to make changes.

Part of the MPA (Mineral Products Association), UK Concrete have taken it one step further with a 'beyond net zero' framework. The roadmap aims to remove more carbon from the atmosphere that the industry emits using existing and emerging technologies.

Aggregate Industries are here to support that roadmap. Our vision is to create a more sustainable future, through our people, products and solutions – committing to supporting targets through the development of low carbon products that advance the pace of construction.

We have proudly launched our new Sustainability strategy which clearly outlines our commitments across our business.

## WHY WE'RE THE PLACE TO BEGIN

### SUSTAINABILITY FROM CRADLE TO GATE

From the very beginning of the manufacturing process, we make sure raw materials are sourced as responsibly as possible.

A nationwide network of plants and a robust logistics system, including rail and barge, means we can transport materials across the country in a more environmentally-friendly way.

Where we do have to use roads, 93% of our fleet used to transport materials to site are Euro 6 compliant. So, you can rest assured that your concrete has still made the most efficient journey possible.

### A REDUCED CARBON FOOTPRINT – PAS 2080

Following the 2013 Infrastructure Carbon Review, it was found that infrastructure is responsible for over 50% of the UK's carbon emissions.

The PAS 2080 standard was designed to specifically address carbon management within the infrastructure life cycle.

We were awarded PAS 2080:2016 certification for the process of carbon management in infrastructure in the capacity of product and material supplies. Since then, we've worked relentlessly to reduce our carbon footprint throughout our value chain and operations.

### RESPONSIBLE SOURCING: BES 6001

The BES 6001 certification recognises construction companies that source responsibly throughout manufacturing and supply chain.

We're proud to be the world's first company to be certified to BES 6001. Demonstrating our commitment to the responsible sourcing of construction products.

### A RANGE FOR 'LIFE'

As environmental, ethical and governmental pressure mount for people to make sustainable choices, we've already started to implement change throughout our company.

Many of our ranges already have more sustainable options, whether recycled content or reduced demand on resources. These all carry the 'Life' stamp. This label means products meet one or more of our six environmental credentials.

For more information on the Life range, visit [www.aggregate.com/life-products](http://www.aggregate.com/life-products)



# GREENER CONCRETE, GREENER PLANET

Concrete is the second most widely used material worldwide, after water. The environmental impact of concrete is not purely due to the per kg carbon produced when compared to other construction materials, it's due to the sheer volume produced.

Cement, a key ingredient of concrete, equates to 90% of its carbon footprint. Originally this was reliant on using fossil fuels during the manufacturing process. However, did you know this process produces less than 1.5% of UK carbon emissions against an average of 7% worldwide?

As the industry moves away from fossil fuels, we're actively seeking greener solutions to help decarbonise our environment and achieve the net zero target.

ECOPact is the start, actively reducing CO<sub>2</sub> in your build, no matter what the project. All alongside maximising alternative fuels throughout the production process within both our cement plants. And investing in future technology to increase our thermal substitution rate at our plants.

## DESIGNING A GREENER FUTURE

By choosing the most suitable concrete mix, you'll not only reduce your carbon emissions, but reduce the overall volume and weight of concrete used in a project. Plus reduce potential over design, positively impacting on the overall cost and viability of a project.

Whether it's exploring different mix designs, product proposals or strength testing for added peace of mind, our concrete team is on-hand to help you choose the most sustainable option for your needs.

Get in touch at [ecopact-aiuk@aggregate.com](mailto:ecopact-aiuk@aggregate.com)

## CONCRETE RECYCLING

Did you know concrete can be recycled aiding the circular economy? Due to its inert nature, it can be used as recycled aggregate or recycled concrete aggregate.

With a performance comparable to natural aggregate it has many applications. Including building products and road construction, reducing residual waste and reliance on virgin resources.

To find out more, get in touch with your local concrete team.

## SUSTAINABLE DOESN'T MEAN COMPROMISE

### SAME GREAT DURABILITY

Concrete is durable like no other building material. Buildings erected today stand the test of time for generations. And when a concrete building is torn down, it's components can be almost completely recycled.

