



Lower Thames Crossing
Sustainability Report

Delivering the UK's greenest road

October 2025

About the Lower Thames Crossing

The Lower Thames Crossing is one of the UK's most important economic infrastructure projects and a key component of the Government's Plan for Change.

It will drive growth by doubling road capacity across the Thames east of London, connect people to jobs and businesses to opportunities, leave a skills legacy for the local community and construction industry, and all while restoring nature and drawing a new blueprint for low-carbon construction.

The project is taking a transformational approach to building infrastructure by putting carbon reduction and nature restoration at the heart of everything it does. It will create a new blueprint for net-zero construction – including the use of hydrogen to power equipment – and become the largest nature enhancement project in the UK with six times more green space than road.

The need for the crossing is greater than ever

- Congestion at the Dartford Crossing costs the UK economy more than £200m* every year in driver's time alone, but the lack of a reliable connection means the River Thames is a barrier, limiting growth of local and regional economies
- Initially designed for 135,000 vehicles a day, the crossing is now used by 150,000 a day and more than 190,000 on its busiest days – carrying over 50m vehicles a year
- Severe congestion and large traffic volumes create up to 3,000 incidents a year, one of the highest levels on the road network
- Nineteen out of 20 northbound journeys in the evening peak are delayed, while two out of three take twice as long as they should

* This is based on 2022 pricing

Benefits



Nearly double road capacity across the River Thames east of London



Ease congestion by taking over 10m vehicles from the Dartford Crossing every year



Bring an additional 400,000 jobs within an hour's commute of local communities



Spend £1 in every £3 of the construction budget with SMEs



Explore methods to achieve carbon neutrality in its construction and transform how the UK delivers infrastructure projects



Create over 1,000ha of semi-natural habitats, provide two new public parks, a 100-hectare community woodland, almost 40 miles of new walking, cycling and horse-riding routes and plant more than one million trees



A pre-fabricated bridge, built off-site – a low-carbon, faster and less disruptive way to build



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Sustainability is the golden thread that runs through everything we do on the Lower Thames Crossing. From cutting carbon and restoring nature to investing in local projects, our approach sets a new standard for how major infrastructure can work in harmony with the environment and support communities.

We are proving that progress does not need to come at nature's expense and are showing that with the right ambition, we can protect nature and support growth.

Staying true to our promise, we've made legally binding commitments that will help restore nature by creating six times more green space than road, and reduce our carbon emissions. We've invested early to bring local communities closer to their heritage and green spaces, and continue to work closely with local businesses and people to build the skills to put them at the forefront of the UK's developing net zero economy.

This year we are taking our commitment a significant step further – we are committing to be the first major infrastructure programme in Britain to be carbon neutral in construction.

The granting of our Development Consent Order (DCO) in March 2025, with no legal challenges, alongside the Government's announcement of funding in June, has given us the certainty we need to get on and start delivering this piece of nationally vital infrastructure.

Turning our commitments into actions

This, our third Sustainability Report, is our opportunity to share the progress we've made over the past year and to look ahead to the exciting journey as we prepare for delivery.

We are actively changing the infrastructure sector's approach to carbon and committed to ending the use of diesel on our construction sites.

Tackling the three largest carbon emitters in construction – diesel, steel, and concrete – won't be easy. But we've already taken steps that prove it's possible, and show how doing so can drive value and boost productivity. Successful trials of hydrogen-powered equipment has led to the world's first ever deployment of a hydrogen powered excavator on one of our worksites in Kent, and we will soon buy the largest-ever volume of low-carbon hydrogen on a UK transport project. Our winning low-carbon footbridge design has also shown what can be done – with an almost 90% carbon reduction.

Our commitment to being a good neighbour goes beyond minimising the disruption from our construction works – we want to leave a skills legacy. Last year saw the successful Skills Hub pilot, providing work-based training and helping people secure jobs in construction. We extended our Science, Technology, Engineering and Maths (STEM) programme, directly reaching almost 10,000 young people to inspire future careers. Tangible community and nature projects include the restoration of Upminster Tithe Barn – removing it from Historic England's Heritage at Risk Register, and the planting of over 150,000 trees.

Looking ahead: scaling up our ambitions

As we move from planning into delivery, the year ahead represents a pivotal moment for us to start delivering against our commitments. We will use electric and hydrogen equipment across our work sites, including setting up Marling Cross

as a 100% zero-emissions site. We will tackle the challenge of powering electric equipment at scale, exploring efficient on-grid and off-grid energy solutions using low-carbon sources.

We are excited to open our first Lower Thames Crossing Skills Hub at Marling Cross, Gravesham to upskill local people for higher-paid roles. This will be followed by two new permanent Skills Hubs in Thurrock and Gravesham to address local skills shortages.

Next year will also see progress on major habitat creation projects, with the opening of a new Community Woodland at Hole Farm, and the start of works to transform areas near Coalhouse Point, Orsett Fen and Thong into thriving green spaces that will connect communities with nature and support wildlife. Our approach aims to create a connected ecosystem with climate-resilient habitats, providing nearly 40 miles of new and improved pathways and seven green bridges to link people with nature.

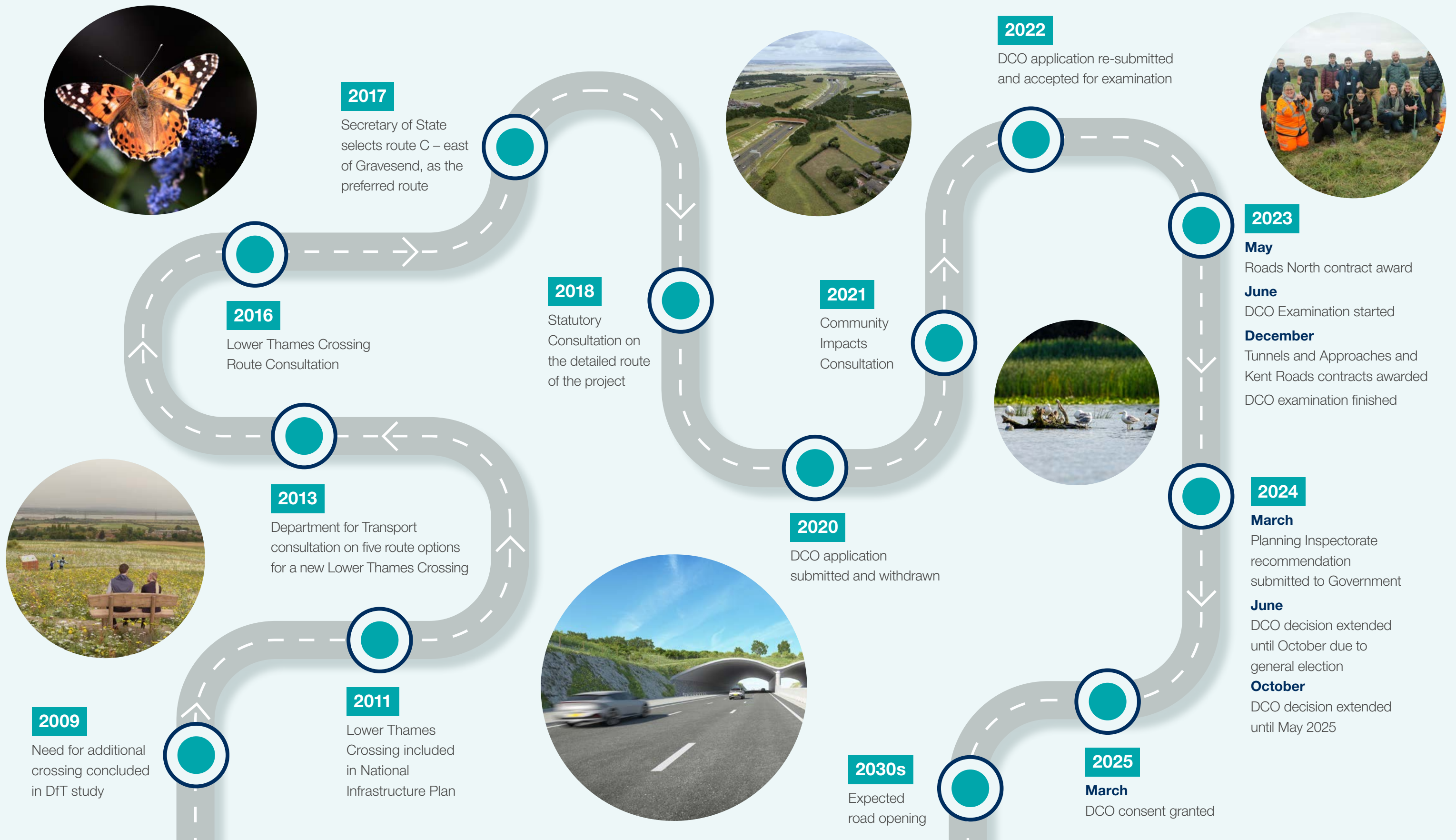
We are confident that by working together with our Delivery Partners and supply chain, we can translate our ambitions into tangible actions, setting new standards for the UK construction industry and delivering a lasting positive legacy for our communities and the environment.



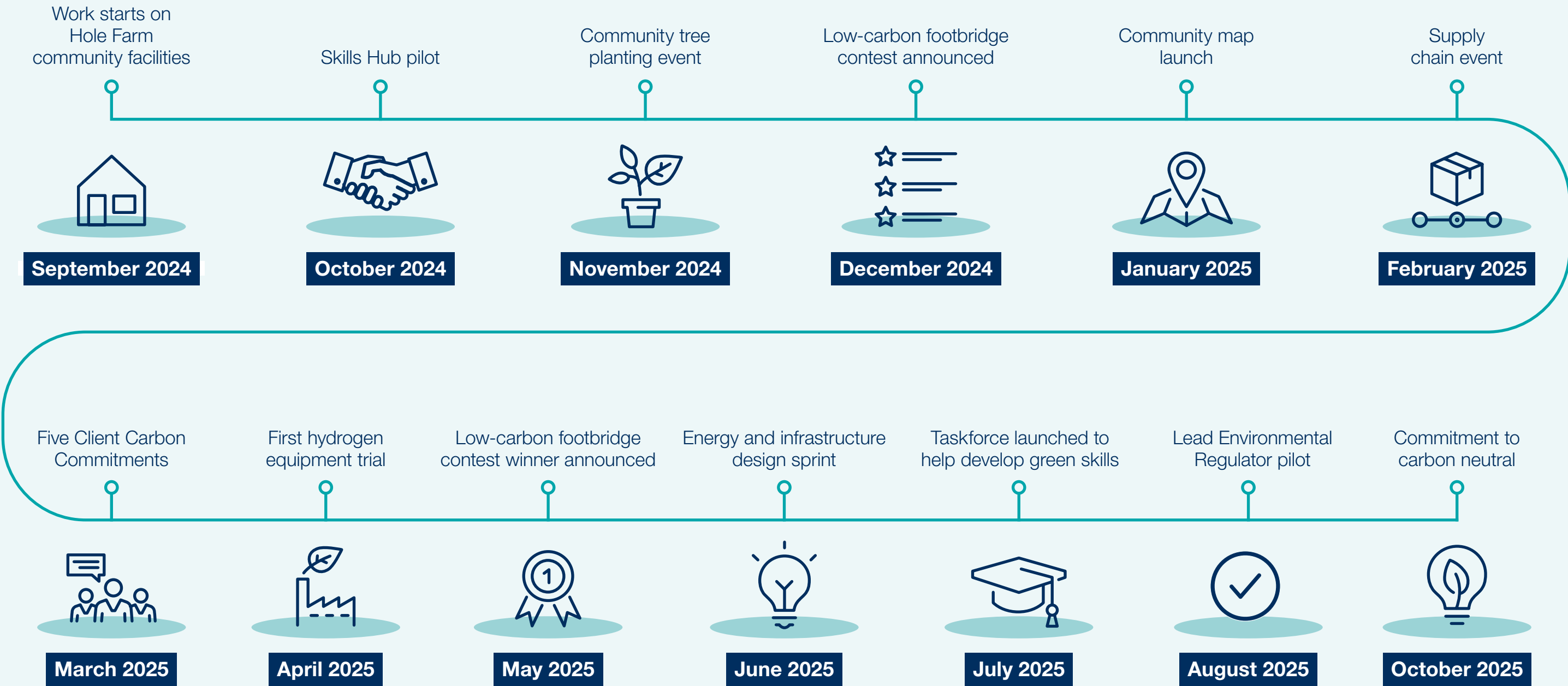
Matt Palmer
Executive Director, Lower Thames Crossing



Our story so far



Year at a glance



The Lower Thames Crossing will be transformational not just for Kent, Essex and the wider South East region, but also nationally. It will unlock growth by creating a new, reliable connection for communities and businesses. We also have the ambition to build the project in a transformational way, setting the standards for efficient, world-leading low-carbon construction that will leave a lasting legacy for the local region, the construction industry and the UK economy.



To drive a change in how we deliver the Lower Thames Crossing, we have created a common purpose and intent for the project.

Our purpose is to build a better world. We will do this by enhancing our community and setting new standards for the construction industry. We will deliver the greenest road and assemble a team of inspired individuals who drive continuous improvement, incorporate sustainable practices and innovative technologies into every aspect of our work. Together, we will create a roadmap towards a greener future and positively impact our society.

Community



We will create thriving, connected ecosystems – bring people closer to nature and offer new opportunities for skills development and employment. Rooted in the local community, we'll ensure that we enhance the quality of life for the people who live and work along it.

Construction



We will embrace circularity principles in the way that we build, focusing on eliminating waste, reusing materials and increasing efficiency. By adopting sustainable sourcing and construction practices, we aim to minimise the environmental impact of the building process locally and in our supply chain.

