

2025

Progress report scope 1,2 and 3

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Montfoort

Department: Sustainability



Daiwa House
Modular Europe



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1. Introduction and justification

In this report, we report progress against the goals for our company. This full-year report provides an incentive to continuously work towards achieving the CO₂ reduction targets for scope 1,2 and 3. Given DHME's strong growth ambitions, combined with the high demand for housing, it is within expectations that emissions will increase in absolute terms in the coming years. Therefore, the reduction targets are presented relative to the company's produced and refurbished square meters. This metric is calculated as follows:

$$\text{CO}_2 \text{ Intensity (kg CO}_2\text{/m}^2\text{)} = \frac{\text{Absolute CO}_2 \text{ Emissions kg CO}_2}{(\text{Produced} \times 0,7) + (\text{refurbished} \times 0,3) \text{ m}^2}$$

2. Progress reduction targets

In this document, scope 1, 2 and 3 CO₂ reduction objectives are presented. For each target, the business activity is presented with target, emissions, responsibility, improvement methods and status.

Scope 1:

Scope 1	
Company activity	Gas usage for heating, fuel usage for transportation, generator and equipment
CO ₂ -emission per kg/ m ²	48 kg-CO ₂ /m ²
Goal	25% reduction (target value: 68,25 kg/ m ² in 2025 vs 2019)
Responsible	Board
Measure	▶ making fleet more sustainable; ▶ managing driving behavior; ▶ monitor fuel consumption; ▶ replace gas-fired heaters; ▶ apply hybrid generators; ▶ purchase electric loading crane; ▶ purchase electric/hydrogen-powered truck;

Analysis status 2025 :

General

- Goal scope 1: 25% reduction in 2025 towards 2019 (20% of total)
 - o Duration of 6 years: $25/6 = 4.17\%$ per year
 - o CO₂-emission 2019: 91 kg-CO₂/m² in CO₂ intensity
 - o CO₂-emission 2025: 69 kg-CO₂/m² in CO₂ intensity
 - o Decrease of 48%
- 2024: 63 T-CO₂/ 2025: 69 T-CO₂ (Increase of 10%)

CO ₂ -emissions	T-CO ₂	CO ₂ intensity
2019	5260	91
2020	5486	114
2021	7074	82
2022	4073	49
2023	4939	65
2024	5063	63
2025	4644	48

Specific

Topic	T-CO ₂ 2019	T- CO ₂ 2025	CO ₂ -intensity 2019	CO ₂ -intensity 2025	% gain or loss
Natural gas business premises	303	1114	5,32	16,54	268%
Diesel project sites	495	432	8,55	6,14	-13%
Petrol business travel	65	447	1,12	6,63	585%
Diesel business travel	657	525	11,35	7,79	-19%
Diesel transportation trucks	3741	612	64,61	9,08	-84%
HVO100 transportation trucks		63		0,94	

Scope 1 emissions have drastically decreased in 2025. This can be attributed to the sell of Medexs as well as a significant reduction in projects. In total 1.214 less units produced compared to 2024 which meant fewer truck movements to project sites, lower aggregate use and HVO100 was used for transportation which further lowered emissions.

Natural gas business premises

This item continues to grow and accelerated this year with 35% growth compared to 2024. This can be explained by the commissioning of the German product location in Fürstenwalde. Fürstenwalde is heated by natural gas and due to its large size, energy-saving actions are not yet in line with the production halls in the Netherlands.

Gas consumption varies a lot per production site. In Montfoort, consumption is down 26% compared to 2024. Due to the few projects available. Production hours were limited to keep the factory open this year. A serious measure. In Eemshaven, gas consumption increased by 8%. On the other hand, in Hulst consumption has increased by 27% compared to the full year 2024. Fürstenwalde was stable in their gas consumption during the full year of 2025 compared to 2024.

Montfoort continues to deal with net congestion, which limits the developments on lowering gas consumption when full production resumes. With the project Green Deal Montfoort negotiations are fully active to investigate the option of an energy hub with neighboring businesses.