### SAME GREAT STRENGTH

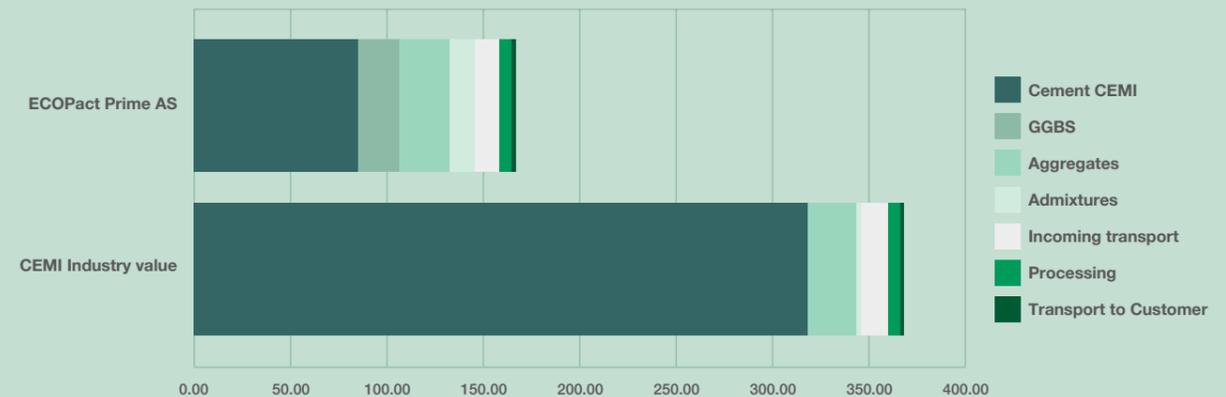
A key characteristic of concrete is strength. There's a myriad of concrete mix possibilities, each designed specifically to meet a range of criteria. This doesn't have to change with low carbon concrete. You can still create complex designs with the same reliability and strength of traditional concrete.

### SAME GREAT FINISH

Whether it's exploring different mix designs, product proposals or strength testing for added peace of mind, our concrete team is on-hand to help you choose the most sustainable option for your needs.

If you're looking for the highest performance with the lowest carbon, our new ECOPact Prime AS concrete increases cement substitution and keeps pace with construction.

## WHERE IS THE MOST OF THE CARBON COMING FROM?



## THE FOUNDATION OF GREENER CONSTRUCTION

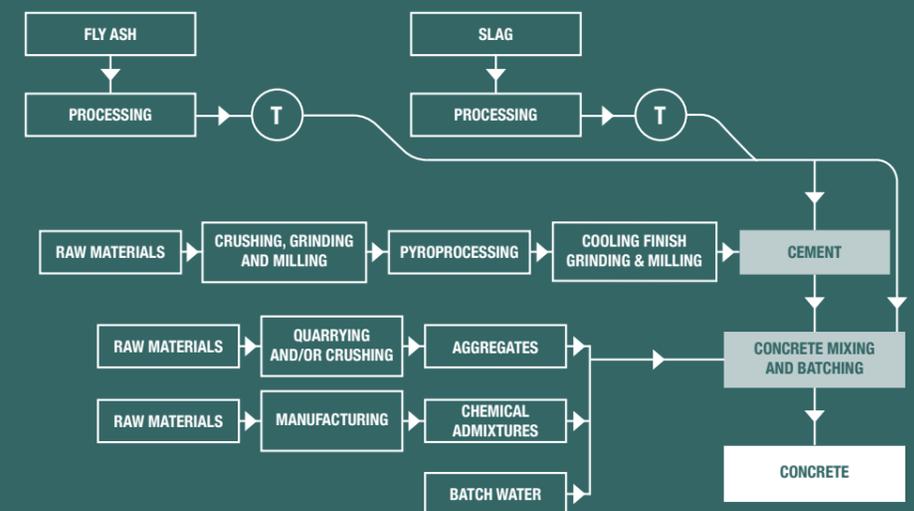
Carbon in concrete as we know is predominantly from cement, but as you can see from the carbon flow there are a number of other factors involved.

In the UK we've been working on reducing carbon in our concrete for years without recognising the impact we have when reducing Ordinary Portland Cement in our mix designs.

Together we have converted to lower carbon blended cements and we are currently seeing this increase even further with over 66% of our ready-mixed concrete sales taking the first steps in lower carbon mixes.