Carbon



We will be a pathfinder for carbon-neutral construction. We will construct the project for the lowest practicable emissions and we will accelerate the transition of the construction sector to net zero.

Culture



We will let our purpose guide our work. We believe in doing the right thing and will build trust through transparent and respectful relationships. We create safe spaces for collaboration and innovation, and will embed sustainability in our organisational purpose and principles and the way we operate.

Measuring success

This section outlines our progress on key performance indicators (KPIs) tied to sustainability, inclusivity and our purpose, reflecting our commitment to driving meaningful change. By tracking and reporting on these focus areas, we ensure transparency and accountability in our efforts to employ local people, improve biodiversity, measure community satisfaction, reduce carbon emissions, foster inclusive workplaces, and prioritise well-being. This highlights our ongoing commitment to proactive initiatives that create a positive impact and deliver lasting benefits for the environment and local community.

Focus Area: Community		
KPI	Target	Commentary
Our team: Local people working on the project	45% Current forecast: 40%	The local people reflected in the data include the entire construction team based in Thurrock, encompassing both the client and Delivery Partners. This does not include individuals involved in manufacturing, design, or other services delivered from factories or offices located elsewhere. We are progressing towards our target, maintaining a 'local first' approach and actively seeking opportunities to enable more local people to contribute to the programme.
Biodiversity Net Gain	10% Current forecast: 7%	Our Delivery Partners are working through detailed design and looking for ways to reduce habitat loss and retain valuable areas of habitat where possible. We anticipate this work will move us towards the +10% target. In addition, we have supported several community projects with a focus on nature and each one has provided biodiversity benefits. There are 12 projects that collectively result in approximately 500 biodiversity units, these projects are set out in Appendix C. The calculation for biodiversity will be rerun once the design is nearing completion and will include the additional opportunities that have been identified.
Our community: Satisfaction	50% Current forecast: TBC	We plan to start surveys next year to measure community satisfaction. In the community section of this report, we have provided an update on our progress. We are determined to be a good neighbour and to do the right thing by those affected by our works. To hold ourselves and our Delivery Partners to account, we'll carry out a regular survey to seek local views on the impact of our works on things like local traffic, noise, the appearance of our work sites and the behaviour of our people.

Focus Area: Carbon

KPI	Target	Commentary
Carbon reduction versus 2020 baseline	70% Current forecast: 59%	We are working closely with our Delivery Partners to significantly reduce emissions beyond the current 50% benchmark. A detailed plan is in place to achieve a 59% reduction, and we are actively developing solutions with our partners to reach our longer-term target of 70%. We continue to share best practice and exchange innovative ideas from the wider industry through our collaborative carbon reduction workshops (see Appendix D).



Employees at tree planting day at Hole Farm Community Woodland

Focus Area: Culture		
KPI	Target	Commentary
Our team: Net promoter score	50+ Current forecast: 17+ Engagement NPS (ENPS) 24+ Inclusive NPS (INPS)	Our engagement survey, launched in July 2025, received over 300 responses. It focused on questions about recommending Lower Thames Crossing as an inclusive and great place to work. An Employee Net Promoter Score (ENPS) over 10 is considered to be a good score from a benchmarking perspective, therefore, our results indicate good levels of engagement across the programme. The Inclusion Net Promoter Score (INPS) also indicates a strong score and shows that we are on the right track. Further analysis showed that men scored significantly higher than women, and that ethnic minorities generally scored lower on both the INPS and ENPS, with ethnic minority women recording the lowest scores overall. These findings show the need to act on inequalities affecting different groups. We will work with our Equity, Diversity and Inclusion committee to identify priorities, propose solutions and recommend actions to our leadership team.
Our team: Wellbeing survey	75% Current forecast: 72%	We have surveyed our team working at our Pilgrims Lane site using the Warwick Edinburgh Mental Wellbeing Scale. The results show our current score is 72%, which sits within the 'moderate' section of the scale. Our Health and Wellbeing Group are using the results to launch activities to support the lowest scoring areas.

Focus Area: Culture		
KPI	Target	Commentary
Our team: Diverse workplace	14.5% disability representation 32% ethnic minority representation 50% female representation Current forecast: 31% female representation	Our male-to-female ratio exceeds the construction industry average, where women represent 15% of the workforce, according to the Chartered Institute of Building, but we acknowledge the constraints posed by the industry’s limited female talent pool. To address this, we are working closely with our partners and driving targeted initiatives to foster greater inclusivity and transform the industry. Recognising the challenges of data capture and transfer, we have prioritised gender identity as the starting point for our diversity tracking. We’ve begun monitoring across our supply chain, including delivery partners, setting an initial baseline.

Data collection

This report reflects our ongoing commitment to monitoring and improving our environmental and social performance. While we aim for accuracy and completeness, the maturity and sources of our data vary across metrics.

In this report, we consolidated data sourced from our internal systems, surveys, and supply chain partners.

We are continuously refining our data collection methodologies and enhancing maturity of our sources to improve the transparency and robustness of our reporting.



Last year



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“We want to leave a lasting legacy, strengthening communities, restoring nature and preserving local heritage. Working in partnership with farmers, we are rewilding farms and planting thousands of trees. To restore historic landmarks and improve public access to green spaces – we’ve funded projects that are making a real difference in our local communities.”

Hélène Rossiter,
Director of Nature, Lower Thames Crossing



Speaking with members of the local community at a public information event

Last year, saw the completion of many of our community projects and we held another round of public information events. We also started looking at our wider nature plan and how we can enable a more joined up approach to create better connected habitats across the route. We relaunched our Science, Technology, Engineering and Maths (STEM) programme, recognising the importance of inspiring the next generation and working collectively with educational providers. Following our pilot, there has been lots of planning and preparation for the opening of our first Skills Hub.

Informing communities

In June and July, we held public information events across Havering, Essex and Kent to talk with local communities about the next steps for the project before our main construction work

begins. These events gave people a chance to find out more about the early surveys and enabling works taking place in their area, and to ask us questions. At these events, our team was on hand to talk about:

- Who our Delivery Partners are and who will be working in the local area.
- What surveys and early works are planned over the next 12 months.
- How our low-carbon approach is shaping the design of the road.
- New public parks and green spaces being created locally.
- Job opportunities and how local businesses can get involved.

Did you know?

Conservation grazing is when livestock is used to maintain and improve the biodiversity of land, making it more suitable for a wide range of wildlife to live and grow in different habitats.

Investing in local communities

We have committed to providing £1.89 million of funding over seven years, with seven annual contributions of £90,000 south of the Thames and £180,000 north of the Thames. Conservation grazing and re-wilding has been an important feature of many of our community funded projects, as well as heritage restoration projects.



Upminster Tithe Barn

Upminster Tithe Barn

As part of our commitment to protecting the historic environment, we supported the restoration of the Upminster Tithe Barn, one of London's oldest surviving buildings. The work included re-thatching the roof, repairing structural timbers and restoring historic brickwork. Dating back to the reign of King Henry VI, the barn has been removed from Historic England's Heritage at Risk Register – securing its future for generations to come.



Vineyard Farms

Vineyard Farms

Vineyard Farms is part of the Silverhand Estate in Luddesdown, Gravesend. At around 700 hectares, it is the largest organic vineyard in the country and is made up of wildflower meadows that are home to rare orchids, pastures and woodlands. It was awarded funding to support a conservation grazing project.

Geese, sheep and cows are being used to feed off the land, improving and maintaining its biodiversity. Each animal has a different diet and way of feeding, which creates good conditions for wildlife. The manure from the livestock, especially cows, is also a great source of nutrients for plants and insects such as worms, which increases the food available for birds.

Our funding has allowed the farm to purchase an all-terrain vehicle, which enables access to all areas with minimal damage to the soil. Other work included fence repairs, tree management and the installation of wildlife towers across the estate.

Did you know?

Wildlife towers are small buildings that provide nesting and hibernation opportunities for a range of wildlife, such as barn owls, bats and invertebrates.



Curtis Farm

Located in Fobbing, Essex, Curtis Farm was awarded funds to support the ‘wild seam’ rewilding project.

Over the past few years, Curtis Farm’s owner, George, has been practising agroecological farming – a form of sustainable farming that works with nature – on his 485-hectare livestock farm. The wild seam project aims to reduce human influence on ecosystems to increase sustainability and biodiversity.

The farm’s British Short Horn and Red Poll cattle are the most important part of this project. Cattle are ruminants, so when they eat grass or fruit, their waste helps to revitalise the soil, attracting many species of Dung beetle. It is a crucial part of building ecosystems.



A cow on Curtis Farm

Did you know?

Rewilding is the large-scale renewal of nature and natural processes until it can take care of itself – and us – again. It encourages a balance between people and the rest of nature so that we thrive together. Rewilding seeks to reinstate natural processes and, where appropriate, missing species – allowing them to shape the landscape and the habitats within it.

Our funding has contributed to:

- Rewilding 20 hectares of farmland.
- Fencing to allow controlled grazing to be introduced.
- Around 4,000 metres of hedgerow planting and natural scrub.
- Culverts – pipes in ditches to allow livestock and animals to cross both sides of the ditch.
- Planting 3.4 hectares of traditional orchard trees, which provide food for cattle, helping to naturally spread the seed from fruits.
- Six new ponds and bunds, made from the excavated soil, helping connectivity by linking the ponds and giving animals and wildlife that like using water easier access across the farm, bolstering species living in this habitat.

The additional infrastructure that we’ve funded is already leading to changes in wildlife and habitats at the farm, increasing the connectivity across the land that is part of George’s vision.

Hole Farm Community Woodland

Hole Farm is a new 100-hectare, multi-purpose community woodland, sitting alongside the northern end of where the Lower Thames Crossing route will be built. It is being developed in partnership with Forestry England.

In the past 12 months, there has been a lot of work at Hole Farm Community Woodland, including:

- **Ecological ponds** – we’ve dug three ponds in the northwest of the site. They are already filled with water and are attracting wildlife, such as geese.
- **A new access route** – we’ve built the main route linking the new car park to Hole Farm Lane. This is currently being used as a construction access road and will later form part of the site’s permanent pathway network.
- **More trees** – we held another community planting day and have now planted over 150,000 trees, including climate resilient planting to create a future-proof woodland that supports wildlife and adapts to changing conditions.
- **An electricity substation base** – this is now in place. The substation powers facilities at Hole Farm, including electric vehicle charging stations and other amenities.

What we’re doing next

Over the next few months, we’ll be finishing the café structure and substation, putting up the café’s timber structure, building accessible paths and adding play equipment, benches and other features to the woodland. These



Artist's impression of Hole Farm

- **A café and infrastructure groundwork** – the sub-base, which consists of a strong layer of crushed stone that helps support paths and roads across the site, has been laid and we have almost completed the structure of the building, with the roof being installed next.
- **Use of the local supply chain** – the new woodland is being built by local people and local businesses and so far, 84% of supply chain spend outside of Balfour Beatty Group is with locally-based businesses. A total of 41% of our spend has gone to SMEs.

Did you know?

One hectare covers an area of over 50 tennis courts. We will create new, semi natural habitats to cover an area of over 50,000 tennis courts.

milestones are an important step towards creating a space that will support nature and be enjoyed by the local community for years to come. Woodland planting is due to be finished later this year.



Inspiring future careers through community engagement

As part of our commitment to education and sustainability, together with our Delivery Partners, we've been working with local schools and organisations to raise awareness of green careers and opportunities in construction. We've delivered almost 650 hours of STEM engagement and almost 10,000 young people have been directly reached through our work.

Treetops green careers week

We visited Treetops School, a special educational needs school in Thurrock, to deliver a workshop based on Tales from Mother Earth, a children's publication from a local author. Students explored green careers and learned about the Lower Thames Crossing's ambition to be the greenest road ever. The session featured Spike the Hedgehog, a story highlighting the challenges hedgehogs face. Pupils built hedgehog homes and feeding stations for their forest school, learning how small actions can support biodiversity.

Tilbury Pioneer Academy – Big Me week

During Big Me week, we engaged with Year 6 students about careers in construction. After discussing their perceptions of the industry, we highlighted a range of lesser-known roles. Students tried on personal protective equipment (PPE) and explored how their interests could align with future careers. The school's career lead praised the session for sparking curiosity and inspiring ambition.

Sycamore Trust work experience

In partnership with the Sycamore Trust, we welcomed Reece, a young person with autism, for a week of work experience. Reece explored roles in design and engineering and met our early careers team. He described the experience as eye-opening and inspiring. As part of our ongoing collaboration, the Trust also delivered autism awareness training to our team.

East Tilbury Primary School engagement

Over three days, we worked with more than 600 pupils from Year 1 to Year 6. Activities were tailored to age groups and aligned with World Book Day and National Science Week.

- World Book Day: Pupils rotated through reading, PPE exploration and a tower-building challenge.
- Science Week: Students designed and built bridges, learning how to adapt and solve problems.
- Construction-themed sessions helped expand their understanding of industry roles.

Horton Kirby Primary School

During a full-day of immersive STEM workshops, pupils across all year groups engaged in hands-on learning focused on engineering and construction.

The sessions introduced students to real-world roles within the industry. Pupils explored structural engineering by designing and building towers with K'NEX and took on the role of Health and Safety Advisors, identifying hazards on a mock construction site. These activities were designed to spark curiosity, build problem-solving skills and highlight the importance of safety and innovation in infrastructure projects.

Higham Primary School

We delivered an age-appropriate construction awareness session, starting with a discussion on perceptions of the industry. Pupils took part in PPE dress-up, a teamwork-based building challenge and a hazard-spotting activity. The session reinforced safety, collaboration and critical thinking – key skills for the future workforce.

