DECARBONISING STREET LIGHTING PROGRAMME NEWSLETTER

Winter 2025

Foreword – from Karl Rouke, Project Manager

As we reach the closing 6 months of our three-year journey, the scale of what we've achieved together is only just starting to sink in. When we began, the ambition seemed almost impossible – to challenge decades of convention, to test whether roads could remain safe and functional with much less light, and to prove that the right design can deliver real decarbonisation and financial savings.

Today, that ambition has become reality. We've built an evidence base the sector can trust, backed by hard data, academic oversight and real-world trials. We've shown that "Right Light, Right Place, Right Time" isn't just a slogan – it's a practical, deliverable model for the UK's highways.

To everyone involved – from our partner authorities, suppliers and research teams to the communities who welcomed the test sites – thank you. Together we've created something truly sector-changing.

In this Newsletter

From Pilot to Practice – The Final Reporting Phase

The project reporting phase is now well underway - drawing together three years of design, testing, monitoring and analysis, the outputs providing a comprehensive evidence base to support guidance, standards and local authority delivery.

Each project workstream is producing a formal report that forms part of the final evidence base. These include:

- **Technical Case** – performance, design standards, and safety validation.
- **Carbon and Cost Case** – lifecycle forecasting from the Strategic Decision Tool.
- **Biodiversity and Nature Case** – ecological impacts of reduced lighting.
- **Community and Equality Case** – how lighting affects people, perception and use.
- **Legal and Risk Case** – assurance, defensibility of change and liability.
- **Academic Evaluation** – independent challenge and verification.
- **Financial and Policy Case** – benefits, costs and long-term adoption.

These reports will be supported by an overarching summary. Together, they form the foundation for how councils can adopt new low-carbon streetlighting principles with confidence.

All providing the sector with a practical framework to adopt *Right Light Right Place Right Time* as mainstream practice.

Key Findings and Sector Impacts

Across all our test sites the evidence is clear:

- **Safety** has been maintained, with no increase in collision risk or driver conflict.
- **Carbon emissions** from lighting systems can be cut by **over 40 percent**.
- **Lifecycle costs** show matching savings of around **40 percent**.
- **Wildlife and biodiversity** benefit measurably from reduced artificial light.
- **Public support** is strong, with residents valuing the darker skies and calmer night environment.

We've also uncovered where the hidden carbon sits. Around **35 percent** of a scheme's lifetime emissions come from materials and maintenance. As the grid decarbonises, those embodied impacts become **100 percent of the footprint**. Every new light carries a carbon cost – so lighting only what's truly needed is the most sustainable choice.

Partner Test Sites – National Delivery Update

With the East Riding of Yorkshire test sites well established we are rolling out across our national partners; increasing the application, the new typologies and evidence.

Authority	Location	Focus and Learning
East Riding of Yorkshire	A164 & A1079	Core test corridors, biodiversity and carbon baseline – strong early results, cost and carbon savings, positive community response.
Aberdeenshire	A952 North Street (Mintlaw)	Rural 30–40 mph; safe de-illumination in northern conditions.
Derbyshire	A610 Ripley Road (Sawmills)	First UK pedestrian-only low-level lighting trial in a 30 mph village.
Hull City Council	Wawne Road Roundabout	Flexible bollards and reflective lines replacing columns.
Lancashire	A584 Freckleton	Rural dual carriageway, solar studs and RA3 signage – AI monitoring underway.
Oxfordshire	Tackley Turn & Stanton Harcourt	Junction and roundabout layouts with high-reflectivity markings – now live.

The **Transoft TrafXSAFE** AI system continues 24/7 monitoring across all sites. Data confirms no rise in risk and in several locations, smoother and more consistent driver behaviour.

Nature, Light and the Night Sky

Our biodiversity monitoring has provided a first for the highways sector. Using acoustic sensors, moth traps, camera traps and citizen science, we've measured the ecological response to lighting change.

Results show higher bat and moth activity, healthier bird behaviour and overwhelmingly positive community feedback. Residents describe "the night sky returning." The forthcoming *Biodiversity and Nature Case* report will offer a practical template for any authority wanting to include nature recovery in its street lighting policy.

