

Greenhouse gas emissions report

Financial year 2022

dopper.
Just refill

Water is the lifeblood of the planet.

What we at Dopper believe is as clean and clear as water itself.
Our vision is a planet with clean water for all,
where plastic pollution is a thing of the past.

Our mission is to end packaged water by getting people to drink tap water.

The funny thing is that as much as people, and their mindless behaviours, have gotten us into this plastic filled problem. People, from individuals to communities to countries, along with some mindful solutions, are what can get us out of this problem.

They just need those solutions.

Reporting period

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Introduction

We find ourselves in unprecedented times, facing the pressing and impactful challenge of climate change. At Dopper, we perceive this crisis not only as a menace to robust markets and businesses but also as a threat to our well-being and that of future generations. We acknowledge the scientific consensus indicating that a 1.5°C rise in the global average temperature is the threshold to mitigate the most severe impacts on our planet and its inhabitants, particularly affecting frontline communities who will bear the initial and most significant consequences. If current trends persist, it is projected that we may reach this critical limit as early as 2030.

Given these circumstances, we believe it is crucial for all businesses to take a leadership role in eliminating emissions, actively reducing carbon levels, and facilitating a fair transition for displaced workers and communities toward a net-zero emissions economy. Moreover, we advocate for the use of our collective influence to push for policy changes that remove barriers and align incentives, thereby driving substantial climate action.

On December 11, 2019, during the UN Climate Change Conference, COP25, in Madrid, Dopper, alongside 500 B Corps, publicly pledged to expedite the reduction of their greenhouse gas emissions. All parties united with the shared objective of following a 1.5-degree trajectory, aiming to achieve net-zero emissions by 2030—20 years ahead of the targets set in the Paris Agreement for 2050. The Net Zero 2030 initiative became integrated with the UN Race to Zero in 2022. This report serves as a demonstration of our commitment and accountability to the pledge we made.

Organizational description

Principles

This report on Greenhouse Gas (GHG) emissions outlines the specific details and inventory of emissions for which Dopper holds responsibility. It aligns with our commitment to the UN Race to Zero campaign, with the R&D team leading the reporting process through cross-departmental collaboration for data collection.

The report discloses GHG emissions from January 1st, 2022, to December 31st, 2022, marking the fourth consecutive year of Dopper's emissions reporting, since baseline year 2019. Notably, 2022 was the first year post the COVID-19 pandemic, impacting the GHG inventory compared to the previous year, when operations were influenced by the pandemic.

Recalculations of results will be performed under specific conditions:

- Availability of more precise primary or secondary activity data.
- Significant changes in the interpretation or values of emission factors ($\pm 50\%$).

The inventory, reporting, and calculations adhere to the Greenhouse Gas Protocol's corporate and value chain standard (ghgprotocol.org), following principles of relevance, completeness, consistency, transparency, and accuracy. All required information is presented, excluding non-mandatory details irrelevant to this report's scope.

This voluntary report is part of Dopper's involvement in the SME Climate Commitment (formerly the Climate Collective Net Zero 2030 initiative) within the UN Race to Zero campaign. Dopper commits to reducing GHG emissions, contributing to the global fight against climate change. The report ensures transparent and verified disclosure of Dopper's efforts, aiding in identifying improvement opportunities and focus areas within the value chain.

Monitoring and reporting responsibilities fall under the R&D team within the Operations department, requiring cross-departmental collaboration for accurate data collection. The R&D team oversees data handling, applies correct calculation methods, conducts quality checks, and validates the data.

Boundaries

Organizational boundaries

Dopper BV is a single entity that takes the equity share approach for the calculation of its share of Greenhouse Gas (GHG) emissions. It makes Dopper responsible for the emissions in proportion to the economic interest in a business activity. This approach best reflects the value chain structure in which Dopper does not own or operate (production) facilities. It also provides the opportunity to directly see the effects of GHG emission reductions in the value chain.