We also visited the school during British Science Week to run engaging sessions for the whole school. Students were tasked with designing and building bridges and we raised questions to discuss how they would adapt and change their design to meet environmental challenges.

Engaging students in care

We offered our school engagement programme to students who have not always had access to educational opportunities and often experienced disruptive education.

Over a period of six weeks, the students were provided with different sessions focused on commercial, engineering, design, community and Health and Safety. They also had an opportunity to visit our office and try equipment simulators, which has inspired one of the students to become a plant operator.

As part of our ambition to engage those who may face barriers to employment, this is the start of an ongoing relationship and we will continue to support these students into employment after their education.



Activities that teach students about engineering and construction



Learning, leading and looking ahead

Last year, we held a Skills Hub pilot, a trial that provided work-based training courses for men and women on day release from Kent-based prisons, as well as local people already in the construction workforce who are seeking higher skilled jobs. We spoke to two participants, Sydney Miller and Sophie Brindley, about their experiences. Their stories show how the programme is helping people build confidence, grow careers and shape a more inclusive and sustainable construction industry.

Experience in the programme

Sydney and Sophie are two local women that took part in the Site Supervisors' Safety Training Scheme, an accredited course provided through the Skills Hub pilot – and it made a big difference. Sydney gained a solid understanding of site safety and how to lead responsibly in high-risk environments. For Sophie, the support from her tutor and speaking to like-minded people boosted her confidence and networking skills.

Impact and outcomes

Taking part in the pilot helped both women see new possibilities in their careers, which aligns with our ambition of attracting more diverse talent into the construction industry. Sydney discovered a passion for leadership and safety roles, while Sophie – then the youngest woman at Gallagher Group Ltd, a family run aggregates, groundworks and civil engineering company – felt empowered to keep pushing forward in a male-dominated industry. Both noticed a shift in how women are perceived on site and are using that momentum to inspire others.

Reflections and future vision

Sydney and Sophie are passionate about encouraging more young women into construction. They believe in the power of confidence, curiosity and taking the leap. Looking ahead, Sydney would like to see more leadership and sustainability training, while Sophie would love to see Skills Hubs opening across the UK to give more people a chance to explore the industry.

Sustainability and broader impact

For both participants, the Skills Hub initiative is about more than just training; it's about shaping a better future. Sydney is helping embed sustainable thinking into everyday work, while Sophie is using digital tools to reduce waste and improve safety. They both see the value of involving local communities and making sustainability part of the culture.

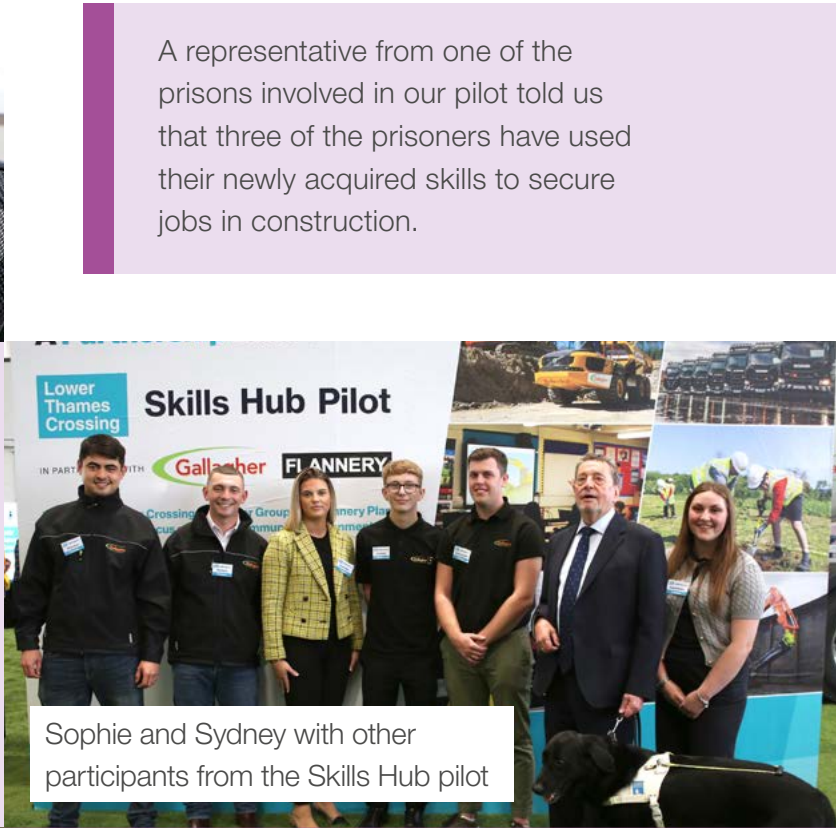


“My confidence has grown... from asking questions in the classroom to being the face of a YouTube video and then being featured on the local news!” **Sophie Brindley**



Sydney Miller

“There’s more respect and recognition for our capabilities, which motivates me even more to grow and lead in this industry.” **Sydney Miller**



Sophie and Sydney with other participants from the Skills Hub pilot



Next year



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“The year ahead represents a pivotal moment for the Lower Thames Crossing as we place communities at the centre of delivery. We are creating new pathways for skills and jobs, supporting local businesses, and inspiring future talent through our outreach programmes and the commissioning of our new Skills Hubs.”

Natalie Bonnick, Head of Supply Chain and Skills, Education and Employment, Lower Thames Crossing



Next year marks a big step forward in the positive impact we’re creating for people, places and nature. We’ll be opening our first Skills Hub to support local people into better jobs, and continuing to work closely with local suppliers. At the same time, we’re getting started on a major habitat creation programme, transforming areas like Coalhouse Point, Orsett Fen and Thong into thriving green spaces that support wildlife and connect communities with nature. Throughout all of this, we will launch new community surveys to help us listen and respond more effectively.

Community engagement and measuring impact

We will start a programme of community benchmarking surveys. These will be carried out by independent research specialists to help us better understand what matters most to local people as construction gets under way.

The surveys will set a baseline for community satisfaction, covering things like:

- Traffic management.
- Workforce behaviour.
- The quality and clarity of information we provide.
- How our work sites look.
- Levels of dust and noise.

We'll share feedback with our Delivery Partners and use it to track our year-on-year performance, helping us to continuously improve. It's all part of our commitment to being a good neighbour while we deliver this vital project.

Creating opportunity: Our skills commitment

As well as improving connectivity, the Lower Thames Crossing will unlock opportunities and potential for those living and doing business in the area and beyond, improving lives and preparing the region and industry for the future. As a catalyst for green skills, it will create a workforce that can build and maintain the infrastructure needed for growth, in a way that protects the environment.

In October 2025, we are planning to open our first Lower Thames Crossing Skills Hub at Marling Cross in Gravesham. Here, we will be delivering predominantly classroom-based training to upskill local people, enabling them to access higher-paid and higher-skilled roles. We will be working with partners such as the Department for Work and Pensions (DWP), Construction Industry Training Board and the Lighthouse Charity to provide wider pastoral support, alongside accredited training, to assist individuals in employment and improve retention rates. This training facility will move to a permanent site, which we anticipate opening later in 2026.

We've published our Skills Strategy for 2025 to 2026, setting out the challenges we better understand, and how and what we will deliver over the coming years.

Lord Blunkett will assist the project by chairing the Skills Taskforce that will continually review the implementation of our Skills Strategy and offer recommendations on how the project can deliver more for local communities. This will help us meet our ambitions by providing advice and direction, embedding a culture of transparency, and challenging us on targets and progress. The Taskforce brings together key stakeholders from across the Thames Estuary region to support and invest in skills, education and employment initiatives to deliver regional economic development and community legacy.

To strategically address local skills shortages that could affect delivery of the Lower Thames Crossing and the wider construction industry, we will build two new permanent Skills Hubs. One will be based in Thurrock and another in Gravesham, so that those most impacted by the project can more readily gain access to training and receive tailored support. We plan

to open these facilities later in 2026, pending approval of planning applications. The hubs will be set up as a collaborative initiative between local authorities, education providers and the supply chain, with some support through existing funding from the Department for Education, DWP and local authorities.

Supply chain engagement events

We remain committed to deepening our engagement with the supply chain, with a particular focus on supporting local SMEs to access and prepare for upcoming tender opportunities. Building on our partnerships with the Kent and Essex Chambers of Commerce, we are planning a calendar of engagement events throughout 2026. These will provide suppliers with the opportunity to meet our Delivery Partners, gain insight into minimum requirements, and a better understanding of our tendering processes. Through this collaborative approach, we aim to foster a more inclusive, transparent and resilient supply chain.



Members of the Lower Thames Crossing Skills Taskforce, chaired by Lord Blunkett



Our approach to nature

We aim to create a connected ecosystem with thriving, climate-resilient habitats, while providing nearly 40 miles of new and improved pathways and seven green bridges to link people with nature. By partnering with experts, the project will ensure these green spaces are professionally managed for long-term ecological health and community benefit.

Habitat creation is essential to offset environmental impacts, enhance biodiversity and support local ecosystems. It helps replace lost habitats, protect wildlife and create green spaces for communities, while also meeting legal environmental requirements and building resilience against climate change.

Next year, we will see a strong emphasis on initiating and advancing our extensive habitat protection and creation work. This will involve significant enabling works, large-scale planting, the creation of new habitats and green spaces, and ongoing efforts to minimise environmental impact and achieve biodiversity net gain. We've chosen to build these areas ahead of construction to maximise the benefits for nature and local communities, and also allow the planting to mature, so nature can start to thrive in these new areas.

Across the route, we are planting as many trees as early as possible, so they are given the opportunity to become established and grown before the road is open to traffic. We'll also be working with specialist organisations on long term care and management of our trees.

This diagram shows the habitat areas that will be the focus of our early creation plans.



Trialling a new innovative environmental regulator approach

The Lower Thames Crossing is setting a new standard as the first major UK infrastructure project to adopt the innovative Lead Environmental Regulator model. With Natural England as the single point of contact, the project benefits from seamless coordination with the Environment Agency and Marine Management Organisation. This approach streamlines planning permissions and approvals, increasing efficiency and project certainty while delivering cost savings. Early oversight ensures that environmental opportunities are identified and addressed promptly. By encouraging collaboration and strong oversight within the Department for the Environment and Rural Affairs (Defra) and its partners, this system supports the timely progress of nationally significant infrastructure projects. The pilot with Natural England will showcase the benefits of this joined-up, forward-thinking model for environmental regulation.



Last year



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“By reassessing our approach to design, we have unlocked faster, more efficient ways to build the Lower Thames Crossing. Harnessing the power of off-site manufacturing and assembly, we’re not just finding ways of accelerating construction, we’re minimising disruption and setting new standards for the way we build. Every step is guided by our commitment to innovation and to minimise impacts.”

**Steve Roberts, Design Champion,
Lower Thames Crossing**



We made progress last year with our Delivery Partners and the wider supply chain, focusing on early critical enabling works like developing designs and utility planning, ecological mitigation and surveys.

Setting new standards for greener roads

A big focus has been reviewing our design approach to explore and adopt ways of reducing carbon through innovative construction methods and materials. This involves challenging traditional practices and exploring how, and where, carbon reduction can be effectively implemented.

In May, we revealed the winner of the low-carbon footbridge contest. We deliberately decided to challenge the UK construction industry by running a design competition for our footbridges. Although they are small and are the simplest of our bridges, in the UK they are typically made from steel, one of the most carbon-intensive materials.

The winning design from Arup and Seán Harrington Architects has set a new benchmark for sustainable design that could be incorporated

into the new road and replicated over roads country-wide. This design would reduce the carbon we emit by almost 90%, and given the number of similar structures on the project, there is now an opportunity to develop a UK-based supply chain that can deliver these bridges for the Lower Thames Crossing and other UK projects.

The design beat 32 impressive entries that were judged on a range of criteria, including the proposed use of low-carbon materials and construction methods. The competition highlighted that the design community is eager to embrace the low-carbon challenge, showing how creative design and strong client backing can drive progress without compromising on form or function.

The number of entries and wide variety of options showed us that solutions for low-carbon construction already exist in the supply chain.

In June, we released new images to show how our designs have progressed and to confirm our commitment to integrating low-carbon construction and nature into the Lower Thames Crossing.

Case study: Low-carbon footbridge



The low-carbon footbridge contest has proved that challenging traditional design principles can create a better quality and more sustainable design that can be used at scale. The winning design showed carbon savings of almost 90% compared to our 2020 baseline by replacing steel with a timber-based solution.

