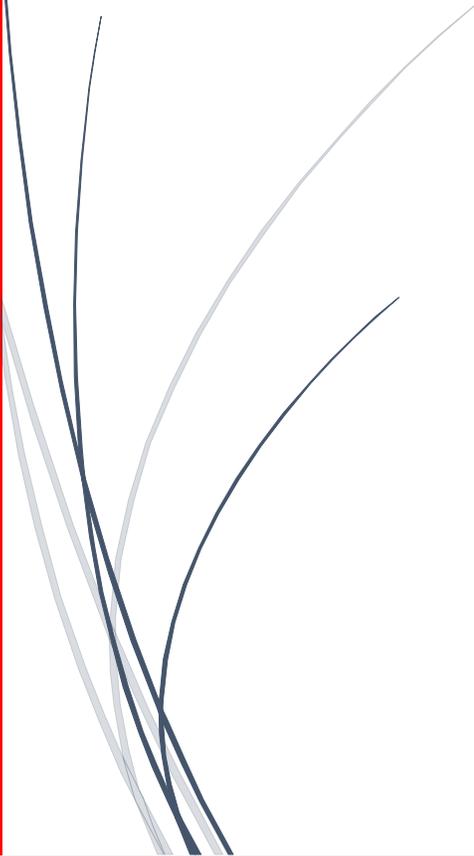


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DSD Construction Ltd

Carbon Management & Reduction Plan



BACKGROUND:

We are a family run company, with over 30 years' experience in road surfacing, planing, maintenance & construction activities operating nationwide.

WHY DO WE WANT TO MANAGE OUR CARBON EMISSIONS?

Society has an increasing appetite for energy and natural resources, which has led to an increase in levels of Carbon CO₂ being released into our atmosphere.

The consequence is climate change which is affecting the world we live in.

In the UK, the built environment accounts for almost half the amount of CO₂ released each year. Subsequently our industry has a great responsibility to deliver projects, which avoid large scale associated environmental cost.

For DSD Construction Ltd this is a driver to act, however there are other factors:

- 1. Carbon Legislation:** We are regulated to mitigate our CO₂ emissions under direct legislation.
- 2. Client Demand:** Our Clients are increasingly focused on reducing environmental impacts throughout their supply chain and when delivering projects. We are therefore providing greater levels of detail to demonstrate our understanding of sustainability, both within our own business operations and as a service provider.
- 3. Corporate Responsibility:** Both our staff & the communities within which we work demonstrate a concern for environmental conservation. Being able to demonstrate an environmentally considerate approach to how we operate is essential.
- 4. Competition and Brand:** We want to be recognised as an organisation which is leading to move the industry towards more sustainable practices.
- 5. Environmental Management System:** Continual improvement is a key requirement of the standard ISO 14001. Reducing our emissions will therefore support the certification of our Environmental Management System.

WHERE ARE WE CURRENTLY?

We have calculated our carbon footprint as part of our ISO 14001 Environmental Management System implementation.

We have considered the requirements of Public Procurement Note (PPN 06/21) regarding Carbon Reduction Plans in the procurement of major government contracts.

DETAILED CALCULATION FOR 2020 & 2021 (SCOPE 1 & 2)

| Description | Consumption 2021 | Unit | Conversion Factor | CO _{2(e)} Tonnes 2020 | CO _{2(e)} Tonnes 2021 |
|----------------------------|------------------|--------|-------------------|--------------------------------|--------------------------------|
| Waste to Landfill (DSD) * | 0.0 | Tonnes | 0.006 | 0 | 0 |
| Waste to Recycle (DSD) * | 25.5 | Tonnes | 0.093 | 2.2 | 2.4 |
| Electricity (HQ) | 52,807 | KWh | 0.23314 | 11.7 | 12.3 |
| Electricity (Region) | 16,636 | KWh | 0.23314 | 6.9 | 3.9 |
| Fuel – White Diesel (Yard) | 141,817 | Ltr | 2.546 | 358 | 361 |
| Fuel – Red Diesel (Yard) | 154,855 | Ltr | 2.757 | 377 | 427 |
| Fuel – White Diesel (Card) | 322,373 | Ltr | 2.546 | 797 | 821 |
| Fuel – Red Diesel (Card) | 9,532 | Ltr | 2.757 | 28 | 26 |
| Fuel – Petrol (Card) | 4,675 | Ltr | 2.168 | ** | 10 |
| Fuel – Red (Sellafield) | 8,811 | Ltr | 2.757 | *** | 24.3 |
| Fuel - Kerosene | 13010 | Kg | 3.165 | 4.8**** | 41.2 |
| Bottled Propane | 4636 | kg | 1.55537 | 5.5 | 7.2 |
| Gas Offices | 30,252 | KWh | 0.18387 | 5.7 | 5.6 |
| Total | | | | 1596 Tonnes | 1802 Tonnes |

NOTES

* Waste data relates to materials sent to licensed facilities from our Head & Regional Offices.