These decisions have predominantly saved over 30% carbon when compared to the more traditional CEMI mixes. This change towards lower carbon mixes will have saved over 1.2 million kg of carbon per year. This is equivalent to over 5.2M miles driven in a diesel car.<sup>1</sup>

<sup>1</sup>data sourced from [www.statista.com](http://www.statista.com)



T Represents transportation for which change of mode is considered

# RECOGNISING CHANGE THROUGH ECOPACT

To help us to recognise and celebrate the positive work that is already going on in UK construction, we will be rebranding all of these mixes with our new ECOPact brand. Helping us to record and report on these positive changes we are making every day.

This won't need our customers to do anything different, but you will notice a change on your PoD and invoices as the ECOPact brand launches in the UK. When you make a decision to work with a solution that offers above 30% reduction in CO<sub>2</sub> we will recognise that by recording it as 'ECOPact'.

In addition, we are implementing digital solutions across our business to make our customers' lives easier. Including our digital order tracking system, LOOP.

## OUR CONCRETE CARBON COMMITMENTS

To support our reduce theme we're launching our three Concrete Carbon Commitments.

- ▶ We'll support our industry partners by offering technical CPDs, making sure they can easily choose the best, lowest carbon concrete for the job.
- ▶ We'll make sure that where CEM I is used we optimise the volume in our mixes - keeping it sustainable while making sure your performance needs are met. All supported by an efficient plant network and the latest technology in mix designs and testing.
- ▶ You'll always have a clear product solution, meaning you can meet specification but include low carbon alternatives easily and with confidence. Delivered by expertly trained teams, giving you the tools you need to make a difference.

# PUT ECOPACT AT THE HEART OF YOUR PROJECT

We have already explained how we are already making some great sustainable decisions in the UK construction market, but we can do more. This is where investing in the ECOPact range will help us to make even better, sustainable decisions.

We have invested in new technology and spent time on research and development to help make the process as simple as possible for everyone involved.

All of our teams have been involved in a series of training sessions, not only to help understand the solutions we have but also to have a better understanding of why this matters.

Introducing our new ECOPact solutions:

### ECOPACT - OVER 30% CARBON REDUCTION

A low carbon concrete utilising blended cement, that has between over 30% CO<sub>2</sub> reduction compared to a standard concrete (CEM I) mix.

### ECOPACT PRIME - OVER 50% CARBON REDUCTION

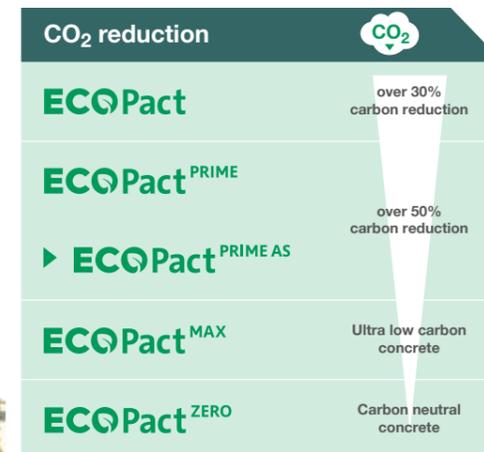
An engineered very low carbon concrete utilising higher blends of cements using supplementary cementitious materials. ECOPact Prime delivers between over 50% CO<sub>2</sub> reduction compared to a standard concrete (CEM I) mix.

### NEW ECOPACT PRIME AS - OVER 50% CARBON REDUCTION

A unique mix, producing a concrete that has greater carbon reduction than ECOPact, plus active strength development and same setting time as ECOPact. Providing very low carbon concrete with the highest performance.

### ECOPACT MAX - ULTRA LOW CARBON CONCRETE

Our lowest carbon range of concrete using cement alternative technology such as alkali activators to achieve increased CO<sub>2</sub> reduction compared to a standard concrete (CEM I) mix..



Carbon reduction figures are based on industry base levels. For project specific calculations, please contact our technical teams.

## WANT TO GO CARBON NEUTRAL?

You can choose to make any ECOPact product, including Prime, Prime AS and Max, carbon neutral through offsetting the residual CO<sub>2</sub>. This will automatically upgrade your product to **ECOPact Zero**, our carbon neutral product.