Planned actions:

- The project in Berlin has finished at the beginning of 2026. New facility operations will be discussed for future projects to lower gas consumption overall during the cold months.
- Together with Green Deal Montfoort DHME and other entrepreneurs will investigate the option of an energy hub and share the Stedin Contract. Taking another step towards a zero gas production site.

Diesel project sites

Earthquake-resistant housing in Groningen (NCG projects) accounts for much of the diesel increase at project sites. Because the homes are built in a hurry and a grid connection cannot usually be realized, they must be powered by hybrid generators.

DHME JS continues to rely on customers on these projects to reduce diesel usage on NCG projects. Another proposal was presented to the customer to use HVO100. Unfortunately, due to the price of HVO100 the proposal was still not accepted. With this, DHME has made every effort to reduce CO2 on residential sites.

Diesel is also used on our construction sites. For this, a study is underway to apply batteries that will significantly reduce diesel consumption. The ultimate goal for 2030 is an emission-free construction site.

Planned activities:

- Expectations are a natural turnover in take down of NCG projects.
- Decrease of projects using generators because of permanent power connection.
- Keep updated and try to convince the client for using alternative fuels like HVO100.

Gasoline and Diesel business travel

Gasoline and Diesel business travel is rising steadily. This is due to the rapid growth of the company and the increase in the number of employees and lease cars this entails.

This year a difference can be observed between Diesel and Gasoline use for business driving. Gasoline has decreased 3% and Diesel has increased by 15% compared to 2023. This can be explained by a 10% decrease in gasoline vehicles and a 6% growth in diesel vehicles.

These increases are the reflection of a growth in business travel between The Netherlands and Germany due to the new production facility in Fürstenwalde. As well as, hiring more employees who received company cars growing the lease fleet by 8%.

The share of electric cars has increased significantly, which could explain the overall decrease of fuel consumption for business travel.

Company policy is for new employees to receive an electric vehicle (EV's), unless there is a reason for a fuel car. Stimulation for EV's resulted in a 63% growth of the EV fleet in comparison to 2023 and a little over 1/5th part of the total business vehicle fleet in 2024 was electric at 22%.

Planned actions:

- Apply research HVO / Premium fuel for passenger cars and commercial buses.
- Run a company campaign to stimulate public transportation and/or taking the bicycle to work-days.

Trucks: diesel transportation

As of November 2023, there were 13 trucks in the transportation fleet that transport the units to project sites. The size of the fleet was stable in 2024. Due to a lower number in unit transport movements in the Netherlands the Diesel consumption decreased 12% in 2024.

Decrease of 13% due to fewer projects and fewer units that needed transportation to project sites. A positive development is the implementation of HVO100 diesel through our Shell fuel partner. Trucks could tank in Montfoort from the local fuel reserve which resulted in a significantly lower diesel consumption and emissions overall.

Planned activities:

- Apply research HVO
- Apply research for alternative fueled trucks (non-diesel)

Scope 2:

Scope 2 + Business travel	
Company activity	Non-direct emissions: electricity generation and air travel
CO ₂ -emission per kg/ m ²	2,57 kg-CO ₂ /m ²
Goal	80% reduction (target value : 2,73 kg-CO ₂ /m ²) in 2025 vs 2019
Responsible	Board
Measure	▶ travelling by train as an alternative to short flight; ▶ install PV systems on (new) halls; ▶ continue to buy 100% Dutch green electricity; ▶ continue to investigate possibility of charging electric cars with green electricity, off-site.

Analysis status 2024:

General

- Goal scope 2: 80% reduction in 2025 towards 2019
 - o 2019= 19 kg-CO₂/m² in CO₂ intensity
 - o 2025= 2,57 kg-CO₂/m² in CO₂ intensity
 - o Decrease of 86%
- 2024: 2,20 kg-CO₂/m² compared to 2025: 2,57 kg-CO₂/m² resulted in a gain of 17%.