** Petrol not included in 2020 data.

*** Sellafield fuel delivered to site not included in 2020 data.

**** Kerosene data for 2020 not an accurate figure (2021 revised).

CALCULATIONS FOR SCOPES

| Scope | Details | 2020 | 2021 Baseline | 2022 (To date) | 2022 (Forecast) |
|---------|----------------------|----------------|------------------|-------------------|--------------------|
| Scope 1 | Own Direct | Not Calculated | 1780 Tonnes | 539 Tonnes | 1869 Tonnes |
| Scope 2 | Indirect (Utilities) | Not Calculated | 22 Tonnes | 10 Tonnes | 25 Tonnes |
| Totals | Scope 1 & 2 | 1596 Tonnes | 1802 Tonnes | 549 Tonnes | 1894 Tonnes |
| Scope 3 | Indirect (Others) | Not Calculated | 6894 Tonnes | 1735 Tonnes | 7238 Tonnes |
| Totals | Scope 1, 2 & 3 | Not Calculated | 8696 Tonnes | 2284 Tonnes | 9132 Tonnes |

DSD Construction Ltd has identified 2021 as our baseline to measure carbon reduction against.

Our carbon data for 2022 is reported for the period January to April (4 months).

We aim to update carbon data for 2022 on a quarterly basis and have predicted our CO₂e emissions for 2022. Although our forecast may vary due to workload, etc. we will publish accurate details on our website at year end.

WHAT ARE OUR TARGETS TO REDUCE CARBON EMISSIONS?

- **Capital Investment** - Purchase of new plant & equipment that meets Euro 6 obligations.
- **Staff Education & Behaviour:** Informing our staff and encouraging behaviour change both through formal and informal training.
- **Monitoring Energy & Carbon:** Energy data monitoring & reporting systems, including an Emission Management & Impact Tool (EMIT) to assist the tracking of carbon emissions for our projects, regarding materials, quantities, plant, transport, utilities & waste.
- **Raw Materials:** To engage collaboratively with local suppliers (where possible) to ensure all purchases are from sustainable sources and low carbon footprint. We will also endeavour to influence the specification/use of low temperature asphalt in road construction, which reduces energy costs & carbon emissions by up to 39%.
- **Vehicles:** Continue to invest in low carbon vehicles.
- **Staff Travel:** Reduce car mileage where possible. Invest in new technologies that reduce the need for face-to-face meetings and enable more teleconferencing, videoconferencing, etc.
- **Waste:** Monitoring waste data received from waste carriers.
- **Fuel Consumption:** Utilising tracking software to monitor & improve fuel consumption & vehicle performance.
- **Supply Chain:** Collaboration with our Supply Chain partners in the reporting of carbon data aiming to be Net Zero by 2050. This is of particular relevance to Scope 3 emissions.

WHAT WE HAVE DONE IN RECENT YEARS:

- **Hydrotreated Vegetable Oil (HVO):** We introduced the first JCB powered biofuel plant in the North-West of England, to support our Nuclear Division. HVO is a substitute for crude oil & manufacturers trials have indicated CO₂e reduction emissions up to 80%.
- **In-Situ Recycling & Graphene Trials:** We were involved in the use of raw graphene, mixed with Cement Bound Granular Material (CBGM) to form a stronger recycled road material. After several months of lab-based development at the Graphene Engineering Innovation Centre (GIEC) at University of Manchester trials were delivered in conjunction with Pavement Testing Services (PTS). The use of recycled on site materials, combined with the use of Volvo P8820D Paver (see below) reduced CO₂e generated on the project.
- **Volvo P8820D Paver:** We invested in the latest high efficiency & environmentally friendly paving technology. The Paver has the ability to lay wider mats with increased depths, meaning fewer passes & reduced construction timescales. In addition, the Paver has an ECO engine mode that reduces fuel consumption & ultimately CO₂e emissions.
- **Low Temperature Asphalt:** Use of low temperature asphalt in road construction, which reduces energy costs & CO₂e emissions by up to 39% on the Cargo Fleet project.
- **Waste:** Recycling damaged kerbs on the Sewell Lane project in Carlisle, by sending them to a recycling depot where they were crushed & reused as aggregate.
- **Waste:** Non-Tar Bound road planings were distributed to a local asphalt supplier, where they were added to asphalt mixes as bulking material (RAP) on the Stourton Park & Ride Project in Leeds.
- **Materials:** Tried a new Cold Recycled Bound Material (CRBM), which reuses tar bound road planings as aggregate in the new mix. The recycling trial involved 26 schemes in which 10,000 tonnes of tar bound planings were recycled & reused as innovative RecoFoam mixture. This delivered a £1.5M cost saving & reduced both environmental impact & CO₂e emissions on the North Yorkshire framework.
- **Materials:** Installing Superflex asphalt, to overlay the problematic Beckwith Road in Harrogate which was subject to cracking. This avoided the need to reconstruct the carriageway, saving up to 50% of the project cost & significant reducing CO₂e emissions.
- **Make it Wild:** We have subscribed to an organisation called Make it Wild, who help offset our carbon footprint by planting 206 trees annually at Banks Wood in Summerby, North Yorkshire (see final page).
This offsets 756 tonnes of CO₂e emissions.
This represents 43 % of CO₂e emissions calculated for 2021.
- **Tracking Software:** We have introduced an Emission Management & Impact Tool (EMIT) to assist the tracking of carbon emissions for our construction projects, regarding materials, quantities, plant, transport, utilities & waste.

WHERE ARE WE GOING?

Our turnover growth in the past 2 years is circa 15% per year.

We forecasted growth from 2020 to 2021 to be circa 10%.

Our CO₂e emissions (Scope 1 & 2) therefore increased from 1596 tonnes in 2020 to 1802 tonnes in 2021 (Baseline).

We are forecasting further growth in 2022 to be circa 10%.

Our CO₂e emissions (scope 1 & 2) is likely to be 1894 tonnes in 2022, accounting for a carbon reduced due to the increased use of Hydrotreated Vegetable Oil (HVO).

Our business targets are to:

- Increase CO₂e offsetting from 43% to 75% by 2025.
- Achieve Net Zero by 2040 for Scope 1 & 2 emissions.
- Achieving Net Zero by 2050 for Scope 3 emissions (with assistance of our Supply Chain).

DECLARATION & SIGN OFF

This Carbon Management & Reduction Plan has been completed in accordance with Procurement Policy Note PPN 06/21 & associated guidance and reporting standards for Carbon Reduction Plans.

Emissions have been reported & recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting protocol corporate standards, using the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions, have been reported in accordance with the published reporting standards for Carbon Reduction Plans & Corporate Value Chain (Scope 3) Standard.

Our Carbon Management & Reduction Plan is published on our Company Website.

Signed on behalf of DSD Construction Ltd:



Date: 24.05.22
Shaun Nugent
Managing Director
DSD Construction Ltd

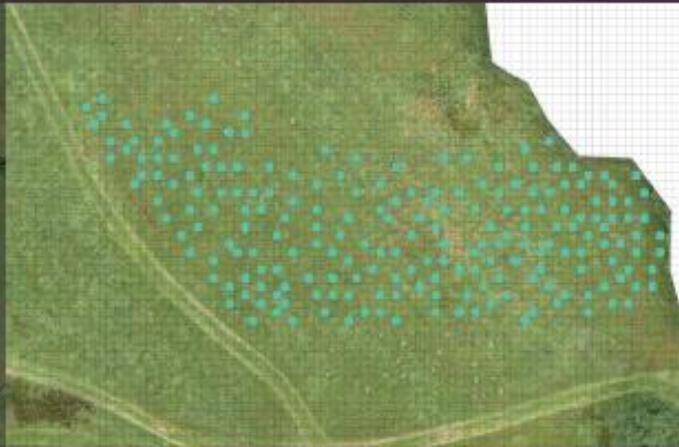
MAKE IT WILD



This is to certify that
DSD Construction Ltd
 Annually offset
756 tonnes of CO₂e
 by planting **206 trees**
 at Bank Woods, Summerbridge,
 North Yorkshire



The East Plantation



The trees assigned to DSD Construction are highlighted in blue

IT'S NOT OUR AIM TO PROTECT NATURE, IT'S OUR PURPOSE!



Make it Wild Limited  www.makeitwild.co.uk  Co. Reg No 11051292  VAT No 281 9471 58