You don't need to do any additional work, simply upgrade your product to be carbon neutral when you place the order. Through our carbon offsetting scheme, we will calculate the remaining carbon and purchase the credits to ensure whichever product you choose, is the most sustainable option available right now.

We will handle all of the admin and provide you with a certificate as proof once your concrete has been delivered. It's as simple as that.

## TRY OUR CARBON CALCULATOR

As part of the new ECOPact range, we've developed an online carbon calculator. This simple-to-use online tool helps you calculate your CO<sub>2</sub> savings by recommending solutions based on the volume, concrete, and cement type; helping you to make the right choice.

In just a few clicks, you can generate a straightforward report based on your requirements.

**Try it for yourself at [www.aggregate.com/ecopact](http://www.aggregate.com/ecopact)**

If you need a project specific report, contact our technical team and they'll develop a detailed report based on your requirements.

# WHAT'S CARBON OFFSETTING?

Carbon offsetting is rapidly rising in importance. The world's carbon emissions are increasing at an alarming rate and offsetting your carbon emissions is a powerful mechanism to help in the battle against climate change and global warming.

Benefits of carbon offsetting are not only carbon emission reduction, but depending on the offset project type, they can bring many benefits to the wider environment. As well as local, social and biodiversity benefits.

Carbon offsetting means individuals and companies can reduce carbon emissions by buying credits in carbon reduction projects. These projects include:

- Biogas generation
- Clean water access
- Clean cookstove projects
- Renewables, such as solar PV and wind turbines

Each carbon credit is equivalent to a carbon reduction of one tonne of CO<sub>2</sub> and also meets ten of the United Nations Sustainability Goals (UNSDG).

# OUR OFFSETTING PARTNERS

Circular Ecology is a UK based environmental consultant. They were founded in 2013 to offer resource efficiency services, including carbon footprinting, water footprinting, life cycle assessment (LCA), circular economy and general resource efficiency.

Circular Ecology has a strong background in the construction and the concrete industry, making them an ideal partner to support this programme.



