

DECARBONISING THE UNDERGROUND

How "No-Dig" Rehabilitation Solves the Scope 3 Emissions Crisis for Tier 1 Contractors

SUSTAINABILITY & NET ZERO REPORT

JANUARY 2026

EXECUTIVE SUMMARY

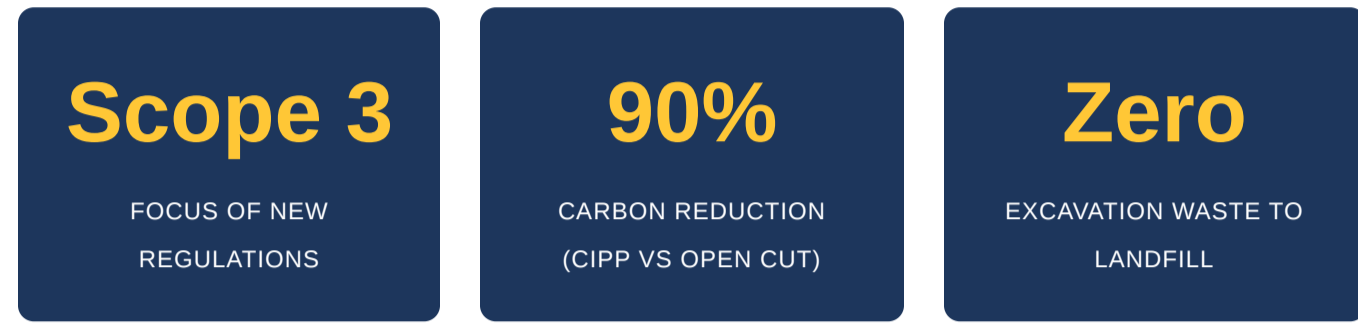
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The Hidden Carbon Below Our Feet

As the UK construction industry races towards Net Zero 2050, the focus has predominantly been on above-ground assets: low-carbon concrete, timber frames, and energy-efficient glazing. However, a significant percentage of a project's carbon footprint lies buried in the enabling works: the subsurface infrastructure.

For Tier 1 contractors, the reporting landscape has shifted. Under the **GHG Protocol Corporate Standard**, reporting Scope 1 (Direct) and Scope 2 (Energy) emissions is no longer enough. The battleground is now **Scope 3**: the indirect emissions from the supply chain.

This whitepaper presents a data-driven comparison between traditional Open Cut excavation and Trenchless (CIPP) technology. It demonstrates that by switching default procurement from "Dig" to "No-Dig," contractors can reduce the embodied carbon of drainage works by up to **90%**.



Key Takeaway: Civil Connect is not just a drainage contractor; we are a strategic partner in decarbonising your supply chain. Utilizing our trenchless solutions directly improves your project's carbon accounting data.

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THE REGULATORY CONTEXT

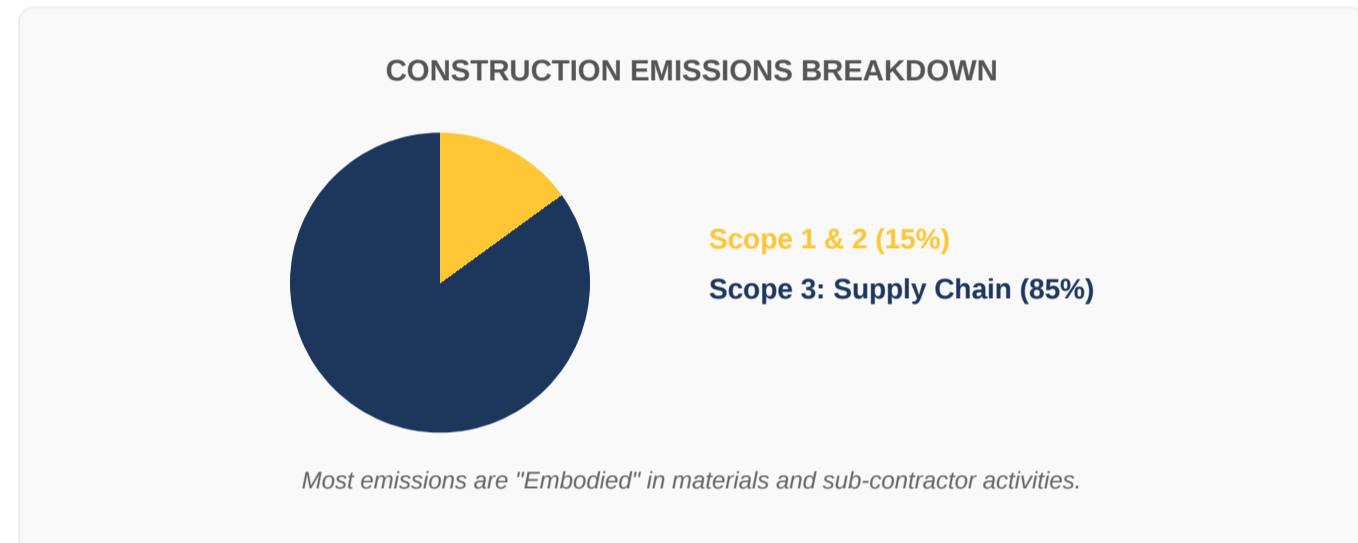
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01. The Scope 3 Challenge

Scope 3 emissions often account for more than 80% of a construction company's total carbon footprint. These are the emissions generated by the goods and services you purchase—including the concrete used in manholes, the diesel burned by excavators, and the transport of waste.