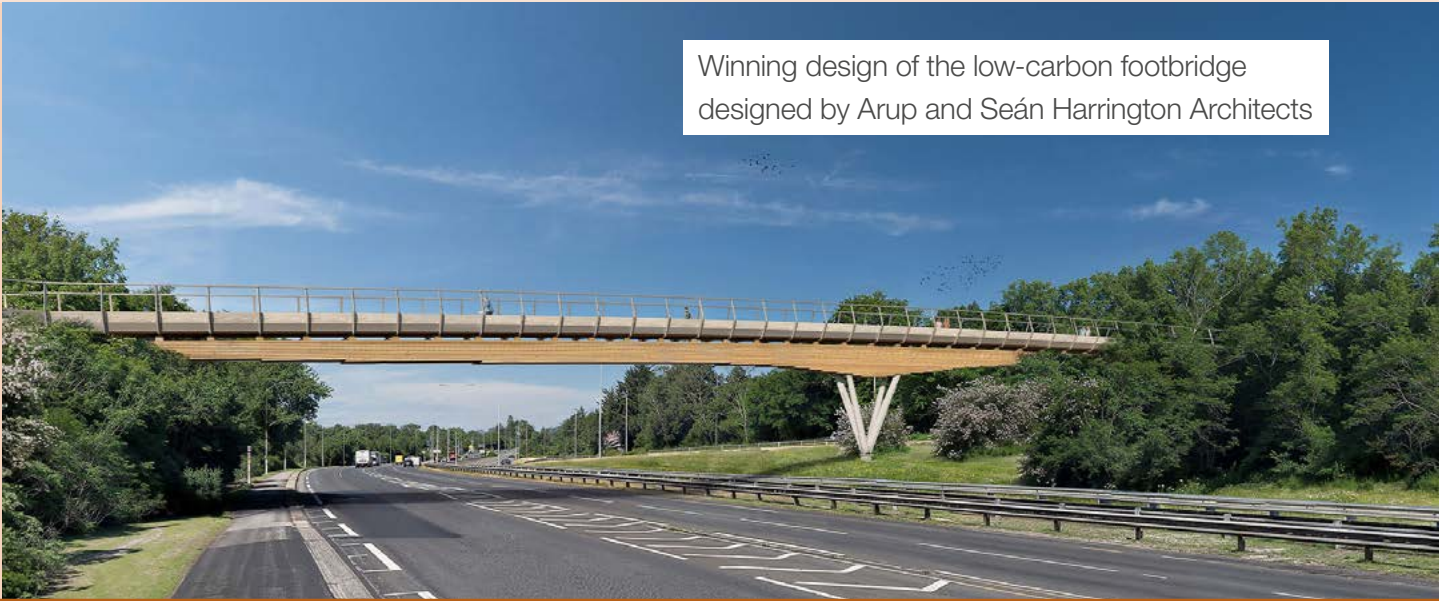
The following methods were adopted in the winning design:

- Eliminating concrete entirely from both the bridge and its approach ramps, significantly reducing embodied carbon.
- Using glulam (glue-laminated) timber girders as the main structural component, a material that offers high strength, design flexibility and a much lower carbon footprint than steel or concrete.
- Replacing concrete foundations with steel screw-piles, which are quicker to install and produce far less carbon than concrete piles.
- Using earth embankments, which are sloped mounds of compacted soil, instead of elevated structural ramps as these are typically built with steel or concrete supports.
- Angling the glulam beams at 30° to the vertical to help rainwater run off. This ensures long-term durability and reduces maintenance-related carbon. Above the beams, a floating deck system acts as a protective roof while allowing 360° airflow around the timber. This design keeps the beams dry, prevents rot and supports a 120-year design life, minimising the need for future repairs or replacements.

Case study: Re-assessing the design to reduce carbon and other impacts

Designed to save time and costs, our detailed design work last year involved reviewing areas of the DCO design for potential savings. One example is where it included the widening of the M25 at Junction 29 over the existing Codham Hall Viaduct. We reassessed this section of the motorway and were able to demonstrate the Lower Thames Crossing

could be safely accommodated within the width of the existing viaduct. This re-design avoided costly and time-consuming structural widening works, significantly reducing the need for traffic management on the existing network and extensive site vegetation clearance. It saved approximately 5,500 tonnes of carbon dioxide equivalent.





Case study: From concept to construction – progressing the Thong Lane Green Bridge North

Last year, we presented how the Thong Lane Green Bridge North is going to be built. A key factor in the updated design has been to allow the bridge to be built in segments, off-site in a factory. The benefits of this approach include:

- Quicker to assemble onsite due to the use of prefabricated modular elements forming the bridge structure.
- Lower carbon design by reducing the volume of concrete and steel used when compared to the reference design, this could reduce carbon by up to 60%.

We expect that overall, these benefits would allow for more efficient construction methods and therefore fewer construction vehicles. One of the next areas we will focus on is calculating estimated changes to construction impacts, such as road closure periods and construction vehicle movements.



“It’s encouraging to see the way in which the detailed design for the green bridges is progressing. Today, we were shown the evolution at Thong Lane Green Bridge where the team are creating a solution that provides habitat connectivity while meeting the needs of a range of different user groups.” Stakeholder workshop participant from Kent County Council



Road corridor design

We’ve been reviewing the design of the road corridor to see how we can make the roads simpler, safer, greener and more user-friendly by removing unnecessary clutter and helping to cut carbon emissions.

By rethinking how each part of the road corridor is used, we have sought to minimise roadside furniture such as signage, lighting, technology, gantries and safety barriers and instead maximise the amount of green

verge in accordance with our ‘greenest road’ philosophy. This means drivers will benefit from a road that feels more open and comfortable, with a greener and clearer environment.

We have placed users at the heart of these improvements. The focus on a clean, consistent road layout will speed up construction and create a more pleasant environment befitting everyone who uses the Lower Thames Crossing.



Working together for zero-emissions construction

As part of our commitment to delivering a low-carbon construction project, we have been focused on the research and development pipelines of our Original Equipment Manufacturers (OEMs) to gain a comprehensive understanding of the construction programme and to ensure we secure the most suitable zero-emissions machinery for the Lower Thames Crossing.

We conducted a comprehensive engagement exercise with many leading OEMs and supply chain representatives to assess the availability of battery-electric and hydrogen-powered equipment. These discussions have provided us with a clear understanding of the technologies that are currently available and what can be produced in time for the start of construction. To help inform our approach, we have also incorporated international insights and lessons learned from other countries.

This has helped us to identify existing gaps and explore viable solutions with our Delivery Partners, and we now have confidence that zero-emissions machinery is either already available or in development to meet our project timeline. Over the coming year, we will be working with our supply chain and are committed to placing orders.

Building better: Fuelling for the future

Our plan to replace diesel with hydrogen and electric in heavy construction machinery, and help accelerate the UK's transition to clean power, moved a step closer in June. This follows the successful conclusion of a hydrogen trial run in partnership with Gallagher Group, JCB and hydrogen supplier, Ryze Power.

The trial was hosted at the family-run Gallagher's Hermitage Quarry in Kent and was carried out using a JCB 540-180H Loadall, powered by a hydrogen combustion engine fuelled with low-carbon hydrogen. The machine

replaced the use of an existing diesel-powered JCB Loadall for masonry work and successfully demonstrated the safe operation of hydrogen combustion-powered equipment and mobile refuelling infrastructure.

The trial proved the equipment would not only meet the project's needs but would produce zero tailpipe emissions and save around 205kg of CO₂ per machine, per week, when compared to traditional diesel-fuelled equivalents.

A summary report of the findings from the hydrogen trial can be found on our website.

We are currently carrying out a procurement process for hydrogen supply, storage and distribution, and expect to award the contract later this year. More information about the shortlisted bidders is set out in the Carbon section of this report.

Testing earth-friendly concrete

In January 2025, our Delivery Partner for the Tunnels contract, Bouygues Travaux Publics Murphy Joint Venture, conducted a series of trials to assess the use of Earth Friendly Concrete (EFC) for building the diaphragm walls, which are the walls in the tunnel entrance and approach.

EFC is a groundbreaking type of cement-free material, which cuts carbon emissions by up to 50% compared to traditional Portland cement, supporting our goal of low-carbon construction.

Our design, construction and materials specialists devised a series of lab-based trials to understand the performance of this innovative new material. These involved controlled tests that assessed how easy the concrete is to use, how well it holds together with water and how it performs in hot weather.

The results so far have been successful and provide confidence in the material's compatibility with our requirements for building the diaphragm walls. We are now planning further trials that will be in-situ to mimic site conditions and will give further confidence in the materials.

Did you know?

Earth Friendly Concrete is a cement-free alternative that can reduce carbon emissions by up to **50%** compared to traditional concrete.



A JCB 540-180H Loadall, powered by a hydrogen combustion engine, used in a trial that was run in partnership with Gallagher Group, JCB and Ryze Power





Next year



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“Every decision we make is shaped by our commitment to being a good neighbour. From quieter, low-impact construction techniques to materials that reduce our carbon emissions, we are building with care — for people, places and the environment, and creating spaces where nature can thrive.”

**Shaun Pidcock, Programme Delivery Director,
Lower Thames Crossing**



As we progress towards construction, we're rethinking how infrastructure is designed and delivered, placing carbon reduction and sustainability at the heart of every structure. From footbridges and viaducts to gantries and retaining walls, we're applying innovative materials, construction methods and solution-focused thinking to reduce environmental impact.

As set out in the Community section of this report, next year will also see the start of works to create new habitats and spaces where nature can thrive and local communities have access to better green spaces.

Structures to the next step

Now that we have a winner from the low-carbon footbridge design contest, we will use this approach for other footbridges across the route and develop other solutions with the aim of further reducing carbon.

Viaducts

The designs of the three large viaducts, Tilbury, Orsett Fen and Mardyke, continue to be developed using an innovative precast concrete solution that significantly lowers the volume of in situ concrete used on the structures, thus reducing carbon. This will be the first time that this precast solution has been used on the UK highway network.

Designing better structures

We are using a method-led approach that brings together experts from the supply chain and construction to find and develop a solution before commencing detailed design. It factors in how an asset is built, as well as where materials come from to develop a design.

Last year, this approach resulted in a precast arch solution for six bridges across the Roads North of the Thames, by eliminating piling and minimising activities onsite.

Bridge deck material

A significant focus has been to change the bridge deck construction, which is the part of the bridge that vehicles travel on. Instead of using weathering steel, we're looking at low-carbon precast concrete beams.

In many instances, bridge spans – the distance between two structural supports – have been reduced to take forward the change in material, resulting in additional carbon savings. So far, for Roads North of the Thames, we have reduced the number of steel beam bridges from 33 to 20, and next year we will look to reduce this by a further 10.

Low-carbon gantries

National Highways ran a competition to create a more streamlined, environmentally friendly gantry design. The solution needed to meet key criteria, which included sustainability, carbon efficiency, elegance, enhanced safety features, adaptability, a modular design and reduced maintenance cost.

We have started work to take the winning design and develop a set of gantries that suit this programme and the wider road network. In the next year, we will start design development, which will include redesigning signage displays that sit on a gantry.

We will test new gantry designs in a wind tunnel to make sure they will work well in real-world conditions. The tests will help us to understand the forces that the gantry would experience, so we can get a more accurate understanding of how much material to use for the signage. We anticipate that this process will help determine more precise material quantities, which is expected to lead to further carbon reductions.

Artist's impressions of low-carbon gantry examples





Last year



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“We’ve seen the real power of collaboration in action. By fostering strong relationships with our Delivery Partners and supply chain, we’ve been able to unlock some of the most complex carbon challenges we face. It’s through this shared commitment and open dialogue that we’re building a culture of innovation and delivering meaningful progress towards a lower-carbon future.”

**Neesha Pandya, Head of Carbon Delivery,
Lower Thames Crossing**



Our Delivery Partners already have a plan for a combined carbon reduction of 50%. We believe that it's possible to go further, so last year we announced our stretched target of 70%. Last year, we focused our efforts on understanding how we can reduce the three largest carbon emitters – diesel, steel and concrete – from the build.

This has involved learning what our supply chain can do, the limitations and how we can push this further. We have been working with our designers to reduce the quantities of steel and concrete, and with our supply chain to test new low-carbon concrete mixtures. The biggest challenge, however, has been in eliminating diesel from our construction sites and replacing it with hydrogen and electric. It is something that has not been done at scale before and we are working extensively with our supply chain to see how we can change the machinery we use and how we use it.

Five Client Carbon Commitments

We are continuing the work started in 2024 with CO₂nstructZero and other major infrastructure developers and owners. In April, at the Construction Leadership Council, three new clients signed up, bringing the total to nine major organisations, which amounts to £30 billion of the UK's future infrastructure projects pledging to decarbonise.

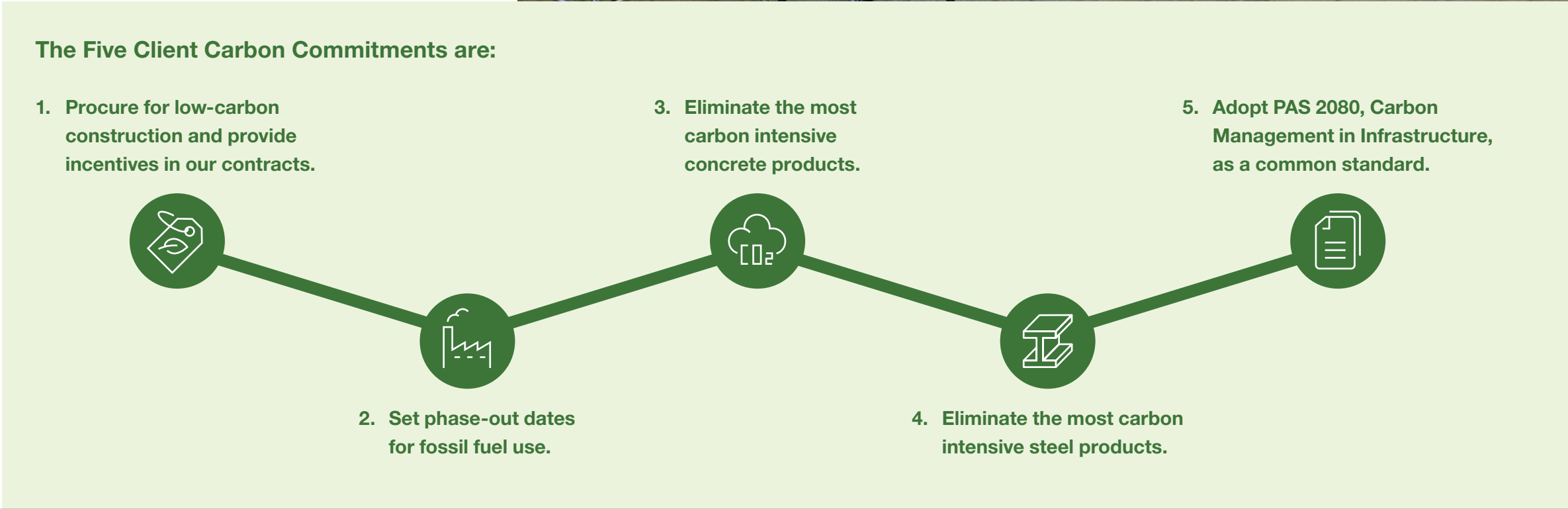
The Environment Agency, Scottish Water and Transport for London joined the Lower Thames Crossing, Anglian Water, Heathrow, National Highways, Northumbrian Water and Sellafield Ltd in publicly pledging to decarbonise.

