



BUSINESS CASE

A Sector-Wide Blue Fuel Marker Scheme for Construction-Site Diesel

Reducing diesel theft and improving on-road / off-road fuel
traceability across UK construction, independent of fuel-duty status

Prepared for submission to: The Construction Leadership Council (CLC)
and associated UK construction sector representative bodies

September 2026

C/o Hire Association Europe
2450 Regents Court, The Crescent
Birmingham Business Park, Solihull B37 7YE

www.cits.uk.com

1. Executive Summary

UK construction sites lose an estimated £800 million a year to theft, with diesel fuel among the most frequently targeted items. The Chartered Institute of Building reports that 51% of construction companies have experienced fuel theft, and losses across the sector are estimated at around £1 million per week. This is not a marginal problem: it is a direct and growing drain on project margins, plant availability, insurance premiums and programme delivery.

A significant driver of this trend is traceable to the removal of red diesel entitlement for construction from 1 April 2022. Since that change, construction sites have stored and used white (full-duty) diesel — visually identical to the diesel used in cars, vans and HGVs. This has removed the one practical feature that previously made site diesel unattractive to opportunist and organised thieves: the fact that it was dyed red, restricted in use, and instantly recognisable as stolen if found in a road vehicle. White diesel is now fully fungible with road fuel, easy to resell, and effectively untraceable once it leaves site.

This paper proposes that the UK construction sector adopt a voluntary, sector-wide unified colour marker scheme for on-site diesel — a visible dye that could be combined with a forensic (covert) marker, added to fuel used exclusively in off-road plant and static site tanks. Critically, this is not a tax or duty scheme: it carries no rebate, no HMRC revenue implication, and no link to the Hydrocarbon Oil (Marking) Regulations 2002 that govern red diesel. Its sole purpose is deterrence, identification and evidential support — restoring the visual and forensic distinction that the sector lost when red diesel was withdrawn, without reintroducing any of the tax questions that made red diesel controversial to begin with.

The Construction Leadership Council (CLC), working with bodies such as Build UK, CECA, CIOB, the Federation of Petroleum Suppliers, plant hire associations and insurers, is best placed to convene the cross-industry standard needed to make such a scheme effective. A fragmented, company-by-company approach to fuel marking has limited deterrent value; a recognised sector-wide colour and standard, endorsed and promoted by the CLC, would not.

The ask

That the CLC establishes a working group — drawing on fuel suppliers, plant hirers, insurers, and police liaison — to define, trial and endorse a single, sector-wide blue diesel marking standard for construction plant and site fuel storage, decoupled entirely from any tax or duty status.

2. Background and Context

2.1 The red diesel model, and what changed

Red diesel is chemically identical to standard diesel but for the addition of a red dye (Solvent Red 24 and related markers) plus a covert chemical marker prescribed under the Hydrocarbon Oil (Marking) Regulations 2002. Its purpose was originally to allow HMRC to enforce a duty rebate: red diesel is taxed at a much lower rate and its use is restricted to certain "excepted" off-road vehicles and permitted sectors, principally agriculture, horticulture, forestry and fish farming.

From Budget 2020, the Government announced its intention to remove the red diesel entitlement from most other sectors — including construction, mining and quarrying, ports, manufacturing, road maintenance and

plant hire — with effect from 1 April 2022, in order to support climate and air quality goals. From that date, construction has had to run its plant and equipment on full-duty "white" diesel.

This was a fuel-duty decision, not a marking decision. But it had an unintended side effect that has become increasingly costly: the loss of visual distinctiveness. Under the red diesel regime, any red-coloured fuel found in a road vehicle, or being carried in an unmarked container away from a site, was immediately suspect. Since 2022, diesel on a construction site looks exactly like diesel in any car, van or lorry on the public road. It can be siphoned, decanted, and used or resold without any visible indicator that it was ever stolen from a site.