CO ₂ -emissions	T-CO ₂	CO ₂ -intensity
2019	1100	19
2020	511	11
2021	17	0,19
2022	36	0,43
2023	131	1,71
2024	178	2,20
2025	173	2,57

Specific

Topic	T-CO ₂ 2019	T-CO ₂ 2025	CO ₂ -intensity 2019	CO ₂ -intensity 2025	% gain
Electricity	556	0	13,33	0	-100%
Charging on the road	0	61	0	0,90	n.v.t.
Air travel	25	112	0,31	1,66	348%

Electricity

Because all the electricity DHME buys is green, the current calculation method dictates that no CO₂ impact should be calculated for this. Electricity consumption is expected to continue to rise in the coming years. This is due to the electrification of existing properties, building and renting new halls/offices and electrifying the vehicle fleet.

Planned actions:

- The Montfoort Green Deal has been collecting energy profiles of 6 to 7 companies who could participate in an energy hub. The collaboration could lead to sharing space in fellow energy contracts in order to have more electricity available amongst the group as there will be congestion on the electricity grid until 2030 at minimum.

Charging on the road

In 2021, the emission post 'charging on the road' was added. The percentage of electric vehicles in the business travel fleet is growing and they charge outside the production sites. In doing so, there is no control over the origin of the electricity. It is therefore assumed that this is grey electricity and emits CO₂. This can be seen as a positive development, as electricity is preferred over petrol or diesel.

Consultations have been held with the supplier of the charging cards, however, it remains impossible to charge with green electricity. As soon as a solution to this is found, DHME will be contacted.

Planned actions:

- Look into HBEs (hernieuwbare brandstofeenheden) to see if they can offset EV-charging off the production site.

Air travel

DHME employees decreased their long distance flights to the U.S. significantly. At the start of the year no flights over 2500 km were taken. Most flights were in the direction of Berlin due to flying experts from Montfoort to Berlin regularly to support the Fürstenwalde factory. Overall, this post reduced emissions by 16% compared to 2024.

During the period when factories and departments are being set up, a lot of consultation and explanation is needed. Initially, this is done as much as possible through MS Teams, however, especially in the primary process, this cannot be done remotely. In addition, the data collection has been improved, resulting in more flights being identified.

Planned actions:

- The Company Policy states that trips under 700 km will be made by train, provided this can be done in a realistic timeframe.

Scope 3:

Supply chain analysis has not changed compared to last year and therefore the same dominance is maintained (materials and waste). Should business operations change to such an extent that changes can be expected here, the dominance analysis will be carried out again.

Scope 3 - Materials	
Company activity	Emissions in the supply chain by use of materials
CO ₂ -emission per kg/ m ²	166 CO ₂ /m ²
Goal	20% reduction (target value : 128 kg-CO ₂ /m ²) in 2026 vs 2021
Responsible	Board
Measure	▶ explore and deploy alternative materials to replace high-impact (top 3) materials. ▶ continue development of new floor and heated mold.

Analysis status 2025 :

- Goal: 20% reduction in 2026 vs 2021
 - o 2024: 172 kg-CO₂/m² in CO₂ intensity
 - o 2025: 166 kg-CO₂/m² in CO₂ intensity
- Reduction of 20%

CO ₂ -emissions	T-CO ₂	CO ₂ -intensity
2019	9929	171,5
2020	6289	131,6
2021	13883	160
2022	12865	153,8
2023	12909	168,8

2024	13870	172
2025	11156	166

The R&D department is looking at possible applications of Biobased Materials to reduce material bound emissions from the units. The National Milieu Database (NMD) is currently adapting the MPG calculation methods. This will influence their actions to achieve a good score. Phasing out or replacing the top 3 high impact materials remains challenging. This is in part because a buildings must meet certain quality requirements for fire safety, as well as energy needs of future users and acoustic use values.

In February there was a test with a different cement mix and a heated mall for the floors. This could result in a significant reduction in CO₂ emissions. The test showed changes needed in the mixture to make it applicable in the floor designs. Further testing will be done and could result in low CO₂ emissions cement floors.

In addition, the engineering department is developing a design that meets the MIA subsidy requirements with a low CO₂ emissions product.

Scope 3 - Waste	
Company activity	Waste emissions in supply chain
CO ₂ -emission per kg-CO ₂ /m ²	100 kg-CO ₂ /m ²
Goal	10% reduction, (target value: 63 kg-CO ₂ /m ² in 2026) vs 2021
Responsible	Board
Measure	Further subdivide waste streams into mono streams, identify processors to optimally process streams and initiate processes to ensure proper waste sorting.