This was the second Five Client Carbon Commitments event, attended by around 100 construction industry leaders.

Pioneered by the Lower Thames Crossing, as a member of the Construction Leadership Council, the Five Client Carbon Commitments are simple, practical steps that organisations can take to reduce their carbon emissions.

By signing up to the Five Client Carbon Commitments, these powerhouses of UK infrastructure are setting a new standard for low-carbon construction – giving clarity to the sector and incentivising manufacturers and suppliers to invest in the new green skills and technologies needed to build major infrastructure in a net zero future.

Leading by example, the Lower Thames Crossing is setting a new blueprint for low-carbon construction.





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A supply chain
that has the
capability and
capacity to meet
the challenge

Strengthening relationships across our supply chain

To achieve our ambition of delivering the greenest road, we need a supply chain that has the capability and capacity to meet the challenge. That’s why, working closely with our Delivery Partners and local SMEs, we’re reaching out to equipment manufacturers and suppliers of concrete, aggregates and steel. These are key areas where collaboration and early engagement will help us build differently and more sustainably.

We’re taking a more proactive role, listening, learning and understanding what’s possible, what investment is needed and what certainty our supply chain partners require.



Talking to the supply chain at engagement events



Talking to the supply chain at engagement events

Supply chain engagement events

Earlier this year, we hosted a supply chain event focused on accelerating progress towards net zero in construction. We welcomed businesses from across the steel, concrete and earthworks sectors to explore opportunities for low-carbon delivery.

Key takeaways from the day included:

- Strong support for our low-carbon goals, with recognition of the construction sector’s role in driving change.
- Shared learning from trials to reduce emissions in concrete mixes, helping to identify further opportunities to cut carbon.
- A clearer picture of the challenges suppliers face and how we can support them, such as through investment in electric and hydrogen-powered machinery.

The event has helped to identify available market options, such as a reinforcing bar that is usually made of steel to strengthen concrete structures and complies with our green steel standards. This enables us to formalise contracts with our Delivery Partners that align with our ambition to further decarbonise and will help us meet the 70% carbon reduction.

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Accelerating progress
towards net zero in
construction



Green Fleet Demonstration Day hosted by Tarmac

Fleet innovation showcase

We attended a fleet demonstration day hosted by Tarmac, which is part of our wider supply chain. Together with our Delivery Partners, we explored the latest innovations in low-carbon construction vehicles. The event featured electric trucks, battery-electric machinery and advanced trailers.

These technologies will significantly reduce emissions across the infrastructure sector and we’re continuing to explore how they can be integrated into our early works.

What this event and others have shown us is how the solutions for low-carbon construction are already in the supply chain. We will be working with our Delivery Partners to start trialling the different machinery available to learn how to operate and charge it. For more information, see sustainable enabling works and preparing for zero emissions compounds in the Carbon next year section of this report.

Rethinking charging for zero emissions

In June, we held an event called the Energy and Infrastructure Sprint. It brought together our Delivery Partners and key energy stakeholders, including technology providers and equipment manufacturers, to work together on a specific challenge.

The challenge addressed the following question: “What is the most efficient charging combination to power up zero emissions machinery onsite, considering both off-grid and on-grid scenarios?”

We asked attendees to develop ideas for the best charging solutions, through a series of workshops to build and test innovative and viable approaches. We know that there are different ways of delivering the energy needed and we also know that our supply

chain has never done this at scale before, so this opportunity allowed us to create an environment where we could get the best of the industry to create a solution that works.

During the day, potential solutions were rapidly prototyped, with teams developing the most efficient charging combinations for the programme, offering our Delivery Partners innovative options while challenging their thinking. The event provided early engagement with energy management and distribution solution providers to help clarify actual operational requirements and unlock new possibilities. The outputs of the event will be directly used by our Delivery Partners to inform the energy and infrastructure solution for the adoption of electric machinery at scale.

“This event helped clarify actual operational requirements and unlock new possibilities and the results will be used by Delivery Partners to inform the energy and infrastructure solution for the adoption of electric machinery at scale.”



Workshop at the Energy and Infrastructure Sprint



Public information event

Spotlight on carbon in the community

In March 2025, we were out in the local community to talk about all things carbon. The construction sector produces a significant share of the country’s carbon emissions but as we are doing things differently, we wanted to raise awareness of what it means to be a pathfinder project and how we are exploring low-carbon construction methods. We held two community pop-up events, one at Lakeside and another at Bluewater.

We’re passionate about inspiring the next generation of green leaders, so we visited the Centre for Engineering and Manufacturing Excellence to help local teachers equip future engineers with the knowledge and skills needed to thrive in a sustainable world.

We also presented at Bridging the Gap: Empowering Educators for a Greener Future,

an event designed to empower local teachers from Thurrock, Havering, Barking and Dagenham to inspire students to explore exciting opportunities in the green economy.

We hosted a debate at the Gifted Young Gravesham Youth Committee around the question of whether a road could really be green and offered free Carbon Literacy Training to engage and empower the next generation. Our goal was to raise awareness about the environmental challenges facing the construction industry and to share how we’re addressing them by making the Lower Thames Crossing the UK’s greenest road.

By involving young people in meaningful discussions and providing accessible training, we’re aiming to foster a deeper understanding of climate action, and the role individuals and communities can play.



Staff at Energy and Infrastructure Sprint

“We’re passionate about inspiring the next generation of green leaders, so this was our chance to help local teachers equip future engineers with the knowledge and skills needed to thrive in a sustainable world.”



Next year



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“We’re focused on transforming ambition into tangible outcomes. With sites operating zero-emission equipment, we will showcase the possibilities and set the stage for widespread adoption across the entire programme. In the coming year, our goal is to demonstrate that sustainable construction can be achieved rapidly and at scale.”

Katharina Ferguson, Supply Chain Development Director, Lower Thames Crossing



Electric excavator being used for work at Hole Farm

Looking ahead, we will continue to focus on diesel, steel and concrete and we will put into action the plans we have developed over the past year to secure low-carbon materials and zero-emissions equipment.

We will start to see how our design development is leading to a reduction in carbon emissions, and we will have the outcome of the concrete trials, providing greater clarity on what is achievable. As we move into doing more work onsite, we are also increasing the use of zero-emissions machinery and ensuring we have the skills onsite to operate and maintain it. Next year is all about the practical application of what we have learned and building more confidence in our supply chain and delivery team around what is achievable.

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We will scale up the use of low-carbon construction methods and materials, with the aim of cutting our carbon footprint by 70%. We have committed to responsibly offset any remaining carbon emissions in the early 2030s once efforts to reduce it during construction are exhausted. We will prioritise offsetting projects that are relevant to construction, transport or can have an impact in the region.

Energy to fuel an electric fleet of plant

Providing sufficient power to fuel zero emissions machinery is a logistical challenge that requires extensive planning.

Our focus next year is to tackle this challenge and better understand how to efficiently power zero-emissions machinery onsite, considering both on-grid and off-grid energy requirements. We are exploring how to meet these demands in the most sustainable way possible, using a combination of low-carbon energy sources. This work will build on the outcomes of the Energy and Infrastructure Sprint, an event we held last year that is covered in the Carbon last year section of this report.

Steel supply chain engagement

As a pathfinder project, we want to be at the forefront of low-carbon construction. We will continue to explore innovative construction materials and production methods, particularly through further discussions with the steel supply chain. We will request information from steel manufacturers and fabricators to better understand the future capability and capacity of green steel production in the supply chain. This will take the form of a market engagement exercise to inform our designs as they progress, as well as the route to market to procure steel that meets our carbon standards.



Sustainable enabling works and preparing for zero-emission compounds

As we move into construction, we are planning to increase the use of zero-emissions equipment in our enabling works. This will provide valuable information about the efficiency of the machinery, how we charge it and how we operate it.

Our Delivery Partners will run a series of ‘proof points’ where electric and hydrogen equipment will be used across various areas where works will start. They will deploy zero-emissions equipment that is already tried and tested by others, with a focus on building confidence and familiarity for construction workers who are new to the technology and ways of working. The purpose is to understand how the machinery integrates into daily operations, highlighting performance, charging logistics and operational factors for future wider adoption and scaling.

These proof points will start small with four types of equipment at Hole Farm and scaling up at Coalhouse Point, a fully operational zero-emission site.

- **Hole Farm, Brentwood** – 20-tonne and 23-tonne electric excavators and a six-tonne electric dump truck. Electric power banks and Syntech biofuel generators will be used to power the machinery.
- **Farmland near Coalhouse Point** – A fully operational zero-emission site, including electric excavators (six, 13 and 22 tonne), articulated dump trucks, rollers, 500kWh power banks, mobile chargers and an electric vehicle fleet. Plus a hydrogen telehandler and fuel cell tower lights.
- **Land east of Thong Village** – Mid-sized electric equipment and hydrogen fuel cell technology.
- **Trial pits near Marling Cross** – Hydrogen combustion powered backhoe loader. A smaller-scale, zero-emission site featuring solar-powered eco cabins and tower lights, an electric vehicle fleet and electric handheld equipment.





Last year



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“We're committed to ensuring that everyone working on the Lower Thames Crossing has the chance to learn, develop and succeed. Over the past year, as we've built our new delivery team, our focus has been on shaping an environment where innovation thrives, collaboration is second nature and everyone feels valued and included.”

**Lawrence Vasu, People Lead,
Balfour Beatty**



Last year, we were in the process of creating a new delivery team together with our Delivery Partners. Our focus has been on embedding a new leadership team and creating a collaborative working environment that spans the contracts and supports the wider programme.

Developing leaders for a sustainable future

We know that delivering one of the most ambitious infrastructure projects in the UK takes more than technical expertise – it also needs ambitious leaders who are connected and embrace and champion diverse talent.

That’s why we’ve launched a bespoke leadership development programme, designed to equip people with the tools, time and confidence to lead effectively in a complex and fast-moving environment. We’re also doing it collectively, by including our Delivery Partners so all our leaders are given the same opportunity.

Through interactive workshops, honest conversations and space to reflect, our leaders are learning how to better support their teams, make thoughtful decisions under pressure and drive positive outcomes across the project.

By investing in our people, we’re building a striving, more connected team that’s ready to meet challenges head-on and deliver lasting value for our industry, our communities, and the environment.

Embedding equity into everything we do

We believe that how we deliver is just as important as what we deliver. That’s why one of our core principles – doing the right thing – sits at the heart of our approach to diversity, equity and inclusion.

Our diversity ambitions highlight our goals, our agreed targets and incentives for our Delivery Partners and integrated client teams.

We’re taking deliberate steps to turn these ambitions into action – building a culture that champions Equality, Diversity, and Inclusion (EDI) at every level.

This year, we are focusing on leading indicators, such as inclusive planning practices and early-stage engagement, to ensure that equity and inclusion are embedded throughout delivery, rather than measured solely by end outcomes.

Building understanding through autism awareness

Creating an inclusive workplace starts with understanding and that’s exactly what our partnership with the Sycamore Trust is helping us achieve.

As part of our commitment to equity and accessibility, 18 members of the Lower Thames Crossing team took part in autism awareness training delivered by the Sycamore Trust. What made this session especially powerful was that it was led by autistic people, offering first-hand insight into the everyday experiences and challenges they face.

The session was eye-opening and helped our team better understand how autism can affect people in the workplace and highlighted practical ways we can be more inclusive in our day-to-day interactions and environments.

The Sycamore Trust also carried out an audit of our office space – reviewing how inclusive it is for autistic individuals and identifying any reasonable adjustments we can make to improve accessibility. Their recommendations are being reviewed as part of our office space improvement plan.

This training is just one part of a growing partnership. We’ve also welcomed a work experience student through the Sycamore Trust, which you can read more about in the Community section of this report.

We are inclusive: turning ambition into action

We hosted a dedicated event for our people – We Are Inclusive – designed to connect colleagues with our EDI ambitions and inspire action across the project.

Colleagues had the opportunity to take part in taster sessions from our Delivery Partners’ training programmes. These covered topics such as:

- Hidden disabilities.
- Microaggressions and micro-actions.
- The right to respect.

These sessions weren’t just about raising awareness, they were about educating our people and building a culture where they feel safe to speak up, ask questions and challenge the status quo through active learning.

The day was a clear demonstration of our commitment to embedding EDI into every part of the programme. Because for us, inclusion isn’t just about what we say, it’s about how we show up for each other, every day.



“We’re building a team that’s ready to meet challenges head on and deliver lasting value for our industry, our communities and the environment.”





Next year



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“Our new engagement platform gives us clear insights into how our people feel and what matters most to them. It’s a big step forward in our work on equity, diversity and inclusion. By listening closely and working together, we’ll use these insights to shape our future plans and make sure we’re building a workplace where everyone feels welcome, supported and able to thrive.”

**Victoria King, Head of People Delivery,
Lower Thames Crossing**



As we move to next year, we will continue our focus on the development of the wider leadership team with our Delivery Partners. We will also have the results of our people survey, allowing us to better understand where we are doing well and where we need to do better. On the back of this, we will review our priorities to ensure we are working effectively on the areas that will have the biggest impact.