2.2 A sector already warning of the consequences

Industry bodies flagged this risk before the change even took effect. During the 2021 consultation period, the International Powered Access Federation (IPAF) specifically warned that removing the red diesel marker without a replacement would risk "incentivising criminal activity, creating a possible black market in white diesel." That warning has proved accurate: fuel theft has risen sharply since 2022, compounded by fuel price volatility, and is now recognised as one of the fastest-growing categories of construction site crime.

2.3 Why this is a live issue for the CLC and its partner bodies

The CLC's remit spans productivity, cost control, safety and the sector's transition to Net Zero. Fuel theft touches all three: it is a direct cost to contractors and clients, it creates safety and environmental risks when tanks are forcibly breached (fuel spillage, Environment Agency enforcement, fire risk from tampering), and it undermines confidence in on-site fuel security precisely as the sector is investing in transitional fuels such as HVO and managing tighter margins across infrastructure and housing programmes.

3. The Problem: Scale and Cost of Diesel Theft

The following figures, drawn from industry sources, illustrate the scale of the issue:

Metric	Figure	Source
Construction site theft (all categories), annual UK cost	c. £800 million – £1.1 billion	Allianz Cornhill / ABAX 2025
Construction firms reporting fuel theft incidents	51%	Chartered Institute of Building (CIOB)
Estimated weekly cost of fuel theft to construction	c. £1 million per week	Industry estimates, 2025
Plant/equipment theft incidents, annual UK total	11,000+	Industry security data, 2025
Recovery rate for stolen plant and equipment	Below 15% (materials/fuel: effectively 0%)	ABAX, October 2025
Average diesel price increase, Jan–Apr 2026	£1.41 → £1.91 per litre	Industry reporting, 2026

Beyond the direct cost of the fuel itself, incidents typically bring secondary costs that are harder to quantify but often larger: plant downtime while tanks are drained, repaired or replaced; project delay; increased insurance premiums or excess contributions; and environmental liability where tampering causes spillage or contamination requiring Environment Agency-notifiable clean-up.

Why diesel specifically has become a preferred target since 2022:

- It is now full-duty white diesel — identical in appearance and composition to road fuel, so it can be used directly in any vehicle or resold at close to full retail value.
- Static site tanks and bowsers are frequently left with reduced supervision overnight and at weekends.
- Organised groups increasingly use tankers and purpose-built extraction equipment capable of draining large volumes in a single visit.
- There is no way for police, hauliers, fuel retailers or the public to visually distinguish stolen construction diesel from legitimately purchased road diesel.

4. Proposed Solution: A Sector-Wide Blue Marker Scheme

4.1 Concept

We propose that UK construction sites voluntarily adopt a common agreed coloured dye for diesel used in off-road plant, generators and static site storage — restoring a clear visual and potentially forensic distinction between construction fuel and road fuel, without altering its tax or duty status in any way.

The scheme would have three layers, mirroring good practice already used elsewhere in fuel security:

1. Visible dye — a distinct colourant added at the point of delivery or bulk storage, making any fuel found outside an off-road context immediately conspicuous to police, DVSA/trading standards, fuel retailers and hauliers performing routine checks.
2. Covert forensic marker (taggant) — a low-concentration chemical or DNA-based marker, invisible without testing, that allows a specific delivery, depot, site or supplier batch to be positively identified. This supports prosecution and insurance claims even where the dye itself has been diluted, filtered or bleached by thieves attempting to disguise stolen fuel.
3. A recognised sector mark or licence — analogous to schemes such as SmartWater or DNA-marking used in plant and tool security, giving participating sites a visible sign (decals, signage, delivery documentation) that fuel on that site is marked and traceable, acting as a deterrent in its own right.

4.2 Suggested Colour Distinction

The choice of colour matters and needs early, explicit engagement with HMRC. Red is reserved: it is the statutory marker colour for rebated fuel under the Hydrocarbon Oil (Marking) Regulations 2002, and any visibly red-tinted fuel is liable to be tested by HMRC officers to establish whether it contains the prescribed rebate markers, even where no rebate is being claimed. Build UK and FASET have both flagged this point directly to members already switching to white diesel: adding colour of any kind invites scrutiny unless the colour and composition are unambiguously distinct from the statutory red diesel markers.

