

Lower
Thames
Crossing

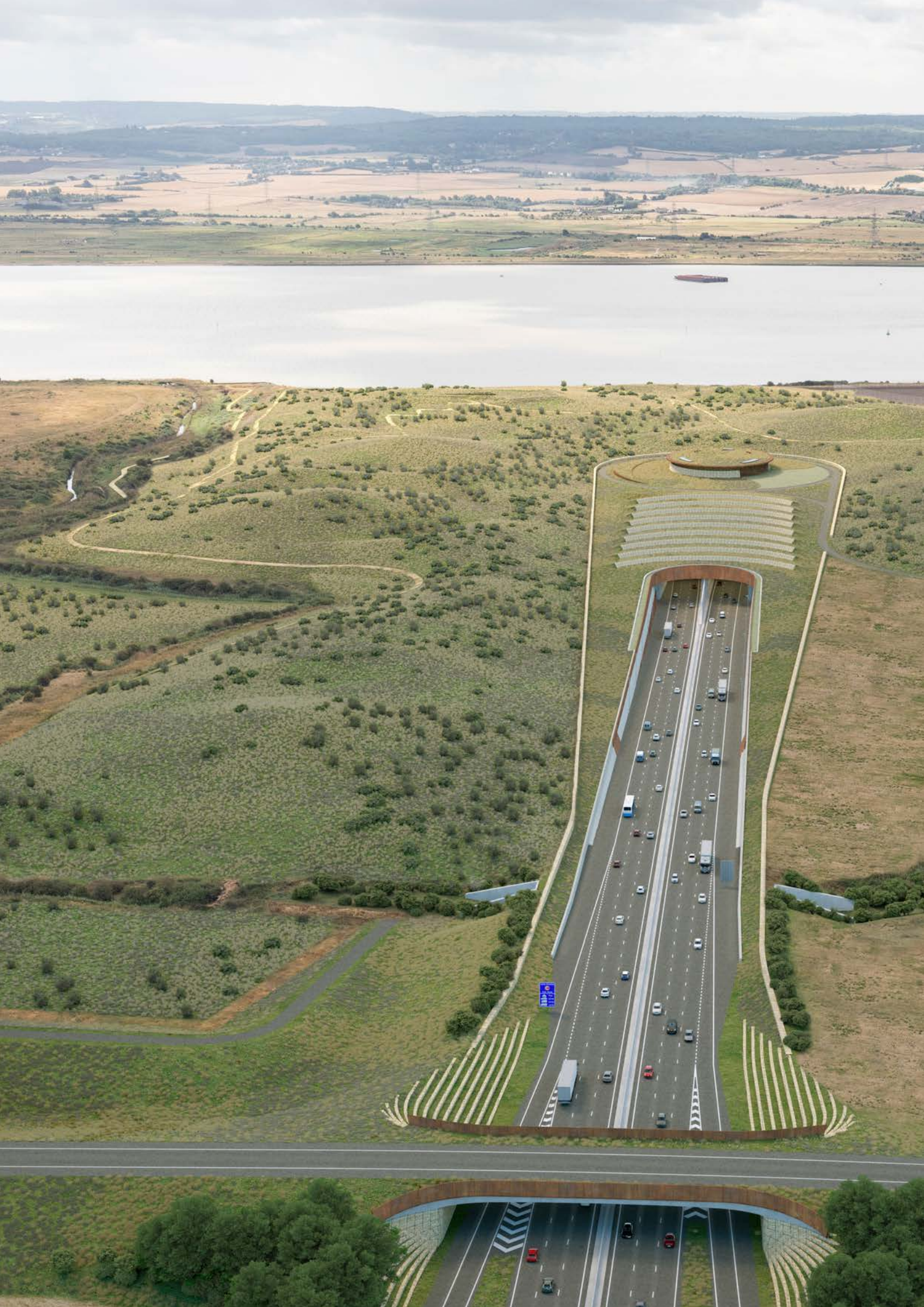


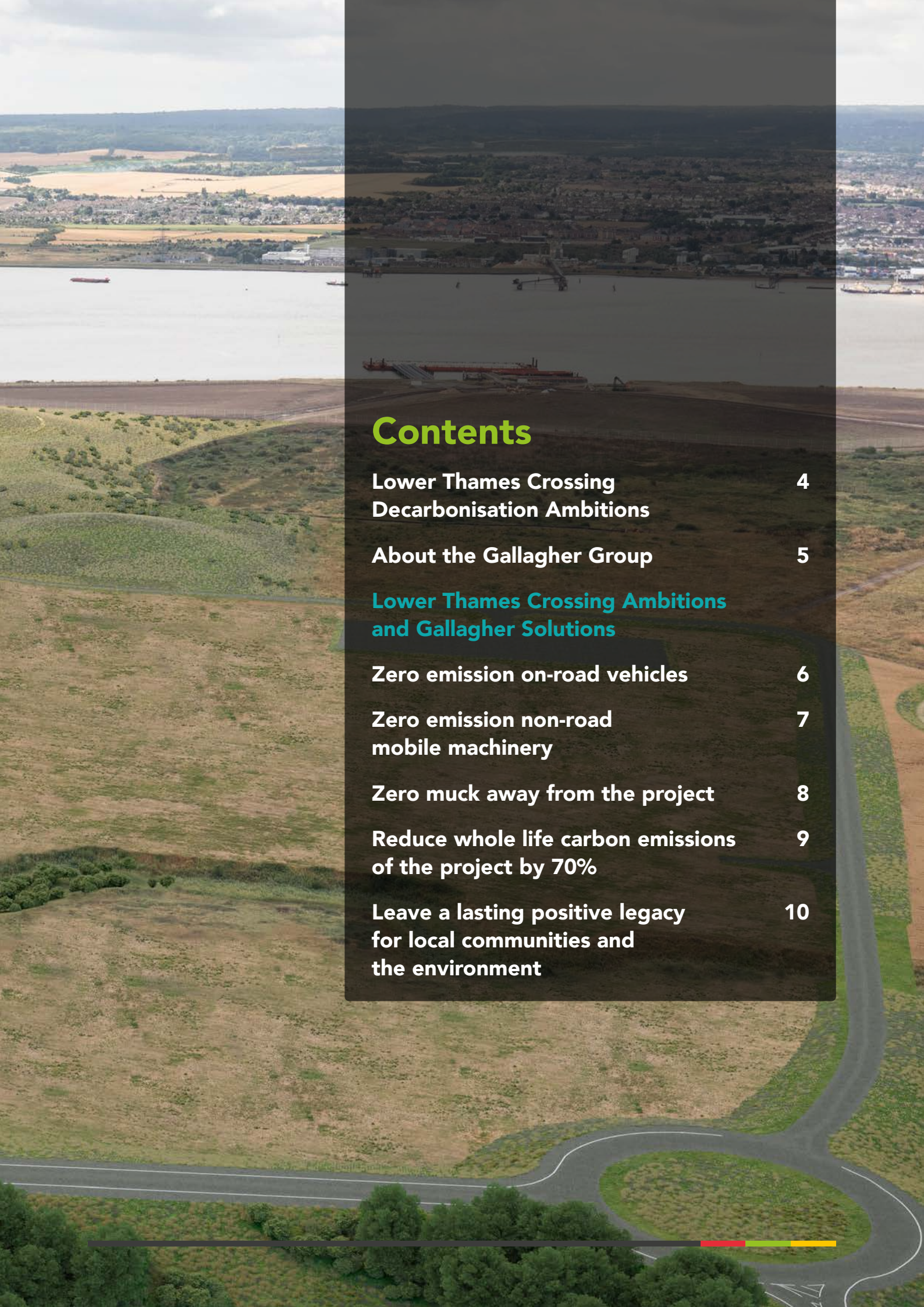
SUSTAINABLE CONSTRUCTION SOLUTIONS

FOR THE **LOWER THAMES CROSSING PROJECT**



EXCELLENCE. DELIVERED.





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Lower Thames Crossing Decarbonisation Ambitions

As a low-carbon pathfinder project, the Lower Thames Crossing is transforming infrastructure design and construction by testing and scaling innovative approaches. In determination to be the greenest road in the UK, the project has set a clear roadmap to phase out fossil fuel consumption – targeting zero onsite emissions by 2027 and zero offsite emissions in site deliveries by 2030.