Why Reporting Matters

Under **PPN 06/21** (Procurement Policy Note), any company bidding for government contracts valued at £5m+ must produce a Carbon Reduction Plan. Failing to demonstrate a credible strategy for reducing supply chain emissions is now a disqualifying factor in major tenders.



The Civil Connect Solution: By utilizing UV Cured-in-Place Pipe (CIPP) lining, we eliminate the heavy materials and plant associated with traditional drainage repair, instantly slashing your Scope 3 reporting figures for that work package.

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THE COMPARISON

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02. The "Grey" Cost of Excavation

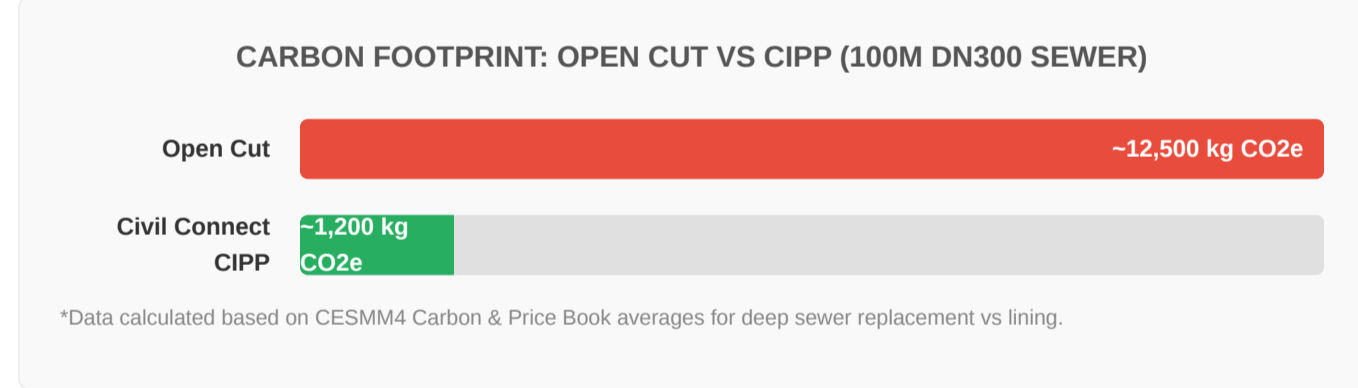
Traditional "Open Cut" repair is carbon-intensive at every stage. To replace a 100m section of deep sewer requires a massive logistical effort.

The Carbon Sources of Open Cut:

- Excavation:** Heavy 20-tonne excavators running on red diesel for days/weeks.
- Transport (Muck Away):** Hundreds of tonnes of spoil must be trucked to landfill. HGV movements are a prime source of CO₂ and NO_x.
- Imported Fill:** Virgin aggregate (Type 1) must be quarried, processed, and transported to site to backfill the trenches.
- Reinstatement:** Asphalt and concrete manufacturing are high-energy processes.

03. The UV CIPP Alternative

In contrast, Civil Connect's UV CIPP lining requires **zero excavation**. The liner is pulled into the existing pipe via manholes and cured using an electric UV light train.



Result: A 90% reduction in carbon emissions. Furthermore, the curing process is electric, meaning if the rig is powered by HVO (Hydrotreated Vegetable Oil) generators or site electrics, the footprint drops even further.

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WINNING TENDERS

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04. The Strategic Advantage

Using Civil Connect is not just good for the planet; it is a competitive advantage in the tendering process.

The "Social Value" Multiplier

Beyond carbon, "No-Dig" technology scores highly on broader Social Value metrics:

- Reduced Community Disruption:** No road closures, no temporary traffic lights, and no noise pollution from breakers.
- Air Quality:** Eliminating HGV movements improves local air quality (NO_x/PM10), a key KPI for inner-city councils.
- Safety:** Eliminating deep trenches removes the risk of trench collapse, improving the project's safety statistics.

05. Conclusion

The subsurface infrastructure sector has historically been slow to innovate. However, the legislative pressure of Net Zero 2050 allows for no more delays.

Civil Connect offers a proven, certified pathway to decarbonising drainage works. We enable Tier 1 contractors to turn a traditional carbon hotspot into a sustainability success story.

The Civil Connect Promise:

We provide detailed carbon reporting for every project upon request, giving your sustainability team the verified data they need for your annual ESG reports.

References:

- [1] UK Green Building Council (2024). Net Zero Carbon Construction Roadmap.
- [2] Calveit Office (2023). PPN 06/21: Taking Account of Carbon Reduction Plans.
- [3] UKSTT (2023). Carbon Calculator for Trenchless Technologies.

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CIVIL CONNECT

Ready to Decarbonise?

Partner with an Agile Tier 1 for sustainable, no-dig infrastructure solutions.

Get Your Carbon Savings Estimate

Send us your project scope, and we will calculate the Scope 3 savings of switching to Civil Connect.

Contact Our Team