Blue is proposed because:

- It is visually distinct from the statutory red/agricultural marker, avoiding confusion with rebated fuel and the compliance burden that would create for contractors.
- It has no current statutory or rebate association in UK fuel-marking regulation, so a scheme can be designed from a clean slate in direct consultation with HMRC, rather than repurposing a regulated colour.
- Blue has a strong pre-existing association with construction and safety (hard hats, hi-vis coordination, signage), giving the scheme an intuitive identity within the sector and for the public and police who will need to recognise it.

This point is important enough to restate as the paper's central boundary condition: this proposal is entirely independent of duty status. It does not ask HMRC for a rebate, and it must be designed so that it cannot be mistaken for, or misused as, a rebate marker. Early engagement with HMRC's Red Diesel Entitlement Policy Team is recommended precisely to confirm this distinction in writing before any pilot begins.

5. Benefits of the Scheme

5.1 To contractors and plant owners

- Deterrence: visibly marked fuel is less attractive to steal because it cannot be used in a road vehicle, or resold, without immediate detection risk.
- Faster, stronger insurance claims: forensic marking provides objective evidence of provenance, supporting claims and potentially improving terms with insurers over time, in the same way that asset-marking schemes (e.g. SmartWater, DNA marking for plant) have done for stolen machinery.
- Evidential value for prosecution: police and trading standards can test suspect fuel found in a vehicle or at a resale point and trace it back to source, supporting recovery and conviction rates that are currently very low for stolen fuel.

5.2 To the wider sector and supply chain

- A common standard avoids a fragmented patchwork of company-specific dyes, which would confuse enforcement bodies and dilute the deterrent effect. A single CLC-endorsed standard gives police, DVSA and fuel retailers one thing to look for.
- Supports the sector's broader security and productivity agenda by reducing a persistent drain on plant uptime and programme delivery.
- Creates a clear, evidenced narrative for engagement with the Home Office and police forces on construction site crime, an area where the CLC and partner bodies already have a convening role.

5.3 To enforcement bodies

- Roadside and yard checks become straightforward: any blue-marked fuel found in a road vehicle fuel tank, container, or informal resale setting is presumptively stolen construction fuel, in the same way red fuel in a road vehicle is presumptively a duty offence today.
- Covert forensic markers allow fuel to be traced to a specific supplier, depot or site even after visible dye has been tampered with, supporting more serious organised-crime investigations.

6. Precedent: Lessons from the Red Diesel Model — and Where This Differs

The red diesel system demonstrates that fuel colour-marking works as an enforcement tool: it has been used for decades to make rebated fuel instantly identifiable, and HMRC's enforcement approach (spot checks, seizure powers, fines up to 100% of duty evaded) shows that a marker-based system is administratively workable at scale.

However, it is important to be explicit about what this proposal does not do:

- It does not seek a duty rebate, a reduced rate, or any change to the fuel duty position of construction plant, which remains taxed at the full white diesel rate.

- It does not require new primary legislation. Fuel suppliers and end users are already permitted to add dye or chemical markers to fuel for commercial or security purposes, provided the additive does not include or mimic the prescribed Government markers set out in the Hydrocarbon Oil (Marking) Regulations 2002.
- It does not create a new HMRC enforcement regime. Any enforcement value comes from ordinary police powers (handling stolen goods, theft, criminal damage) and civil/insurance processes, not from tax law.

This distinction should be stated clearly and repeatedly in any submission and any public communication about the scheme, to avoid the proposal being mistaken for a campaign to reinstate red diesel status for construction by the back door — a position that is not what is being proposed here, and that would attract different (and more difficult) scrutiny.