Licence to Hire Training

Led by our Delivery Partners, the Licence to Hire Training will ensure that all managers recruiting on behalf of the Lower Thames Crossing are following inclusive recruitment best practice while ensuring that the Lower Thames Crossing Purpose and Principles are at the heart of the selection process.

Learning in reverse: empowering growth through mentorship

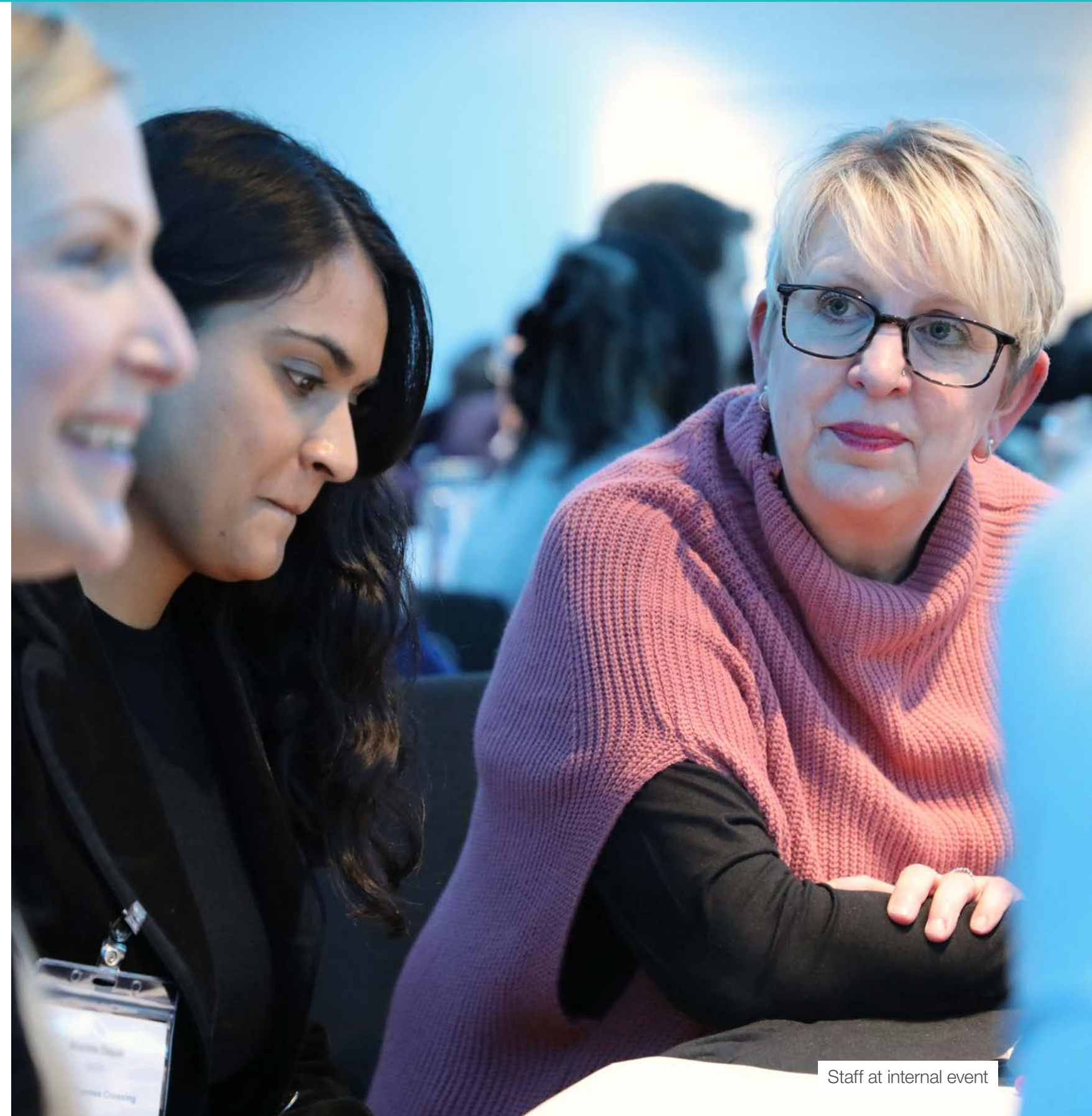
We're always looking for new ways to learn from one another and that includes challenging traditional development models.

In 2024, we launched our first reverse mentoring programme, where junior team members mentored senior colleagues. We found this approach created space for open dialogue and fresh perspectives, particularly around topics like technology, EDI and emerging workplace trends.

The current cohort, made up of 10 mentoring pairs, will continue through to the end of 2025.

As the programme progresses, we'll be gathering feedback and insights from participants to understand what they've learned, how it's influenced their thinking and what outcomes have emerged.

While still in its early stages, this initiative is helping to foster a culture of curiosity, humility and mutual respect, where everyone has something to teach and something to learn.



Staff at internal event

Contribution Towards UN Sustainable Development Goals

The Lower Thames Crossing will help contribute to the UN Sustainability Development Goals (UN SDG). The table below highlights where we believe we can have the most impact.

UN SDG description	Lower Thames Crossing contribution to development goal
4 QUALITY EDUCATION 	Quality education; ensure inclusive and equitable quality education and promote lifelong learning opportunities. We will be delivering opportunities for local communities by creating greater access to new skills and jobs. Our Skills Strategy sets out how we will deliver these in partnership with local stakeholders and our supply chain. Inclusivity is at the heart of our culture and we want to lead the way in creating a more diverse team by setting ambitious targets for ourselves and our supply chain.
5 GENDER EQUALITY 	Gender equality; achieve gender equality and empower all women and girls for all. The construction industry still has some way to go in delivering greater gender equality. We recognise this and are focusing on changing this both within our own organisation and across our supply chain. We will be publishing our diversity goals, which will specifically look at targets for women on the programme and women in leadership positions. This will be supported by a plan for how we will meet these.
8 DECENT WORK AND ECONOMIC GROWTH 	Decent work and economic growth; promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The construction of the crossing will create jobs and we are committed to ensuring that a minimum of 45% of these are filled by local people. In building the UK's greenest road, we will also create skills that can deliver future sustainable infrastructure for a net zero economy, including using new technology, and hydrogen and electric equipment. The new crossing will also support economic growth by providing greater access to jobs for people living in the local communities.

UN SDG description	Lower Thames Crossing contribution to development goal
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	Industry, innovation and infrastructure; build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. The new crossing is providing much-needed resilience to the existing Dartford Crossing. The lack of a reliable connection means the River Thames is a barrier, limiting growth of local and regional economies. The new crossing will improve journeys and boost the economy by providing a reliable new connection between people and jobs, businesses and customers, and the region's key ports, manufacturing centres and distribution hubs.
11 SUSTAINABLE CITIES AND COMMUNITIES 	Sustainable cities and communities; make cities and human settlements inclusive, safe, resilient and sustainable. In building the new crossing, we will connect communities with bigger and better managed green spaces to improve access to nature. This includes connecting footpaths and cycleways, improved routes for walking, cycling and horse riding, as well as the conservation and interpretation of local heritage assets.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	Responsible consumption and production; ensure sustainable consumption and production patterns. Our ambition to build the UK's greenest road means challenging how we have delivered major construction programmes in the past. This includes building more sustainably both through eliminating and reducing high-carbon materials or using more sustainable alternatives. We will be working with our direct and wider supply chain to better understand the value chain and how it can be made more sustainable.
13 CLIMATE ACTION 	Climate action; take urgent action to combat climate change and its impacts. Our relentless focus on carbon reduction through procurement and in our contracts is supporting tackling climate change and its impacts. Our continuous drive to reduce carbon on our programme sits at the core of how we work with our supply chain, with incentives specifically designed to enable this. In addition, we are sharing our learning with the wider industry and other infrastructure clients, so that they can benefit and together change the construction industry to build more sustainably.
15 LIFE ON LAND 	Life on land; protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. We will deliver landscape-scale environmental enhancement and accelerate the decarbonisation of the construction industry through bigger, better-connected habitats.

Community projects

We have invested in a variety of community initiatives over the years, including the following, which were completed in the last financial year:

Warley Place, Brentwood

We invested £250,000 in Warley Place, Brentwood, to help the community better connect with its heritage. This donation enabled Essex Wildlife Trust to restore the historic brickwork in the site's Grade II listed walled garden, the eastern extension and boundary walls and the conservatory. A garden of national importance created by one of the country's leading female horticulturalists, Ellen Wilmott, in late 19th early 20th Century.

Royal Society for the Protection of Birds

In addition to an earlier £143,000, we've contributed a further £240,000 to the Royal Society for the Protection of Birds to support wetland habitat improvements at Shorne Marshes. This work is now complete and has already proved a success, notably the return of breeding Lapwings and Redshank pairs have increased to 16 from zero.

Dagnam Park, London Borough of Havering

The London Borough of Havering was provided funding of £168,000 for the restoration of Dagnam Park Woodland. The project was completed in March 2025 and has delivered tree management and path management encouraging ground flora in the woodland areas as well as the restocking of the understory

(this is a layer of plants and bushes that grow under the canopy of a forest) with associated deer protection. Highlights include footpath improvements around the pond, revealing and renovating the cellar steps and producing a management plan for ongoing maintenance.

Conservation grazing and wildlife towers

Our investment of £350,000 to support local landowners through the introduction of conservation grazing and the installation of new towers to house wildlife at the Silverhand Estate in Luddesdown is now complete. The wildlife towers are being used by owls and bats. Building on the success of the events that part of our funding contributed towards, the team at this site are continuing to hold community events programme.

Cobham Woods

We gave West Kent Downs Countryside Trust £85,000 to improve Cobham Woods for visitors. The work here is complete and included thinning trees to let more light in, removing invasive species and supporting biodiversity.



Towers to house wildlife at the Silverhand Estate in Luddesdown

Shorne Woods Country Park, Gravesend, Kent

We provided £180,000 of funding to Kent County Council to help establish conservation grazing in a section of Shorne Woods Country Park. The funding was also used to update the visitor centre display cases with key findings from the park, new interpretation panels and a new booklet that covers the history and archaeology of the park.

The funding we provided also allowed for works to improve habitats at the site for protected species including dormice and bats.

North West Kent Countryside Partnership

The final phase of works to restore woodland at Telegraph Hill, Higham was completed in March 2025. We provided £28,000 to support the partnership in undertaking ecological surveys, scrub clearance, coppicing and path management to encourage the growth of ground flora in wooded areas.

Forestry England

To help Forestry England create new wildflower meadows at Jeskyns Community Woodland in Gravesham, Kent, we provided £113,000 of funding. The final phase of works were completed in spring 2025.

Essex Wildlife Trust

We provided £94,000 to support Essex Wildlife Trust in undertaking scrub clearance, replacement fencing and wetland habitat management at Chafford Gorges Discovery Park in Thurrock. This work was completed in spring 2025.



Improvements to the coastal pathway

Essex County Council

£350,000 has been provided to Essex County Council to introduce and extend conservation grazing within its country parks. The infrastructure and tree work was completed in March 2025.

National Trust

£110,000 was provided to the National Trust to relocate young, self-set oak trees to support the habitat of the Site of Special Scientific Interest (SSSI) for saproxylic invertebrates and to increase the diversity of the woodland cover at Cobham Woods. Work completed in spring 2025.

Improvements to the coastal path accessibility

We awarded £900,000 to improve 7km of the England coastal path from Tilbury Fort to Stanford-le-Hope. Phase one of this project focused on the Two Forts Way from Tilbury to Coalhouse Fort and was completed in 2022. Phase two of this project, Coalhouse Fort to Stanford Wharf, was completed in March 2025.

Vange and Fobbing marshes

We contributed £600,000 for the re-wilding of a farmed 20ha site in Fobbing that will connect to nearby Vange and Fobbing marshes SSSI in Essex. The final stage of work was completed in spring this year.

Improve habitats for water voles

We provided £220,000 to help improve habitats for water voles across Essex. Work was completed in spring 2025 and the project was successful in monitoring threats to the water voles and identifying locations where they are present. It formed part of a first-time regional scale project and provided invaluable data for Essex Wildlife Trust and the Wildlife Recovery Trust.

Thames Estuary Festival

We gave £225,000 to the Thames Estuary Festival to support the design and programming of the 2025 Arts Festival, the only large scale festival that spans across the Thames Estuary.

Kent County Council

£70,000 was awarded to Kent County Council to complete feasibility and modelling works for Gravesham Flood and Water Management Plan. The funding will support a new approach to developing a longer-term programme of works and the detailed design of flood risk management schemes in the area.

Preserving and improving access to heritage

Restoring Tithe Barn: We funded a grant of £650,000 for the London Borough of Havering to undertake restoration work for the Tithe Barn in Upminster (a Scheduled Monument). This work was completed in March 2025 and included re-thatching the roof, structural repairs, repairing its timbers and restoring its brickwork.



Water vole habitat created in Essex

It was announced in June 2025 that the Tithe Barn will be removed from the Heritage at Risk Register in the 2025 updates due to be published in the autumn.

Pop-up heritage exhibition: We awarded £98,000 to Gravesham Borough Council to host a pop-up heritage exhibition. Planning and development work is currently underway with work expected to be completed by spring 2025.

Heritage outreach programmes: Delivering a wider community archaeology and heritage programme for Kent and Essex, including workshops, training, community digs, guided walks, talks and heritage site visits. These concluded in spring 2025.

St Mary's Church Room: Through our donation of £150,000 to Cobham Parochial Parish Council, urgent restoration work on the Tin Tabernacle meeting room was carried out and was completed in early 2025.