LTC ROUTEMAP TO LOWEST CARBON

	1. Contract for low carbon	2A. Diesel free sites (on-site)	2B. Diesel free sites (deliveries)	3. Low carbon concrete	4A. Green steel (long steel)	4B. Green steel (other steel)	5. Know your numbers (PAS2080)
A	2022	2027	2030				2022
B		2025	2025		2025		
C				2025		2025	
D							
E							
F							
G							

4 KEY AREAS OF IMPROVEMENT FOR THE LOWER THAMES CROSSING

Economy

A reliable new connection will add billions to the UK economy by making journeys quicker, safer and more reliable.

Jobs, skills and education

Building a new major piece of the road network creates a huge opportunity for the local community through new jobs, skills and education.

Environment

The Lower Thames Crossing will create bigger, better and more connected habitats for wildlife and the local community.

Communities

The Lower Thames Crossing is committed to leaving a lasting positive legacy for local communities and the environment.

Gallagher Group can provide assistance in all areas.



About the Gallagher Group

As one of the South East's premier Aggregates, Groundworks and Civil Engineering companies, the Gallagher Group is passionate about providing the highest standards in everything we do.

- The largest family-owned construction company in Kent.
- Founded in 1973 by Pat Gallagher.
- Organically grown and financially secure.
- Provide a wide-range of integrated services.
- Proud to be a 'community company' employing over 550 local people.
- We build lasting relationships with our clients, suppliers and other stakeholders.

OUR MISSION

To **inspire our people** and **support their ambitions and well-being**, so that they build a **positive future** and **legacy for themselves** and the **communities** in which we serve.

GALLAGHER GROUNDWORKS AND CIVIL ENGINEERING



- Over 50 years of experience.
- Preferred contractor for a number of well-known and established clients.
- Working in both the public and private sector.
- Services include: bulk earthworks, site remediation, enabling works, civils infrastructure, substructures, RC works, drainage, services installation and external works packages.
- Pre-Contract assistance with programming, planning, utilities and logistics.
- We own and maintain our own fleet of vehicles and state-of-the-art machinery.

GALLAGHER AGGREGATES



- Only 2 remaining quarries in the South East of England.
- 3 concrete plants based in Kent.
- Supplying over 2 million tonnes per year.
- Offer a wide range of products including primary and recycled aggregates and ready-mix concrete.
- Own fleet of trucks and Ready-Mix Lorries and New HGV Workshop.
- On-site recycling and inert landfill.

bsi **BSI PAS2080**
Carbon Management Gallagher Aggregates

Lower Thames Crossing Ambition

Zero emissions on-road vehicles

1

All vehicles over 3.5 tonnes must be Zero Fossil from 2025 onwards.

2

All vehicles over 3.5 tonnes must be Zero Emissions from 2030 onwards.

3

As many vehicles over 3.5 tonnes as practicable should be Zero Emissions between 2025 and 2030.



Gallagher Solution

Zero tailpipe emissions aggregate delivery to the project.

Zero Emissions Volvo Electric Truck



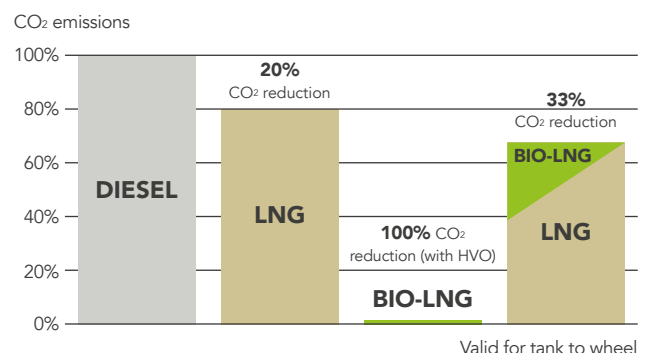
Key Benefits:

- + Zero tailpipe emissions
- + Zero fossil fuel
- + Significant reduction in air pollutants: PM, SO_x, NO_x, and VOCs
- + Charging facilities powered by 100% renewable energy supply.
- + Reduced noise pollution.
- + Payload capacity: 25.5 tonnes.