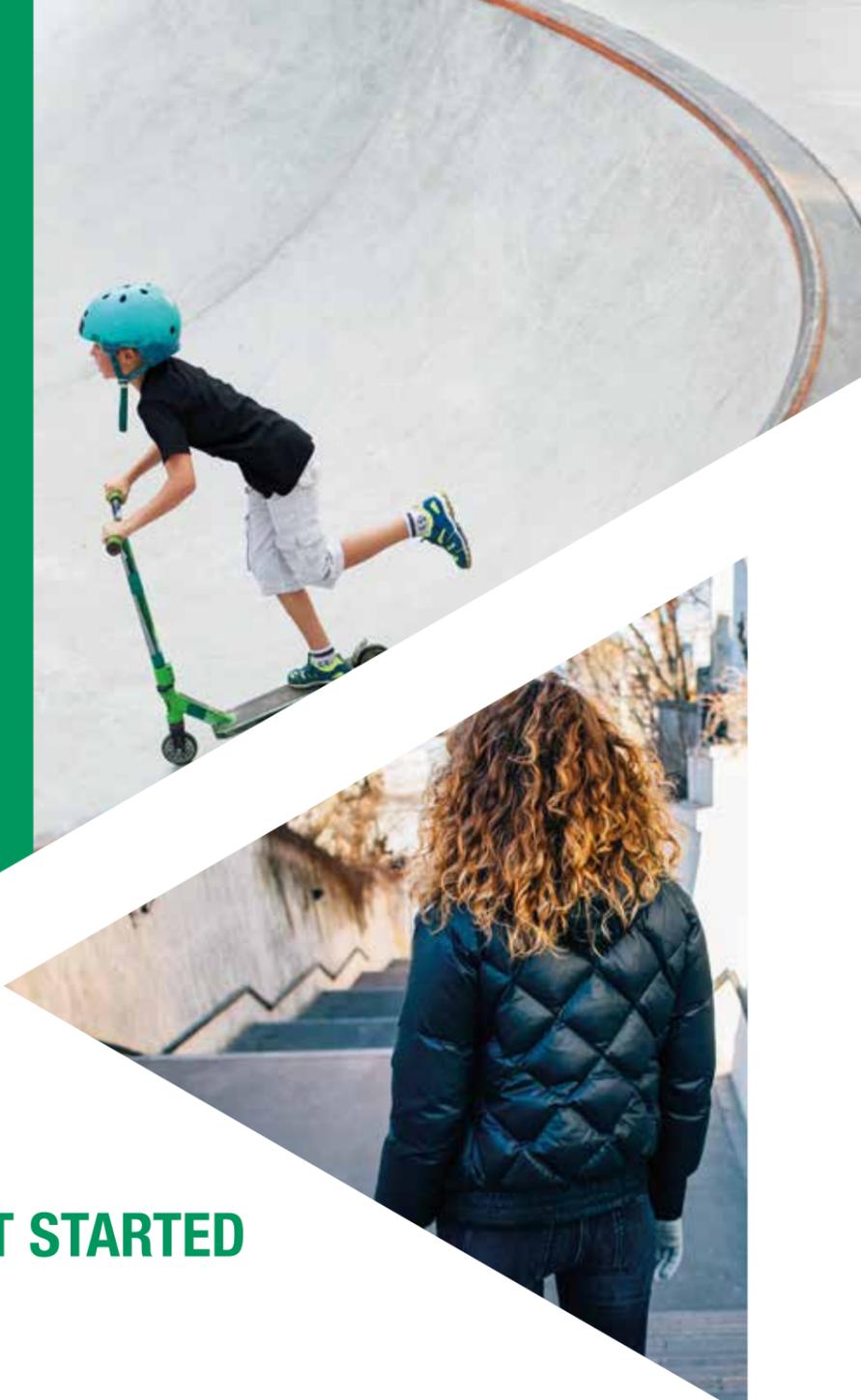
# THE OFFSETTING PROCESS

Carbon offsetting your emissions involves procuring carbon credits, then retiring them on behalf of your organisation. For a carbon credit to be have credibility, it must be:

- **Additional** – ensuring that the carbon reduction is real and permanent
- **Verified** – providing assurance on the quality and credibility of the credits
- **Traceable** – transparent and proving proof of the offset

There are carbon offsets available from various verification schemes, including:

- **Gold Standard** – [www.goldstandard.org](http://www.goldstandard.org)
- **Verified Carbon Standard** – [verra.org/project/vcs-program](http://verra.org/project/vcs-program)