Community projects providing biodiversity benefits

The following projects that we have supported through funding have also provided biodiversity benefits:

- Telegraph Hill
- Shorne Woods Acid grassland
- Jeskyns Woods Grassland
- Cobham Woods National Trust
- Vineyard Farms Conservation Grazing
- Fobbing Farms
- Gravesham biodiversity
- Essex Country Parks (Weland and Thorndon)
- Swanscombe Heritage Park
- Chafford Gorges
- Dagnam Park Woodland restoration
- Cobham Woods West Kent Downs Countryside Trust

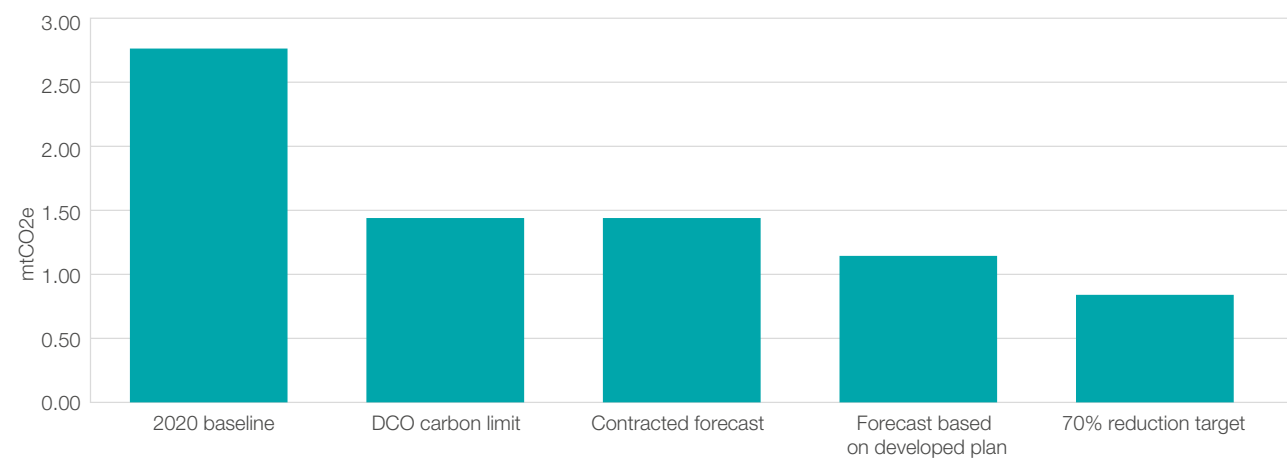


The 'Cockles of My Heart' Soundwalk event, held as part of the Thames Estuary Festival

Lower Thames Crossing's carbon emissions

Status	Construction carbon emissions (mtCO ₂ e)	Reduction from 2020 baseline
2020 baseline	2.76	
DCO carbon limit	1.44	48%
Contracted forecast	1.44	48%
Forecast based on developed plan	1.14	59%
70% reduction target	0.84	70%

Figure 1: Reduction in LTC's construction carbon emissions



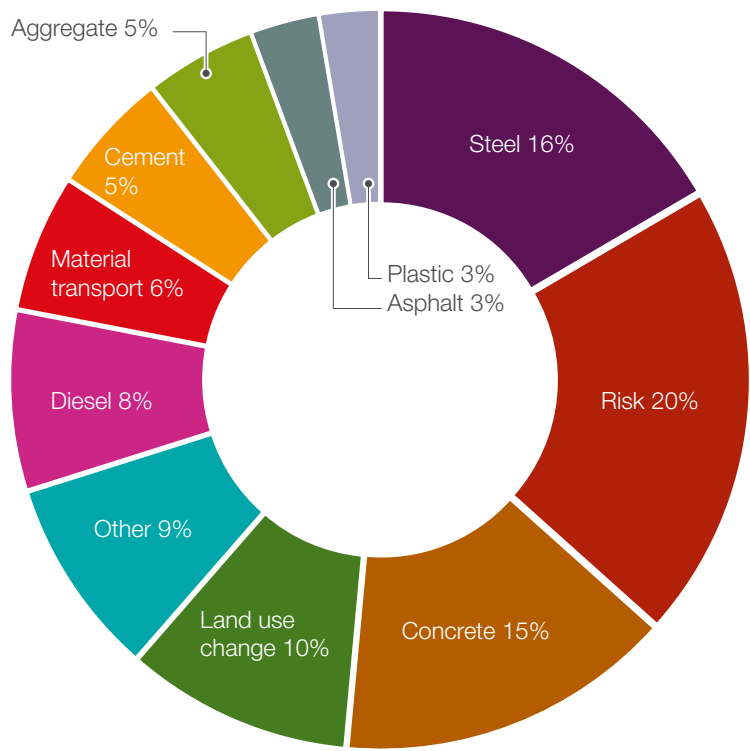
- 1. 2020 baseline:** Represents what emissions would have been if the project had been built using National Highways' standard databook assumptions for carbon intensity in 2020.

2. DCO carbon limit: Project-wide carbon limit of 1.44 mtCO₂e as presented in the first iteration of the Carbon and Energy Management Plan. This limit is achieved through carbon savings made both prior to and during procurement.
- 3. Contracted forecast:** Currently the same as the DCO carbon limit.

4. Forecast based on developed plan: Our forecast emissions based on the carbon reduction opportunities that our Delivery Partners have identified and quantified.

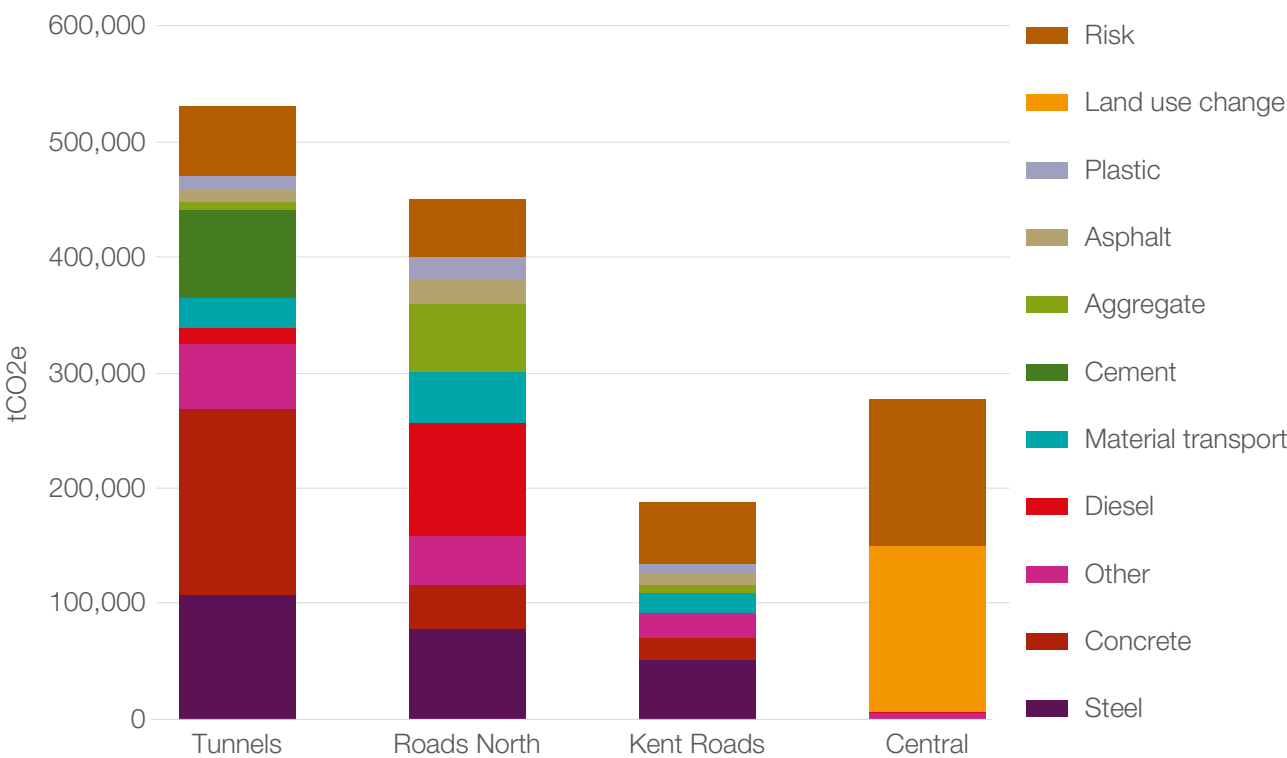
5. 70% reduction target: Our forecast emissions based on 70% reduction target and includes carbon reduction opportunities that are in development. As these opportunities are worked up, they will move into our developed plan.

Figure 2: Contracted forecast by materials



Steel, carbon in risk items and cement (including the cement in concrete) account for 56% of the 1.44 mtCO₂e construction emissions (**Figure 2**).

Figure 3: Contracted forecast by location and material



Performance against expected forecast

The contracted forecast remains the same as our DCO carbon limit. The only difference is that additional habitat creation work is now required at Coalhouse Point, so the emissions associated with this have moved from the ‘Central Risk’ emissions to the ‘Tunnels’; carbon limit emissions.

In the 2024/25 Sustainability Report, we set out a target to reduce forecast emissions to 1.21 mtCO₂e. This was based on savings from enacting our commitments under the Five Client Carbon Commitments:

- Not using fossil fuels to power equipment at our construction sites. Diesel consumption at our construction sites currently accounts for 8% of total construction carbon emissions.
- Using concrete that is C-rated or better. Two of our three Delivery Partners have already committed to using concrete that meets this standard.
- Using long steel that is B-rated or better and ‘other’ steel that is C-rated or better. Achieving this standard will result in carbon savings across all three contracts.

Since the 2024/25 Sustainability Report, we have been working on implementing these commitments. This has not progressed as fast as expected, so these reductions are now due to be contractualised with our Delivery Partners and incorporated into our contracted forecast by March 2026. The work so far has focused on developing the carbon monitoring and reporting

framework, and conducting trials for zero emissions equipment and concrete.

Forecast based on developed plan

The forecast based on our developed plan is 1.14 mtCO₂e and is based on the carbon reduction opportunities that our Delivery Partners have identified and quantified.

These reduction opportunities include low-carbon design and implementing the Five Client Carbon Commitments we have made for steel, concrete and diesel.

Independent review of our carbon data

The UK Collaboratorium for Research on Infrastructures and Cities (UKCRIC’s) research consultancy services company, UKCRIC Limited, was asked to examine the latest Lower Thames Crossing carbon calculators to provide an independent opinion on the following: whether the 2020 Baseline carbon calculator represents an appropriate baseline for the scheme’s emission; whether the carbon limit carbon calculator accurately states the carbon limits for Roads North, the Tunnel, Kent Roads and centrally managed items; and finally whether the Target position carbon calculator, which represents a 70% reduction in the 2020 Baseline calculator emissions is industry leading and achievable.

Review

The review was limited to construction stages A1-A5 of RIBA since other lifecycle stages have been reviewed in the past and nothing significant has changed since then. To assess fitness for purpose, the review team analysed the Lower Thames Crossing 2020 Baseline carbon calculator for consistency with the

National Highways 2020 calculator rules and with industry carbon factors from 2020. The case carbon calculator was compared with the results and recommendations from UKCRIC Limited’s January 2024 review. Data that is now in eTool was also analysed to identify potential anomalies and inconsistencies in carbon factors using density functions and comparison of similar materials. The Target 70% reduction calculator was examined for ambition, risks, mitigations and opportunities by reference to current knowledge of carbon avoidance and industry innovation.

Summary of review findings

In our opinion:

- The 2020 Baseline position is consistent with the National Highways 2020 baseline ruleset and so is suitable as a starting point for comparisons of carbon reductions.
- The carbon limit position of 1.44 mtCO₂e is fit for purpose, credible and deliverable, particularly as it incorporates supplier contractual commitments. Monitoring of effective execution of low-carbon construction commitments is needed. Uncertainties relating to low-carbon resources availability will need risk management, ideally using ISO31000 processes.
- The 70% reduction Target position provides a stretch target that is industry leading. The Target position is achievable provided a range of innovations at differing levels of maturity are adopted and significant risks and dependencies are carefully managed. Reductions could be higher for some materials and lifecycle stages and lower in others to achieve 70% overall.

DCO sustainability commitments

The Lower Thames Crossing has now been granted development consent, marking a significant milestone in its delivery. With this approval, National Highways’ sustainability commitments have moved from ambition to obligation, enshrined in legally binding requirements through the DCO.

Carbon commitments

The table below sets out the progress we have made against each of the 24 carbon commitments in our Carbon and Energy Management Plan.

ID	Commitment	Progress
CBN01	We will include carbon as a key criterion in the evaluation of tenders for the three design and build contracts.	Complete.
CBN02	We will require contractors to have corporate net zero plans setting out how they will reach a net zero position that aligns with the 1.5°C reduction of the Paris Agreement (United Nations, 2015) and the UK’s commitment to be net zero by 2050. The plans must include science-based targets for emissions reduction.	Complete.
CBN03	We will ensure that formal regular collaborative carbon reduction workshops are held with representatives of all contractors present.	In progress: We are holding formal collaborative carbon reduction workshops monthly with our Delivery Partners.
CBN04	We will develop and, where appropriate, implement measures to avoid/prevent, reduce and remediate emissions arising from the construction of the project to ensure that net construction emissions do not exceed 1.44 mtCO ₂ e.	In progress: We are working with our Delivery Partners to ensure our net construction emissions do not exceed 1.44 mtCO ₂ e.
CBN05	Delivery Partners will be required not to exceed a carbon limit which is aligned to the level set out in CBN04.	In progress: Our Delivery Partners are working to ensure their construction emissions do not exceed their carbon limit.