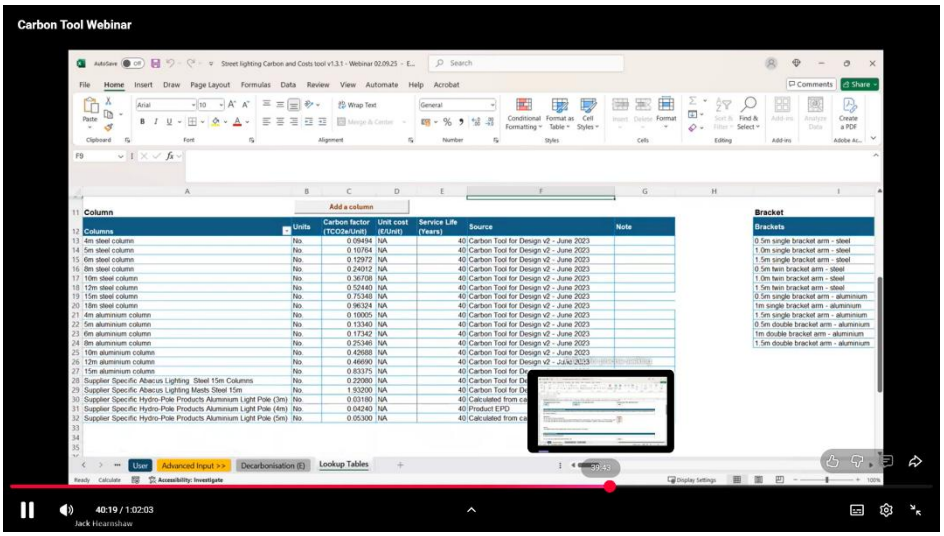
Carbon, Cost and the Strategic Decision Tool

Developed with the NHT Network and Leeds University, the Strategic Carbon and Cost Decision Tool is now fully operational. It allows authorities to test different interventions, forecast carbon savings and model financial impacts across asset lifecycles.

Early application shows:

- Up to 40 percent reduction in both lifetime carbon and costs.
- Clear identification of optimum replacement timings.
- Quantifiable payback periods for new materials and lighting types.

A demonstration webinar was held for project partners who are using it to assess their carbon and cost savings. The Tool will be part of the project legacy package to support any council who wishes to put the right light in the right place at the right time for a low-cost low carbon streetlighting future.



Awards and Recognition

It's been another outstanding year for the Decarbonising Street Lighting Project – and the recognition we've received nationally has really underlined the scale and significance of what we've achieved together.

At the 2025 Highways Awards we proudly took home two national trophies:

- **The Environmental Sustainability Award** – recognising the leadership shown by East Riding of Yorkshire Council and partners through the Decarbonising Street Lighting Live Labs 2 Project. The judges praised our "evidence-based, scalable model that shows how safety, cost and carbon reduction can go hand in hand."
- **The Climate Resilience Award** – awarded for the council's integrated approach to whole-network climate readiness, with our Live Labs 2 work highlighted as a key pillar of that strategy. The citation acknowledged how the lighting trials are helping create a more adaptable, lower-carbon network and demonstrating that local authorities can build resilience and reduce emissions at the same time.

These awards sit alongside the **Highly Commended** Awards we received in both the **Partnership of the Year** and **Team of the Year** categories, recognising the strength of collaboration across councils, academia and industry.

Across LinkedIn and sector channels, the response was fantastic:

- Karl Rouke shared his pride in the "whole team effort that's proving the impossible can be done."
- Jon Munslow's post thanking everyone for "taking collaboration to the next level" reached well over a thousand views, showing how widely our message is resonating.
- Partners such as Clearview Intelligence and Transoft Solutions added their congratulations, highlighting the project's role in accelerating innovation with the supply chain.
- John Lamb reflected on how the award demonstrates the value of the data and evidence we've built – proof that practical decarbonisation and financial savings can go together.