# HOW TO GET STARTED



TOGETHER, WE'LL BUILD A GREENER FUTURE

# WHICH ECOPACT IS RIGHT FOR ME?

## APPLICATIONS

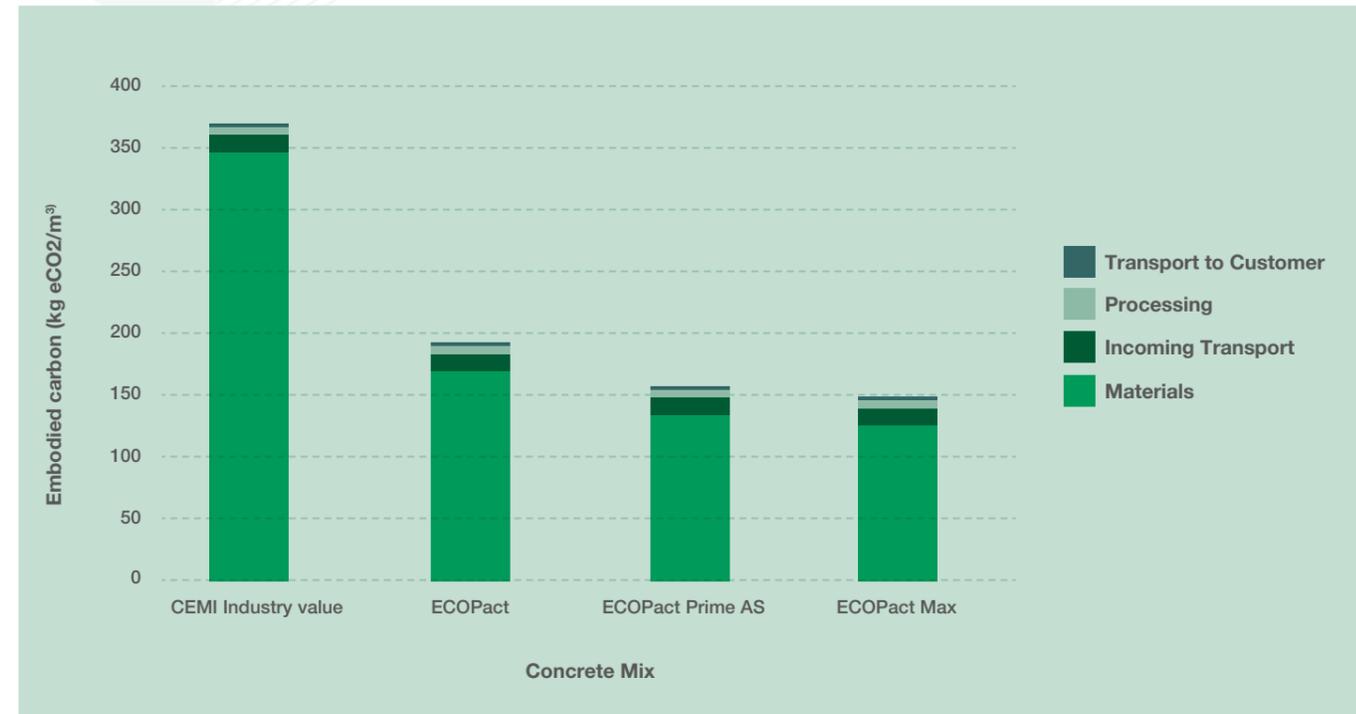
Our range of ECOPact products have been designed to offer alternative solutions for all construction applications - from foundations to structural and infrastructure.

For more detail or to discuss a specific application, speak to your local concrete team or email [ecopact-aiuk@aggregate.com](mailto:ecopact-aiuk@aggregate.com)

**ECOPact**  
The Green Concrete

## EMBODIED CARBON AND PERFORMANCE SUMMARY

Specification example: C32/40, DC-2, workability S4 to F5, produced at Battersea London Concrete plant, project site - 5.2 km from the production plant.



### ECOPact

#### Standard Product Ranges

	C8/10	C12/15	C16/20	C20/25	C25/30	C28/35	C32/40	C35/45	C40/50
ECOPact	✓	✓	✓	✓	✓	✓	✓	✓	✓
ECOPact Prime	✓	✓	✓	✓	✓	✓	✓	✓	✓
ECOPact Prime AS	✓	✓	✓	✓	✓	✓	✓	✓	✓
ECOPact Max	✓	✓	✓	✓	✓	✓	✓	✓	✓

### ECO

We can offer a range of our performance products as ECO giving you a carbon reduction of over 30%

	Agilia Eco (A&H)	Highpave Eco (45)	Watertight Eco	Lytacrete Eco	Artevia Eco	Highflow Eco	Highflow Rapide Eco
ECO	✓	✓	✓	✓	✓	✓	✓



