

Memo: Sellafield Limited

Date: 2026-01-05

1. Executive Summary

A forensic screen of open public procurement data identified the contract 'Decommissioning Nuclear Waste Partnership' as a Critical Carbon Priority.

Based on the contract value (£4,600,000,000.00) and detected material profile (General Civil Blend (Synthetic)), we estimate the embodied carbon risk to be approximately 3,168,889 tonnes CO₂e.

2. Forensic Calculation Method

Methodology: High-fidelity screening using industry composite rates (SPONS 2024) and emission factors (ICE V4.1 / DEFRA 2025).

- A. Contract Value: £4,600,000,000.00
- B. Composite Rate: £45.00 per tonne (Installed)
- C. Est. Quantity: 102,222,222 tonnes (General Civil Blend (Synthetic))
- D. Emission Factor: 31.00 kgCO₂e/tonne (PROXY_Synthetic_Mix_40Earth_30Agg_30Struct)

CALCULATION: $(102,222,222 \text{ tonnes} * 31.00 \text{ kg/t}) / 1000 = 3,168,888.89 \text{ tonnes CO}_2\text{e}$

3. Mitigation Opportunities

Standard interventions for this material profile:

- Request Environmental Product Declarations (EPDs) from Tier 1 suppliers.

DISCLAIMER: This report is a screening estimate based on open data (Contracts Finder). It applies heuristic modeling to estimate quantities and does not replace a Bill of Materials. Intended for internal prioritization use only.