We were also honoured to receive the **Net Zero Project Award** at the **LCRIG / DfT Special Recognition Awards**. This award recognised the project's outstanding innovation in accelerating decarbonisation within the highways sector and for providing clear, measurable evidence of carbon reduction. The judges highlighted how our work demonstrates that sustainable design can deliver real, proven environmental outcomes while maintaining safety and value for money. It's a major endorsement of the data-driven, collaborative approach we've taken and positions our project as a model for how local authorities can lead the transition to net zero infrastructure.

The recognition from these national awards means a great deal. It tells us that the work we're all doing here is not just important for East Riding or the Live Labs programme – it's helping to shape how the whole sector thinks about lighting, safety and sustainability.

And we're not stopping there. The team are already preparing submissions for the 2026 awards season, so we can keep the spotlight on what this partnership is delivering and make sure the lessons we've learned reach as wide an audience as possible.

..... STOP PRESS! .....

*Project Partner URBIS wins the **Highways Electrical Association Project of the Year** for the innovative pedestrian lighting installations as part of Decarbonising Streetlighting*.

.....

The Road Ahead – Legacy and Dissemination

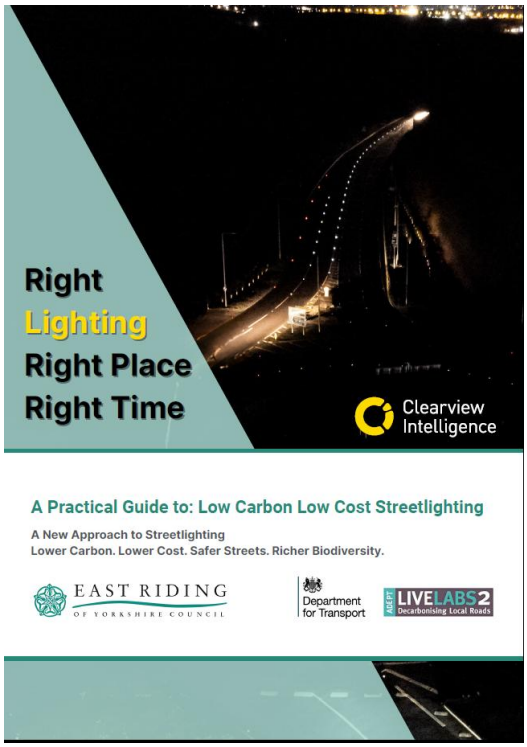
As we head toward March 2026 the focus turns to legacy:

- Publication of all final reports and guidance.
- Defining a new standard for Streetlighting.
- Dissemination events and sector engagement.
- A roll-out framework supporting fast-follower authorities.

Our goal is simple – to leave the sector not just with a report, but with the tools, data and confidence to change how lighting is designed and managed across the UK.

Together we are proving that roads can be safe, affordable and low carbon without costing the earth. And that the Right Light, in the Right Place, at the Right Time really does make all the difference.

Right Light Right Place Right Time – Share the Guide



We've now produced a concise **Right Lighting – Right Place – Right Time** leaflet for decision-makers. It's a practical guide that distils the full project into one clear message: **lower carbon, lower cost, safer streets, richer biodiversity.**

The leaflet explains:

- Why so many of the UK's 7.2 million streetlights no longer serve their original purpose.
- How authorities can phase in change safely as assets reach end of life.
- The design principles that keep roads safe while protecting dark skies and wildlife.
- The financial and environmental savings already proven through our Live Labs 2 work.

This document is written specifically for **Heads of Service, Street-Lighting Managers, Climate Teams and Finance Leads** – the people who can turn our evidence into action.

👉 **Please send this leaflet to your Street-Lighting Managers, Heads of Service, and Climate Team Managers.**
It gives them the headlines they need to start making informed, evidence-based decisions right now.

By sharing it, you help ensure the learning from this project drives real change across every local authority network.

You can also access the leaflet via the East Riding Live Labs 2 webpage or request printed copies by emailing **livelabs2er@eastriding.gov.uk**.

Hayton Village – Low Level pedestrian Lighting, Solar Studs and High Reflectivity Lines replacing Street lights

From the Decarbonising Street Lighting Comms Team
📧 livelabs2er@eastriding.gov.uk
🌐 https://www.eastriding.gov.uk/environment/roads-pavements-and-traffic/live-labs-2/

Leading the Way in Lighting the Way across the UK