



Mydflower Corporate Accounting

- Scope 1 to 3 Emissions

Prepared by Foodsteps in line with the GHG Protocol Corporate Accounting and Reporting Standard¹

1. General Information and Scope

Mydflower is working towards offsetting the emissions of their operations. In order to successfully deliver on this commitment, it is vital that Mydflower's Scope 1, 2 and 3 emissions are calculated. This will enable the company to identify emissions hotspots for reduction as well as offsetting.

This is the baseline year for Mydflower's corporate emissions accounting, against which future assessments will be compared, and trends in emissions analysed.

Given Mydflower is a food/drinks brand, it is important to account for Scope 3 emissions, as well as Scope 1 and 2, as these make up a significant proportion of the company carbon footprint.

2. Company Description

Mydflower is a sparkling wine company operating in the Brecon Beacons. Mydflower distributes their products within the UK and the Netherlands, via online delivery service and retailers.

3. Inventory Boundary

3.1 Reporting Period

The reporting period for this assessment is 1/1/2020 to 31/12/2020.

3.2 Organisational and Operational Boundaries

All emissions from premises owned by Mydflower were included, as were all life-cycle emissions of Mydflower products, which included some scope 3 emissions by other organisations based on an operational control consolidation approach. Home office emissions were calculated using annual fuel bills based on the number of cohabitants and the number of hours worked per week.

See section 6 for a full list of included scope 3 emissions.





4. Summary Results

4.1 Summary Scope 1 to 3 Emissions

Mydflower's company footprint during the period 1/1/2020 to 31/12/2020 was estimated to be 4,263 kg CO₂e. That's roughly equivalent to heating two average homes for a year, or driving from London to Moscow and back, 5 times.

Scope 3 emissions make up a large proportion of Mydflower's total company footprint, contributing 2,957 kg CO₂e, or 69%. This is followed by Scope 1 emissions, which contribute 1,077 kg CO₂e, or 25%. Finally, Scope 2 emissions represent a relatively small proportion of Mydflower's company footprint, contributing 229 kg CO₂e, or 5%.

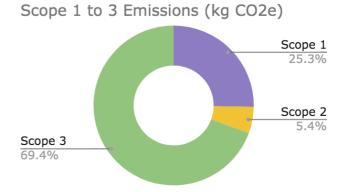


Fig. 1: Pie chart showing breakdown of Mydflower's company footprint

4.2 Summary Breakdown by Emissions Source

The main contributor to Mydflower's company footprint falls under Scope 3 Product Life Cycle emissions, including farming, packaging, Mydflower processing (non-Scope 1), cannery processing, distribution (non-Scope 1), retail, household and waste & end-of-life. This accounts for nearly half of Mydflower's Scope 1 to 3 emissions. Capital goods procurement makes up a further 15% of the company footprint. As such, a large proportion of Mydflower's emissions fall outside of organisational control.

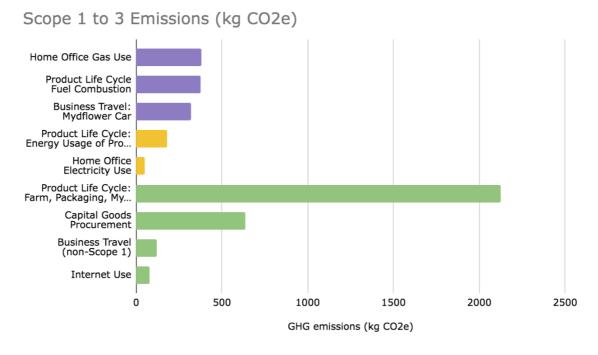


Fig. 2: Bar graph showing breakdown of Mydflower's company footprint



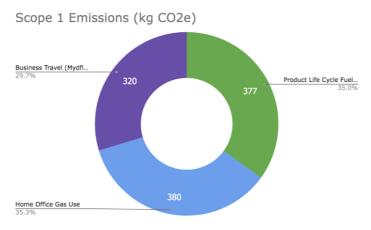


5. Scope 1 & 2 Emissions

The total Scope 1 & 2 emissions during this period equate to 1,306 kg CO₂e. This can be largely attributed to Mydflower's Scope 1 emissions, which make up 82.5% of total Scope 1 & 2 emissions.

5.1 Scope 1 Emissions

Scope 1 emissions account for all anthropogenic GHG emissions directly related to Mydflower's operations. This includes fuel combustion throughout the product life cycle, such as for processing in Mydflower's barn and product distribution in Mydflower's car. Home office gas usage also falls within Scope 1, as well as any business travel in Mydflower's car.



Home office gas usage represents the largest proportion of Scope 1 emissions, making up more than a third of total Scope 1 emissions. This is closely followed by product life cycle fuel combustion, and business travel in Mydflower's car.