Analysis status 2024 :

Goal: 10% reduction, meaning 7 kg-CO₂/m² lower compared to 2021

Goal: 80% mono-streams in 2030

- 2024: 93 kg-CO₂/m² in CO₂ intensity
- 2024: 100 kg-CO₂/m² in CO₂ intensity
- Gain of 8 % in intensity.

CO ₂ -emissions	T-CO ₂	CO ₂ -intensity
2019	4239	73
2020	2881	60
2021	6095	70
2022	5690	68
2023	6395	84
2024	7503	93
2025	6759	100

Specific

Topic	T-CO ₂ 2021	T-CO ₂ 2025	CO ₂ intensity 2021	CO ₂ intensity 2025	% gain
Mono	2329	3913	26,8	58	116%
Mixed	3759	2821	43	42	-2%
KCA	17	25	0,19	0,36	89%

Overall waste emissions have decreased by 10% absolute in 2025 compared to 2024. Compared to the target year of 2021 it was not enough. Production increased overall so much, it was not realistic to accomplish this goal. When compared to units produced the CO₂ intensity even increased.

Monostreams where 58% of the total waste in 2025 and mixed was 42%. The goal of 80% monostreams has come closer compared to 2024 where it was only 50%. We can be pleased with this change in division between mixed and monostreams.

3. Measures

For H2 2025 the following measures were planned:

Own initiative

Investigate the possibility of a shared Energy Hub with the group Green Deal Montfoort (12/2025)
Implement new waste separation signs to improve mono-streams (12/2025)

For H1 2026 the following measures were planned:

Selection of SKAO list of measures

Between 5% and 25% of electricity use is covered by own generation of renewable electricity (via own investment or lease) (01/2024) à Only achieved for main production sites.
The company can demonstrate that it operates at least one mobile tool based on zero CO ₂ emission technology. (11/2025) à Aerial platform in Montfoort is zero emission and the Automated Guided Vehicles (AGV) in hall 17.
At least 100% electricity for consumption at work (construction site) is green electricity and/or covered by national GVOs. (12/2025)
In projects where the company as main contractor provides fuel on the construction site, the company ensures that at least 10% of the total fuel refueled on the construction sites is demonstrably renewable fuel. (9/2024)

Own initiative

Waste management manual for hall managers (12/2025)
Change concrete mixture from De Goudse Beton Centrale for a CO ₂ negative mixture by Concrify (02/2025) à Tests with cement unsatisfactory
Develop heated mold to lower CO ₂ -emissions while drying cement floor

Own initiative (following year):

Phase out NCG projects (natural attrition) (1/2026)
Apply research HVO / Premium fuel for passenger cars and company buses (07/2026)
Apply research HVO for trucks (07/2025)
Incorporate Eco Concrete in floor planning (8/2026)
Further subdivide waste streams into mono streams, identify buyers to optimally process streams and initiate processes to ensure proper splitting. (ongoing)
Investigate Energy Hub with Green Deal Montfoort entrepreneur group to step towards zero gas on production site Montfoort (11/2026)

4. Progress uncertainties and estimates

The results presented should be seen as the best estimate of the actual values. Virtually all data used to calculate the carbon footprint are based on invoices, data from insight portals or supplied by the supplier. As a result, the margin of uncertainty is small.

An uncertainty lies in the possible human errors that can be made. First, the supplier may, for example, transmit the wrong time period, which will quickly be noticed because certain months will remain blank, for example.

Secondly, typos can be made in copying the data, however, this chance is small as DHME works with a 4-eye principle. Copied data and references are (randomly) checked by another employee than the one copying the data.

Forecast

For 2026, there are a number of expectations that could impact carbon emissions:

- ▶ Commissioning of the production site in Germany will continue to affect natural gas and electricity consumption.
- ▶ The German production site will grow their number of units produced and an increase in material bound carbon emissions is to be expected.
- ▶ To reduce transportation Diesel emissions, HVO100 will be selected where possible. However, price will play a large role in the decision when and where to implement this.
- ▶ Problems with Netcongestion will continue and influence sustainability actions regarding the disconnection from gas supply.