ID	Commitment	Progress
CBN06	We will require contractors to provide Environmental Product Declarations for the ten construction products contributing the most to carbon emissions in their contract. The Environmental Product Declarations must show that the emission factor for the product being used is better than European average.	In progress: Our Delivery Partners are identifying the ten construction products contributing the most to carbon emissions in their contract and working on sourcing Environmental Product Declarations for them, with the emission factors better than European average.
CBN07	We will require contractors to procure renewable electricity throughout construction, to meet any demand that is not met through onsite renewables and will provide Renewable Energy Guarantee of Origin (REGO) certificates covering the total amount of electricity consumed.	In progress: Our Delivery Partners are assessing the electricity demand that will not be met through onsite renewables and will then procure REGO-backed renewable electricity to cover it.
CBN08	We will require contractors to provide and maintain electric vehicle charging facilities, using zero carbon electricity, for 30% of parking capacity in each compound, increasing this as necessary to satisfy demand.	In progress: Thirty-two electric charging points are provided at our Pilgrims Lane office and our Delivery Partners will provide charging points at other compounds as they are built.
CBN09	We will require contractors to use zero tailpipe emission vehicles for all people travelling within working areas and to and from public transport hubs.	In progress: An electric minibus is already in use at our Pilgrims Lane office and Delivery Partners will use zero emissions vehicles at other compounds as they are built.
CBN10	We will require contractors to promote the use of active transport for personnel to and from the compounds and to provide managed electric charging facilities for e-bikes at each compound, in covered cycle parking areas, to satisfy demand.	In progress: Our Delivery Partners will promote the use of active transport and provide managed electric charging facilities for e-bikes at compounds as they are built.
CBN11	We will provide commercial incentives for contractors to reduce emissions below their carbon limit.	In progress: We have established an incentivisation scheme to pay Delivery Partners for every tCO ₂ e they reduce below their carbon limit.

ID	Commitment	Progress
CBN12	We will include a contractual mechanism that allows contractors to be paid the additional costs of implementing agreed carbon reduction technologies, together with an incentive payment to further encourage their identification and adoption.	In progress: We have established a process to pay Delivery Partners the additional cost of implementing agreed technologies alongside an incentive payment.
CBN13	We will obtain PAS 2080 certification for the project from an independent, third-party certification body by the end of 2023 and will maintain the certification annually.	Complete: We have obtained PAS 2080 certification from an independent, third-party certification body and are maintaining it annually.
CBN14	We will require contractors to obtain PAS 2080 certification from an independent, third-party certification body within 52 weeks of the contract starting date and will maintain the certification annually.	Complete: Our Delivery Partners have obtained PAS 2080 certification from an independent, third-party certification body and are maintaining it annually.
CBN15	We will require subcontractors to obtain PAS 2080 certification within 52 weeks of appointment, unless otherwise agreed.	In progress: Our Delivery Partners are working with their subcontractors on PAS 2080 certification.
CBN16	We will publish an annual carbon report that will include information on forecast lifecycle carbon emissions and reductions, and progress against carbon commitments, as well as key actions and targets for the following year.	Complete: This Sustainability Report acts as our annual carbon report.
CBN17	Carbon data published by the project in the annual carbon performance report will be independently reviewed prior to publication.	Complete: Our carbon data has been reviewed by UKCRIC (see Appendix C for more details).
CBN18	We will deliver carbon literacy training and achieve silver certification from the Carbon Literacy Project by the end of 2023.	Complete: We achieved gold level Carbon Literate organisation status.
CBN19	We will require contractors to develop the carbon literacy of their workforce working on the project to Carbon Literacy Project level silver within 52 weeks of the contract starting date.	Complete: All three Delivery Partners have achieved silver level Carbon Literate status.

ID	Commitment	Progress
CBN20	We will require subcontractors to develop the carbon literacy of their workforce on the project to Carbon Literacy Project level silver within 52 weeks of their engagement.	In progress: Our Delivery Partners are working on Carbon Literacy training.
CBN21	We will require contractors to appoint a director responsible for carbon.	Complete: Our Delivery Partners have appointed a director responsible for carbon.
CBN22	We will publish a third iteration of this Carbon and Energy Management Plan explaining how carbon emissions will be managed and minimised during the operation and maintenance of the project, to support the applicant's carbon policies, plans and strategies. This would include measures such as the use of low-energy lights.	Not started: We will publish the third iteration of the Carbon and Energy Management Plan by the end of the construction, commissioning and handover stage of this project.
CBN23	We will seek to meet a target of 0.84 mtCO ₂ e for construction carbon emissions using reasonable endeavours.	In progress: We are working with our Delivery Partners to reduce construction carbon emissions to 0.84 mtCO ₂ e and the initiatives described elsewhere in this report (low-carbon concrete, low-carbon steel and zero-emissions equipment) will help to achieve this.
CBN24	We will implement an approach to carbon neutral construction, aligned to ISO 14068 by offsetting residual construction carbon emissions. The applicant will prioritise investment in carbon reduction solutions ahead of offsetting. This commitment can be amended by the Secretary of State on application in writing by the applicant, where it is demonstrated to the Secretary of State's satisfaction that residual construction carbon emissions cannot be responsibly offset for less than a mean average cost of £45/tCO ₂ e (index linked to 2020 prices).	In progress: We are focusing on carbon reduction solutions (to meet CBN23) before considering offsetting.

Biodiversity and wider environmental sustainability

We have developed the project to avoid or minimise significant effects on the environment. The measures adopted include:

- Landscaping and naturalised embankments blending into the landscape.
- Seven green bridges (including Europe’s widest) facilitating safe wildlife and public connectivity.
- Reducing the impact on ancient woodland by over 70%, with ongoing refinement of the route and planning process.
- Floodplain compensation and new watercourses/ponds supporting wetland species.
- Creation of over 40 miles of shared-use paths for walkers, cyclists, and horse riders, three miles for every mile of road.
- Planting more than one million new trees, targeting species-rich hedgerows and wildlife corridors.
- Hole Farm Community Woodland (100 ha) and two new Thames view public parks at Chalk Park and Tilbury Fields.

Commitments about biodiversity and other environmental sustainability considerations have been embedded throughout the project. Our Code of Construction Practice (CoCP) and Register of Environmental Actions and Commitments (REAC) sit within a suite of documents known as the control plan, which

is the framework for mitigating, monitoring and controlling effects of the project. It is made up of a series of ‘control documents’, which present the mitigation measures identified in the application that must be implemented during design, construction and operation to reduce the adverse effects of the project.

The CoCP and REAC are an Appendix of the Environmental Statement (ES), which is a control document. The REAC presents the good practice and essential mitigation commitments identified for each environmental topic in the in the ES. The ES itself reports the findings of our Environmental Impact Assessment (EIA), which determines the likely significant environmental effects of the construction and operation of the project. The environmental topics reported are:

- Air quality
- Cultural heritage
- Landscape
- Terrestrial biodiversity
- Marine biodiversity
- Geology and soils
- Material assets and waste
- Noise and vibration
- Population and human health
- Road drainage and the water environment
- Climate

Additional topic management plans for environmental subjects that require further measures and controls to be implemented are now being developed by our Delivery Partners in line with the DCO. These include air quality, ecology, noise and vibration, soils, contaminated land, substances hazardous to health and pollution prevention controls.

The project’s environmental commitments follow three main themes:

- 1. Embedded mitigation:** measures that form part of the engineering design, developed through the iterative design process.
- 2. Good practice:** standard approaches and actions commonly used on infrastructure development projects to avoid or reduce environmental impacts, typically applicable across the whole project.
- 3. Essential mitigation:** any additional project-specific measures needed to avoid or reduce potential impacts that could otherwise result in effects considered significant in the context of the EIA Regulations. Essential mitigation has been identified by environmental topic specialists and through consultation with stakeholders, taking into account the embedded and good practice mitigation.

Community fund

We have committed to provide £1.89 million of funding over seven years, with seven annual contributions of £90,000 south of the Thames and £180,000 north of the Thames. The first funding contribution will be made when construction commences (anticipated late 2025). This is intended to help mitigate intangible and residual impacts of the project by enhancing the quality of life of communities. The amounts will be index linked to maintain value. The allocation of spend by borough on each side is as follows:

- South of the Thames: Gravesham 75%, Medway 25%
- North of the Thames: Thurrock 75%, Havering 15%, Brentwood 10%

Engaging with our stakeholders

As we progress towards construction, the close partnerships we have developed during the Lower Thames Crossing's planning phase will continue to be vital to the project's success. These relationships will help us build the crossing in the least disruptive way and leave as positive a legacy as possible for the local community.

Designing a low-carbon future with our stakeholders

We are working closer than ever with local authorities and environmental bodies on the development of the Lower Thames Crossing's detailed designs. This engagement has helped shape the project's evolution, including the design of structures with a smaller carbon footprint, which are better for nature and are less disruptive to the local community compared to traditional road design.

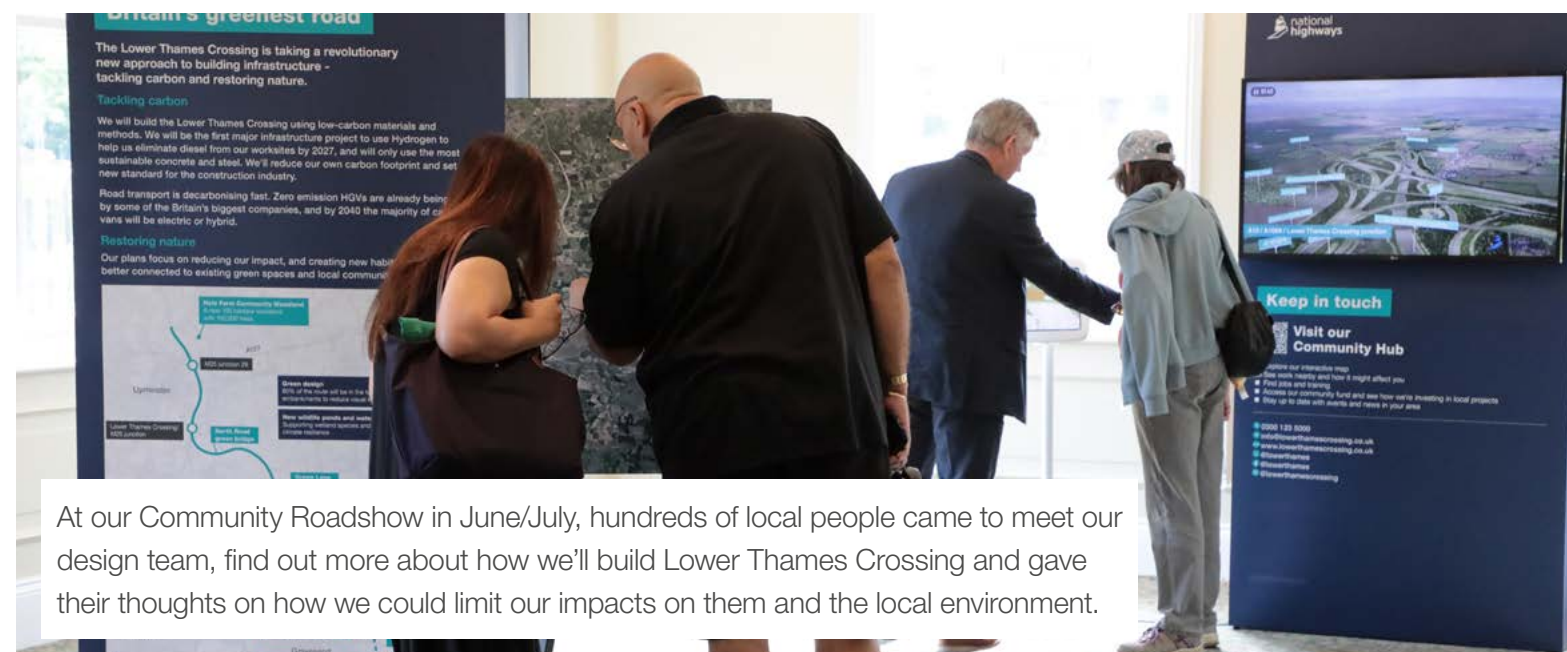
Local community

We're building the Lower Thames Crossing with the community front and centre through our three stage approach:

- **Design:** we're evolving our design to limit impacts – like using modular construction that will limit local impacts and allow us to lower the project's carbon impact.
- **Mitigate:** where there are impacts we'll work with the community on how to mitigate them – like noise screening or tree planting near our compounds/infrastructure.
- **Inform and listen:** We are clear about the impacts our construction will likely have, and provide opportunities for our communities to share their ideas on how we can build Lower Thames Crossing better.



Local stakeholders including the local authority, helped our Low Carbon Footbridge Contest. The Deputy leader of Havering Council was invited to announce the winner of the contest.



At our Community Roadshow in June/July, hundreds of local people came to meet our design team, find out more about how we'll build Lower Thames Crossing and gave their thoughts on how we could limit our impacts on them and the local environment.

Spotlight on...

Lead regulator

In August 2025, the Government announced it would modernise the UK's planning and development regulations and that the Lower Thames Crossing would be the first major infrastructure project to have a single Lead Environmental Regulator. We are working closely with Natural England in this capacity, and will provide an important case study to the Defra on how this new approach will deliver environmental and efficiency benefits.

In the future

We are currently establishing Community Liaison Groups (CLGs) in areas likely to be most affected by construction activities. These groups will comprise relevant stakeholder representatives and serve as a forum for engaging with local communities and businesses, ensuring they remain informed and involved as our plans evolve. We will continue to work with these representatives to share updates on upcoming construction activities, highlight opportunities such as employment and training, and identify further potential for delivering community social value.

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