Fig. 3: Pie chart showing breakdown of Scope 1 emissions

Table. 1: Table showing breakdown of Scope 1 emissions

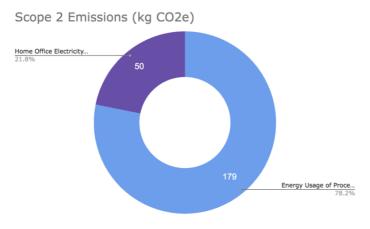
Emissions Source	Carbon Footprint (kg CO ₂ e)
Product Life Cycle Fuel Combustion	377 kg CO₂e
Onsite processing (heated dissolution) Product distribution (Mydflower-owned car)	8.5 kg CO ₂ e 368.5 kg CO ₂ e
Home Office Gas Usage	380 kg CO₂e
Mydflower Car Business Travel	320 kg CO ₂ e
Total	1,077 kg CO₂e





5.2 Scope 2 Emissions

Scope 2 emissions account for all anthropogenic GHG emissions that derive indirectly from Mydflower's consumption of purchased electricity, steam, heating or cooling. This includes energy usage associated with processing in Mydflower's barn, and home office electricity usage.



Energy usage associated with processing in Mydflower's barn, including temperature maintenance of the barn and UV filtration, makes up the major proportion of Scope 2 emissions. Home office electricity usage makes up a relatively minor proportion of Scope 2 emissions.

Fig. 4: Pie chart showing breakdown of Scope 2 emissions

Table. 2: Table showing breakdown of Scope 2 emissions

Emissions Source	Carbon Footprint (kg CO ₂ e)
Energy Usage of Processing in Mydflower Barn	179 kg CO₂e
Temperature maintenance UV filtration	179 kg CO₂e <1 kg CO₂e
Home Office Electricity Usage	50 kg CO ₂ e
Total	50 kg CO₂e

5.3 Methodology

Data on Mydflower's Scope 1 to 2 emissions was collected via two survey questionnaires. Information was initially gathered in order to conduct a separate Product Life Cycle Assessment, including the specific processing and distribution of Mydflower's products. A second survey was then conducted to supplement this, providing more detail on the wider company footprint, including Mydflower's office and travel operations.

Mydflower provided data on electricity and gas usage in their respective home offices, as well as car mileage attributable to company operations. GHG emissions were subsequently estimated using the 2021 Government Conversion Factors.²

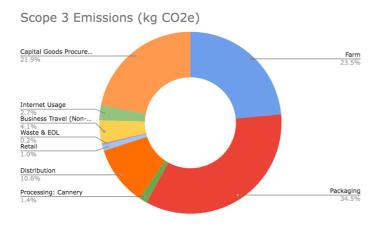
See the Mydflower Product Carbon Footprint Report for the Product LCA methodology.3





6. Scope 3 Emissions

Scope 3 emissions account for all other indirect anthropogenic GHG emissions, outside of Scope 2, occurring in the value chain. The total Scope 3 emissions during this period equate to 2,957 kg CO₂e. This is more than 2 times greater than Scope 1 and 2 emissions combined.



Packaging accounts for more than a third of Mydflower's Scope 3 emissions, closely followed by farming and capital goods procurement. Other sources make up a relatively small portion of Mydflower's Scope 3 emissions.

Fig. 5: Pie chart showing breakdown of Scope 3 emissions

Table. 3: Table showing breakdown of Scope 3 emissions

Emissions Source	Carbon Footprint (kg CO ₂ e)
Product Life Cycle	2,125 kg CO₂e
Farming	682 kg CO ₂ e
Packaging	999 kg CO₂e
Mydflower processing	<1 kg CO ₂ e
Cannery processing	40 kg CO ₂ e
Distribution	307 kg CO₂e
Retail	30 kg CO₂e
Household	3 kg CO₂e
Waste & EOL	5 kg CO₂e
Used lemon disposal	53 kg CO₂e
Unused ingredients (Barn)	6 kg CO₂e
Business Travel	50 kg CO₂e
Internet Usage	77 kg CO₂e
Capital Goods Procurement	635 kg CO₂e
Total	2,957 kg CO₂e





6.3 Methodology

Data on Mydflower's Scope 3 emissions was collected via two survey questionnaires. Information was initially gathered in order to conduct a separate Product Life Cycle Assessment, including the specific farming, packaging, processing, distribution, retail, household, waste & end-of-life stages of Mydflower's products. A second survey was then conducted to supplement this, providing more detail on the wider company footprint.

Mydflower provided data on business travel, internet usage and capital goods procurement attributable to the company's operations. GHG emissions were subsequently estimated using the 2021 Government Conversion Factors.²

See the Mydflower Product Carbon Footprint Report for the Product LCA methodology.³

7. Ratio Performance Indicators

Based on Mydflower's 2020 production of 8,510 sparkling wine products, the company footprint per kilogram of product produced is estimated at 1.55 kg CO₂e.

Mydflower's company footprint per product produced is estimated at 0.50 kg CO₂e.

8. List of Facilities

The company-owned facilities accounted for in Mydflower's Scope 1 to 3 emissions assessment include:

Mydflower Barn (Brecon Beacons, Wales)

Cannery (Wrexham, Wales)

Office 1 (Wales)

Office 2 (Netherlands)

9. References

- 1. The Greenhouse Gas Protocol. A Corporate Accounting and Reporting Standard. https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf
- 2. UK Government GHG Conversion Factors for Company Reporting (2021)
- 3. Mydflower Product Carbon Footprint Report. Methodology Summary.