Zero Fossil Fuel – Volvo LNG Truck (Bio- LNG and HVO)



LNG – CO₂ saving potential



Key Benefits:

- + 100% emission reduction with Bio-LNG.
- + Zero fossil fuel.
- + Cost-effective alternative technology.
- + Cost per tonne comparable to conventional trucks.
- + The UK's largest LNG terminal is in Isle of Grain.
- + Derived from renewable feedstock.
- + Well-established and reliable.

Lower Thames Crossing Ambition

Zero emissions on non-road mobile machinery

1

All NRMM must be Zero Fossil from 2025 onwards.

2

All NRMM must be Zero Emissions from 2027 onwards.

3

As much NRMM as practicable should be Zero Emissions between 2025 and 2027.



Gallagher Solution

Onsite electric mixer and batching plant.

Onsite Volvo Electric Mixer and Batching Plant



Key Benefits:

- + Zero tailpipe emissions
- + Zero fossil fuel
- + Significant reduction in air pollutants: PM, SO_x, NO_x, and VOCs
- + Charging facilities powered by 100% renewable energy supply.
- + Payload capacity: 6.6 m³.
- + Can be permanently stored on site and charged between pours.

Key Benefits:

- + Eliminates on-road mixers and on-road emissions.
- + Zero emissions if powered by renewable energy.
- + Increased productivity and efficiency.
- + Minimised waste by fresh production.
- + Onsite testing capabilities.
- + Reduces programme risk in relation to delivery delays.
- + Capacity to produce 120m³ per hour.
- + State of the art plant with latest technology.

Combined Benefits:



**Saves Time
and Money**



**Zero
Emissions**



**No Traffic
Delays**



**Continuous
Material Supply**

Lower Thames Crossing Ambition

Zero muck away from the project



Gallagher Solution

Onsite soil stabilisation

Onsite Material Improvement Plant (Kitty)



Gallagher has recently introduced a custom-built on-site material improvement plant to their fleet. This innovative piece of plant provides sustainable solutions to our projects with the following benefits:

- + Reduces a project's overall **carbon footprint**.
- + Reduces/eliminates lorry movements.
- + Improves **poor quality soils** for reuse on-site, which would otherwise go to landfill.
- + Reduces the requirement for **imported aggregates**.
- + Provides **substantial cost savings** for the project.
- + Gives **greater assurances** with regard to programme deliverables.
- + **On-site testing lab** with same day results to ensure efficiency and quality.
- + Capacity to **improve up to 450 tonnes of material per hour**.
- + **Market-leading technology** which eliminates binder material entering the atmosphere during the soil improvement process.
- + Advanced software which **guarantees precise mixes** to meet specifications.

A recently completed project using the improvement plant produced the following results:

- + **113,000 tonnes** of site won material was improved on-site using the plant.
- + The requirement for **80,000 tonnes of imported aggregate** was eliminated on the project.
- + This resulted in **reducing approximately 17,000nr lorry movements** on the project.
- + Gallagher estimated that this reduction in lorry movements **reduced the projects CO₂e generation by 1000 tonnes**.

Lower Thames Crossing Ambition

Reduce whole life carbon emissions of the project by 70%



Gallagher Solution

Supplying 100% locally sourced aggregates from our two limestone quarries, ensuring sustainability and reducing carbon emissions.

Important considerations:

Despite the project's ambitions to achieve zero tailpipe emissions on-road, importing aggregates from long distances via shipping or railing to local depots results in significant CO₂e emissions attributable to material transportation, or Module A4 of the project's life cycle.

Less visibility to individual country/region's climate policies and financing, may pose a risk of making the project accountable for carbon leaking.

Hermitage Quarry and Blaise Quarry



Importing 1,000,000 tonnes of aggregates from Jelsa, Glensanda or Mendip quarries would require approximately:

13

Super freighters

or

600

Rail movements

=

C9,000T

of CO₂e to the project

=

Planting an additional **200 acres** of broad-leaved woodland for long-term sequestration of these emissions

Local sourcing can avoid these emissions at the source and Gallagher Quarries are ONLY 16 MILES from Lower Thames Crossing

Plus local sourcing enhances the project's resilience to wider market fluctuations by reducing reliance on imports.



Gallagher Aggregates achieved a 42% emissions reduction from its processes and significant reductions in material carbon footprint.

by switching all fixed plant from diesel to electric, powered by 100% renewable energy supplied by a REGO-certified energy provider.