# WHY CHOOSE

# ECOPact PRIME AS

Active Setting Carbon Saving Concrete



## ECOPACT PRIME AS, IS THE NEWEST ADDITION TO THE ECOPACT RANGE OF LOW CARBON CONCRETE

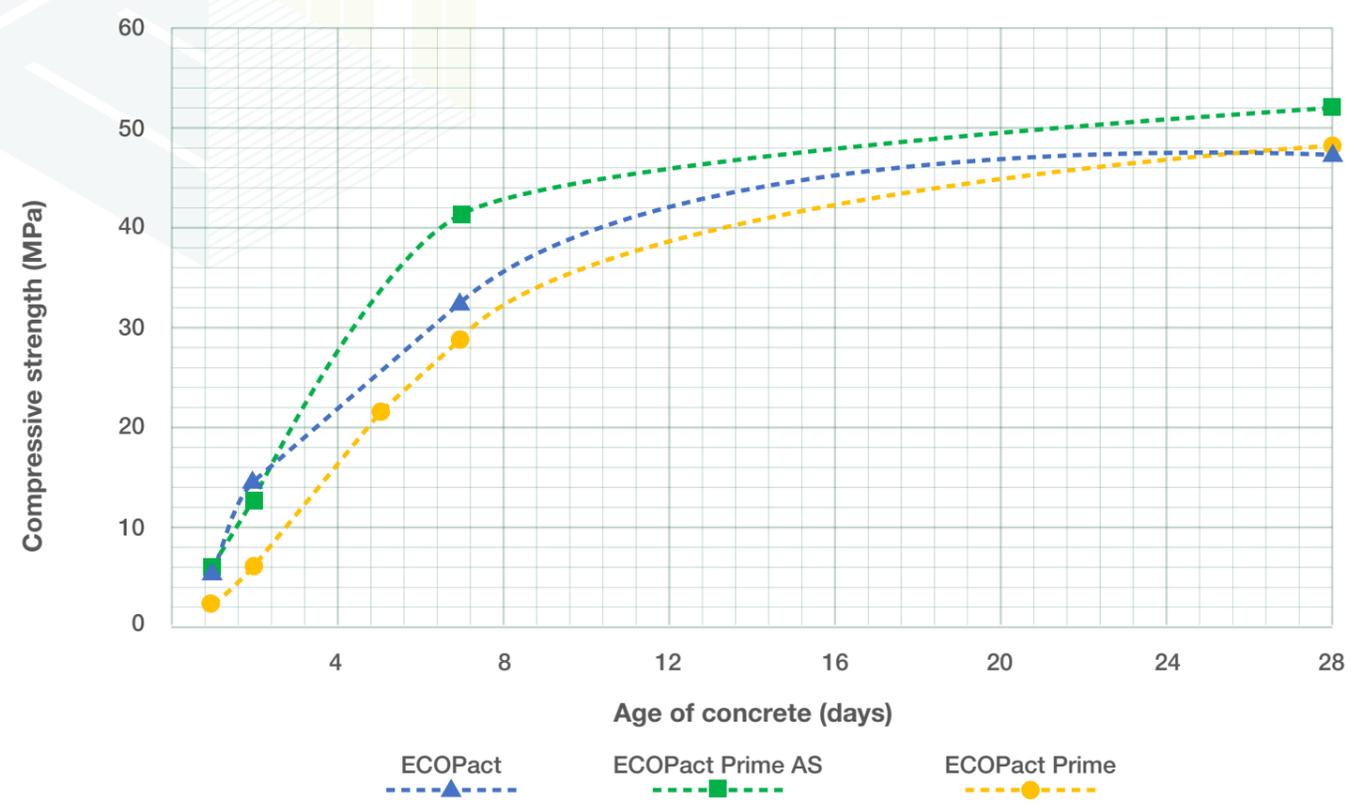
Developed through extensive product research, this innovative solution offers greater carbon reduction compared to ECOPact, with the same setting time, plus an active development of strength.

**ECOPact Prime AS is the UK's first concrete to offer high levels of carbon reduction without compromising on performance.**

- ▶ Increases cement substitution.
- ▶ Includes advanced technologies to secure the build performance of regular concrete.
- ▶ Ensures reduced bleed, high early age strength and improved concrete durability.
- ▶ Meets all the existing standards for regular concrete and the design of concrete structures.
- ▶ Bespoke mixes can be developed to meet specific site needs.
- ▶ Readily available throughout the UK

### REDUCE CARBON WITHOUT COMPROMISE

### CONCRETE STRENGTH GAIN C32/40 EXAMPLE BASED AT OUR LONDON CONCRETE READY MIXED BATCHING PLANT IN BATTERSEA



### ECOPact PRIME AS

Email our dedicated team on [ecopact-aiuk@aggregate.com](mailto:ecopact-aiuk@aggregate.com)

Or visit [www.aggregate.com/ecopact](http://www.aggregate.com/ecopact)

ECOPact Prime AS is tested in accordance with existing standards BS EN 12350 and BS EN 12390.

ECOPact Prime AS is specified and produced in accordance with BS 8500 and BS EN 206-1.

Design of Concrete Structures is progressed through existing Eurocodes BS EN 1992.