7. Regulatory and Legal Considerations

7.1 Interaction with the Hydrocarbon Oil (Marking) Regulations 2002

Any additive used must be formulated so that it cannot be confused with, and does not contain, the specific chemical markers reserved for rebated fuel under the 2002 Regulations. This is a formulation and legal question for fuel additive manufacturers and HMRC, and should be the first technical step in any pilot, ahead of any commercial rollout.

7.2 Engagement with HMRC

Because HMRC officers are entitled to test any visibly coloured diesel to establish its content, it is strongly recommended that the CLC (or its nominated working group) engage HMRC's Red Diesel Entitlement Policy Team directly and in writing before any trial, to: confirm that a blue, non-rebate marker scheme falls outside the scope of the 2002 Regulations; agree a protocol so that HMRC roadside/yard checks are not unnecessarily triggered by marked fuel; and ensure fuel suppliers, hauliers and hire companies operating the scheme are not inadvertently exposed to compliance risk.

7.3 Fuel supply chain and warranty implications

Plant and engine manufacturers, fuel additive suppliers and major fuel distributors (e.g. members of the Federation of Petroleum Suppliers, UKPIA) should be consulted to confirm that any dye/taggant combination is compatible with modern diesel engines, after-treatment systems (DPF/SCR) and existing fuel specifications (EN 590), and does not void plant warranties or breach existing supply contracts.

7.4 Data protection and forensic evidence handling

Where covert markers are used to trace fuel to a specific site or delivery, protocols will be needed for how that data is held, by whom, and how it is disclosed to police for the purposes of an investigation or prosecution, consistent with data protection requirements.

8. Implementation Roadmap

Phase	Activity	Indicative timing
1. Engagement	CLC working group established; HMRC Red Diesel Entitlement Policy Team, fuel suppliers, insurers and	Months 1–3

Phase	Activity	Indicative timing
	police liaison consulted; scheme boundaries confirmed in writing	
2. Technical development	Additive formulation and testing (dye + forensic marker) confirmed compatible with EN 590 diesel, modern engines and after-treatment systems; supplier(s) selected	Months 3–6
3. Pilot	Trial across a small number of volunteer sites/contractors, covering delivery, static storage and plant refuelling; feedback from police and insurers	Months 6–12
4. Evaluation	Pilot results reviewed: theft incidence, ease of enforcement, cost per litre, contractor feedback, HMRC confirmation of no duty-status conflict	Months 12–14
5. Sector rollout	CLC-endorsed standard published; adoption promoted through Build UK, CECA, CIOB, plant hire associations and major contractors; supplier network scaled	Months 14–24

9. Key Stakeholders for Engagement

- Construction Leadership Council (CLC) — convening role and endorsement of a single sector standard.
- Build UK, CECA and the Chartered Institute of Building (CIOB) — member engagement and best-practice guidance, as already provided on the 2022 red diesel transition.
- HMRC (Red Diesel Entitlement Policy Team) — confirmation that the scheme sits outside the 2002 Marking Regulations and rebate regime.
- Fuel distributors and the Federation of Petroleum Suppliers — delivery, additive dosing and supply chain logistics.
- Plant and engine manufacturers / Construction Equipment Association (CEA) — confirmation of engine and warranty compatibility.
- Police forces and the Home Office — recognition of the marker in roadside/yard enforcement and stolen goods investigations.
- Insurers and the Association of British Insurers (ABI) — potential premium or claims-handling benefits for marked fuel, similar to existing plant-marking discounts.
- Plant hire associations (e.g. IPAF, CPA) — given hired plant regularly moves between sites and operators.