Increases social value

by generating local employment opportunities and income streams.

Lower Thames Crossing Ambition

Leave a lasting positive legacy for local communities and the environment



Gallagher Solution

Working with Gallagher Group you'll gain access to our in-house expertise in carbon management, restoration and community engagement.



Lyndsey Gallagher FCIQB

CEO at Gallagher Group

Lyndsey became CEO of the Gallagher Group in January 2024, after joining the business 14 years ago as Operations Manager. Lyndsey represents the company in stakeholder engagements with clients, investors, and industry bodies, while leading a culture of safety, innovation, and sustainability.

Lyndsey is deeply committed to giving back to the community, with a strong focus on empowering women and nurturing young talent in the construction industry. She actively supports local organisations and charities, using her talent for uniting teams around shared goals. Her leadership fosters high levels of engagement, helping to amplify the impact and visibility of the causes she champions.



Udeshika Weerakkody Ph.D., M.Sc., FHEA, MRSB

Head of Quality, Environmental & Sustainability

Udeshika joined Gallagher in 2021 as part of our commitment to achieving Net Zero, and she has played a key role in helping the Group reach its sustainability goals. A dedicated academic and researcher, Udeshika holds a PhD in Environmental Sciences.

With over 12 years of experience spanning both industry and higher education, she brings deep expertise across a wide range of fields, including:

- Environmental Sciences
- Sustainability
- Green Infrastructure
- Waste Management
- Biological Sciences
- Minerals and Aggregates
- Environmental Chemistry
- Air & Water Quality
- Data Analysis and Review

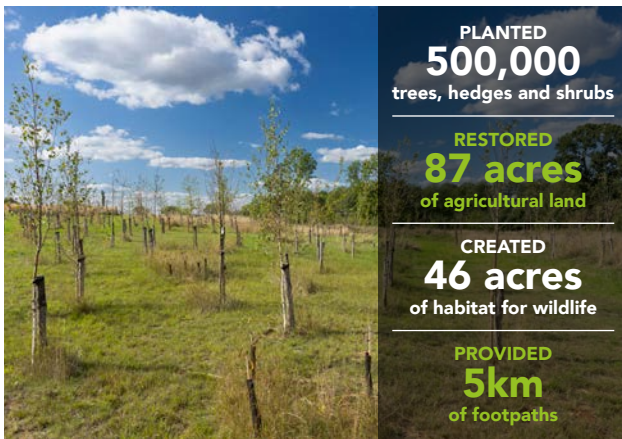


John Flowers PrCMA

Estates Manager at Gallagher Group

John is an integral part of the Gallagher Aggregates team, managing our successful restoration programme. His work involves the careful translocation of ancient woodland soils and the creation of habitats that nurture wildlife and support the establishment of new woodlands. Through meticulous planning, management, and ongoing maintenance, John ensures that these restoration efforts align with ecological principles, fostering long-term sustainability.

His expertise has been recognised by the Countryside Management Association, which has accredited him as a Practitioner – acknowledging his in-depth knowledge and skills in ecological management and restoration.



Land Restoration

We have restored over 87 acres of land at our Hermitage Quarry in our mission to restore the quarry back to a condition that's better than when we started.



Charity Support

Gallagher are proud to support charities and local organisations including the Lighthouse Charity, Demelza House, Maidstone United FC and the NHS.



Roadmap to NetZero

We have embarked on our mission to decarbonise our materials supply and processing operations in support of NetZero 2050 and the UK's COP26 commitments.



Roots in the Community

Through our Roots in the Community education and sustainability initiative, we invite local children to plant their own native trees and become part of our restoration project.



Community Engagement

Since 2019, the Gallagher Group has created **£129,857,316*** in social value to Kent, as part of our commitment to our people, and the communities in which we serve.



Training & Development

Gallagher have teamed up with Flannery Plant Hire and the Lower Thames Crossing to create a Kent Skills Hub. This is part of LTC's ambitious goal to recruit a local workforce and combat the industry skills shortage.

*Our Social Value is externally audited. Measured using Social Value Portal (TOMs) values by Social Value and SROI accredited practitioner. (2021)



EXCELLENCE. DELIVERED.

Gallagher Aggregates Limited
Gallagher Limited



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