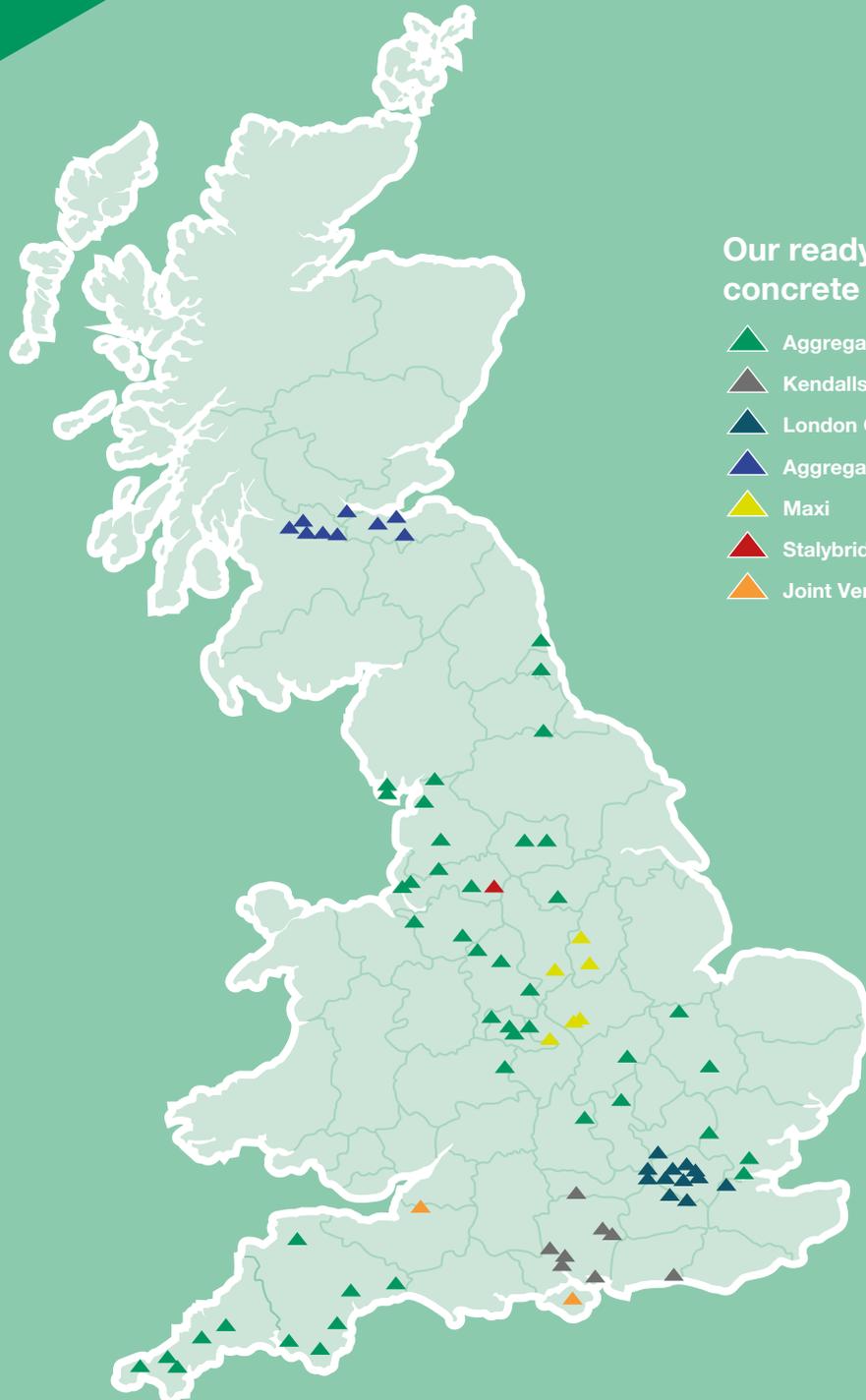


# WHERE YOU CAN FIND ECOPACT

We have UK plants up and down the country, offering the ECOPact range.

To check your area, get in touch at [ecopact-aiuk@aggregate.com](mailto:ecopact-aiuk@aggregate.com)

[www.aggregate.com/ecopact](http://www.aggregate.com/ecopact)



## Our ready-mixed concrete plants

-  Aggregate Industries
-  Kendalls
-  London Concrete
-  Aggregate Industries Scotland
-  Maxi
-  Stalybridge
-  Joint Ventures