10. Risks and Mitigations

Risk	Mitigation
Blue marker mistaken for, or confused with, a duty rebate marker	Early, written engagement with HMRC; formulation explicitly excludes prescribed 2002 Regulation markers; clear public messaging that no rebate is sought or implied

Risk	Mitigation
Fragmented adoption — different contractors use different dyes	CLC-endorsed single standard, promoted through Build UK/CECA member channels, tied to procurement and framework requirements over time
Criminals adapt by filtering, bleaching or diluting the dye	Covert forensic/DNA marker layer provides traceability even where visible dye is defeated
Additive cost passed through to contractors	Pilot phase to quantify cost per litre; likely offset by reduced theft losses and potential insurance benefits; bulk procurement through CLC-endorsed suppliers
Engine, warranty or fuel-specification concerns	Manufacturer and CEA sign-off required before rollout; pilot phase specifically tests this

11. Conclusion and Recommendation

The removal of red diesel entitlement for construction in April 2022 delivered its intended environmental and fiscal objective, but it also removed, as a side effect, the sector's only practical visual deterrent against fuel theft. The result has been a well-documented and costly rise in diesel theft from construction sites, running into the hundreds of millions of pounds annually and contributing to project delay, safety incidents and rising insurance costs.

A sector-wide blue marker scheme — combining a distinct visible dye with a covert forensic marker, and kept entirely separate from fuel duty and tax status — offers a proportionate, low-cost way to restore that deterrent. It requires no new legislation, no change to construction's duty position, and can be designed from the outset in partnership with HMRC to avoid any risk of confusion with the statutory red diesel regime.

We recommend that the Construction Leadership Council establish a working group to take this forward, with the objective of piloting a scheme within twelve months and publishing a sector-endorsed standard within twenty-four.

Recommended next step

A short scoping meeting between the proposer, the CLC secretariat, and one or two nominated fuel-security and workstream leads, to agree ownership and a route into the appropriate CLC workstream (e.g. Net Zero & Biodiversity or Infrastructure) for formal consideration.

12. Sources

- gov.uk — Reform of red diesel and other rebated fuels entitlement (HM Treasury / HMRC) — <https://www.gov.uk/government/publications/reform-of-red-diesel-entitlements/reform-of-red-diesel-and-other-rebated-fuels-entitlement>
- Build UK — The Use of Red Diesel in Construction: FAQs — <https://builduk.org/the-use-of-red-diesel-in-construction-faqs/>
- FASET — Red Diesel: FAQ — <https://www.faset.org.uk/news/red-diesel-faq/>
- CLA — In Focus: Red Diesel Changes, April 2022 — <https://www.cla.org.uk/news/in-focus-red-diesel-changes-april-2022-new-rules-explained/>

- IPAF — HMRC issues guidance over end to red diesel rebate in 2022 — <https://www.ipaf.org/en/news/hmrc-issues-guidance-over-end-red-diesel-rebate-2022>
- Ardent Hire — Fuelling Concerns: Tackling the Rising Tide of Fuel Theft on UK Construction Sites (cites CIOB survey data) — <https://www.ardenthire.com/blog/fuelling-concerns-tackling-the-rising-tide-of-fuel-theft-on-uk-construction-sites/>
- Orbis Protect — Fuel theft on UK construction and CNI sites is surging (cites CIOB survey data) — <https://www.orbisprotect.com/2026/05/08/fuel-theft-on-uk-construction-and-cni-sites-is-surging-heres-how-to-protect-your-site/>
- Veritech Security — UK Construction Site Theft Statistics 2025 (cites Allianz Cornhill, ABAX, Direct Line Business Insurance) — <https://veritech-security.com/uk-construction-site-theft-statistics-2025/>
- Millennium Security — Residential Construction Site Theft: Why It Happens and How to Stop It — <https://millenniumsecurity.co.uk/2025/08/05/residential-construction-site-theft-why-it-happens-and-how-to-stop-it/>
- Construction Leadership Council — <https://www.constructionleadershipcouncil.co.uk/>

Note: figures in this paper are drawn from published industry and government sources current as of mid-2026 and should be independently verified and refreshed with primary CIOB / HMRC / ABI data before formal submission.



C/o Hire Association Europe
2450 Regents Court, The Crescent
Birmingham Business Park, Solihull B37 7YE

Email: faye@cits.uk.com

www.cits.uk.com