

Carbon Reduction Plan 2021-2022



This document details the actions adopted by DSM Demolition Ltd [DSM] to reduce the carbon emissions from our works.

This document was issued and formally adopted by the board of [DSM] on the 7th July 2021

Commitment to achieving net zero carbon emissions

DSM is committed to achieving net zero emissions by April 2050.

Baseline year emissions footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any significant strategies to reduce emissions.

Baseline emissions are the reference point against which reduction can be measured.

Baseline Year	April 2019 to April 2020	
Additional details relating to the baseline emissions calculations		
General Notes	Due to the method of data collection on wastes, contract transportation and secondary aggregate production precise data on running contracts is not available and has to be estimated. Previous SECR reports are reviewed when a new version is produced and are updated with actual data.	
Baseline year emissions (tCO_{2e})		Notes
Scope 1	5,851.36	1, 2, 3 & 4
Scope 2	27.76	5
Scope 3	568.64	6, 7 & 8
Total Emissions	6,447.76	

NOTES

- 1 The 2020 UK Government Greenhouse Gas Conversion Factors document has been used to calculate this report for all emission values.
- 2 Principle emissions from the use of gas oil on site 4,945 tCO_{2e} (85% of total) and vehicle diesel use 881.39 tCO_{2e} (14% of total).

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- 3 Minor other sources of emissions: natural gas (office heating), propane (site hot cutting), petrol (company car and minor small plant use) and electric car use.
- 4 Included in scope 1 are other specified emissions; Methane, Nitrous Oxide, Hydrofluorocarbons, Perfluorocarbons, Sulphur hexafluoride and Nitrogen Trifluoride. The reported carbon dioxide equivalent values include the contribution from Methane and Nitrous Oxide. No other emissions were recorded from the other sources.
- 5 Emissions from the use of grid electricity.
- 6 The reported upstream emissions, 15.96 tCO_{2e}, are from onward processing of certain wastes DSM produces and staff commuting.
- 7 The reported downstream emissions are from contract hauliers used for some waste and aggregate movements and for onward processing back into the material supply chain of waste metals produced.
- 8 The emissions from the processing of steel waste back into a product amounted to 138 tCO_{2e}. The emissions from the re-use of scrap metals are a fraction of the emissions that would have been produced if the produced product had been made from raw materials. This would have produced 23,168 tCO_{2e}.

Current year emissions reporting

Current Year	April 2020 to April 2021	
Emissions (tCO _{2e})	Notes	
Scope 1	4,481.49	1
Scope 2	30.77	2
Scope 3	380.11	3 & 4
Total Emissions	4,892.37	

NOTES

General comments as per baseline year data.

- 1 Emissions of 77% compared to the baseline year due principally to a reduction in the amount of gas oil used due to the nature of work undertaken.

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- 2 Emissions of 110% compared to the baseline year due it is thought to lower average winter temperatures.
- 3 Upstream emissions of 78% compared to the baseline year due to a lower total weight of wastes produced and processed by receiving organisations.
- 4 Downstream emissions of 67% compared to the baseline year due to a lower amount of recorded contract haulage of aggregates. Due to the way DSM records data the amount of these emissions may rise when actual data from running contracts is substituted for the estimated value used in the production of DSM's SECR report.

Factors affecting produced emissions

DSM has already instigated measures to reduce the carbon footprint from its works, but due to the following factors has limited control on overall emissions due to:

- DSM has no control of the geographical location of its work sites.
- DSM has no control over the distance from work sites to waste facilities.
- The variable nature of the road network between a work site and Arden Road or waste facility.
- DSM has no control of the absolute quantity of waste from any particular site.
- There is no true correlation between the amount of waste produced and the energy requirements required to produce it. Heavily reinforced concrete structures require more energy to remove and process than traditional brick construction building do.
- The removal, moving, placing and, where needed the treatment of, soil has numerous variables such as distance to move; need to double handle; compaction requirements; ease of excavation; variable treatment energy requirements.
- Planned increase in turnover.

Emission reduction targets

- DSM Demolition Ltd is committed to achieving Net Zero emissions by 2050, and if possible sooner.
 - To achieve this, due to the nature of DSM's core works, some technological advances will be required.
- DSM has set a five-year plan, 2020-2021 to 2024-2025 to monitor annually the effectiveness of our carbon reduction actions.
- The target set for this first plan is to reduce our CO₂e emission rate compared to turnover by 5% based on the baseline 2019-2020 value of 167.45 tonnes CO₂e per £1,000,000 turnover.

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- The value for 2021-2022 on the data now obtained is 144.6 tonnes CO_{2e} per £1,000,000 turnover, a reduction of 13.6%. This will be reviewed in the next SECR report as for the reasons stated previously accurate data can only be obtained when all contracts in the period have been completed. The corrected values for 2020-2021 are expected to increase above the reported values.
- Fluctuations may be recorded in the annual emissions due to variations of contract works, both in type and location.
- To achieve moving towards net zero carbon emissions the following actions have been, and are planned to be taken.

Completed carbon emission reduction actions plans

- Arden Road has replaced all lights with LEDs and are PIR enabled in the offices and external security floodlights are on automatic timers to minimise electricity usage.
- DSM is trialling an electric vehicle to determine its practicality and has installed vehicle charging points at Arden Road.
- DSM operates vehicle sharing for work sites, subject to Covid restrictions, to minimise business mileage.
- Proximity of waste disposal sites to work sites is now a core selection criteria.
- Business meetings are now carried out by Teams to minimise business mileage.
- DSM has in 2020-2021 invested heavily in new D-Rigs from 1 tonne to 55 tonnes manufactured by Kobelco. These are replacing Hyundai D-Rigs due to their more efficient engines.

Planned carbon emission reduction actions plans

- Investigate unexplained electricity usage at Arden Road identified in this report.
- Investigate unexplained gas usage at Arden Road identified in this report.
- Invest in 2021-2022 in more efficient Kobelco D-Rigs of up to 80 tonne weight to replace existing less efficient D-Rigs.
- Buy a hybrid 20/22 tonne excavator for use in loading a crusher. These vehicles recover energy when slewing and this is the only operation DSM carries out where significant slewing is required.

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- Carry out a trial of, HVO [hydro-reactive vegetable oil fuel], as a direct replacement of diesel fuel. HVO has only emissions of 0.16580 CO_{2e} kg per litre compared 2.54603 kg CO_{2e} per litre for typical bio-diesel blend a reduction of 93.5%. The trial will be designed to monitor matters such as the affect on mpg and servicing requirements.
- Investigate carbon offsetting schemes which include the planting of trees in The United Kingdom in locations close to DSM's work sites.
- Review data acquisition, including use of Apps with aim of increasing speed of data gathering, improved accuracy, more detailed information and the reduction in paper use.

External assurance statement

DSM Demolition maintains externally certified compliance to ISO 9001, ISO 14001 and ISO 45001 through URS - United Registrar of Systems. The method production of this report, and its findings, fall under ISO 14001 and therefore are within the audit scope of this standard.

Declaration and sign off

This carbon reduction plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the publishing reporting standards for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 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 standard for Carbo Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors of DSM Demolition Ltd.

Signed on behalf of DSM Demolition Ltd.

A handwritten signature in black ink, appearing to read 'Andrew Fletcher', with a horizontal line extending to the right.

Andrew Fletcher Managing Director

7th July 2021