Operational Boundaries

This report accounts for the greenhouse gases covered by the Kyoto Protocol and in accordance with ISO 140641-1:2018. The emissions are quantified in tonnes CO₂e.

This report encompasses the full spectrum of GHG emissions, categorized into 3 scopes:

SCOPE 1 EMISSIONS

Emissions directly generated by sources under Dopper's control

SCOPE 2 EMISSIONS

Indirect emissions arising from the electricity procured by Dopper

SCOPE 3 EMISSIONS

Indirect emissions from activities occurring in assets not owned or controlled by Dopper

Scope 3 is further divided into 15 Categories, and Table 1 provides a comprehensive list of each category, specifying whether it is included or excluded in the inventory.

Biogenic emissions - related to the natural carbon cycle, as well as those resulting from biologically based materials - are reported separately from the 15 Categories.

Scope 3 Categories	Status
Category 1: Purchased goods & services	Included
Category 2: Capital goods	Included
Category 3: Fuel- and energy-related activities	Included
Category 4: Upstream transportation & distribution	Included
Category 5: Waste generated in operations	Included
Category 6: Business travel	Included
Category 7: Employee commuting	Included
Category 8: Upstream leased assets	Excluded: Dopper does not operate leased assets Car park is covered in Scope 3 Cat. 6 Warehousing is covered in Scope 3 Cat. 4
Category 9: Downstream transportation & distribution	Included
Category 10: Processing of sold products	Excluded: Sold products have no post-processing
Category 11: Use of sold products	Excluded: Maintenance and use of sold product are outside the equity share scope of Dopper
Category 12: End-of-life treatment of sold products	Included
Category 13: Downstream leased assets	Excluded: Dopper does not lease assets to others
Category 14: Franchises	Excluded: Dopper does not own any franchises
Category 15: Investments	Excluded: Dopper does not make investments, nor does provide financial services

Table 1 - Status of Scope 3 Categories

Data collection

Data structure

The inventory is documented in Appendix I, providing a summary and overview of the emissions in the 3 Scopes. Separate documents containing the calculations for each Scope and Category are stored in Appendix II. Finally, the documentation of all activity data is stored in Appendix II (Data sources).

The calculation documents have a consistent structure with the following tabs:

Calculation guidance

Defines the category and outlines calculation methods following the GHG Protocol

Category emissions

Summarizes emissions from each category section

Section calculations

Presents calculations involving activity and reference data multiplied by emission factors

Internal data sources

Specifies the source of activity data obtained from within the company or suppliers

External data sources

Specifies the source of emission factors and external data values

Activity data

Of all activity data, 55% is collected from primary sources, mainly from the company's ERP system. Most secondary data are supplied by direct suppliers in the value chain.

Emission factors

For the emission factors 3 main sources are used:

- DEFRA FHF Conversion Factors 2022 (full set)
- CO2 emissiefactoren 2023 (mainly for the Dutch energy-supply)
- EcolInvent 3.8 (for emission data on materials)

Other sources are only used when emissions factors are provided by suppliers or if the information is not available. For example, local transportation and distribution (T&D) losses, are obtained from the World Bank database.

Data quality

The GHG Protocol's qualitative approach has been used to assess data quality, with the results presented in Appendix IV. Uncertainty in the GHG inventory results from both activity data and the applied emission factors. Dopper utilises emission factors from official sources to the extent possible, but the uncertainty range of these factors, beyond the company's control, is unknown.

Exclusions

Sources contributing less than 2% of the total emissions are excluded from the inventory. The combined emissions of these excluded sources are less than 5% of the total GHG emissions.

GHG emissions inventory

Summary

In 2022, Dopper recorded a total of 1599,3 tonnes of CO2 equivalent in greenhouse gas emissions, of which 3,7% biogenic emissions. The primary source of emissions was the Upstream Scope 3 category, showing its importance in the upcoming reduction strategy.

The Scope 1 and 2 emissions were minimal, especially when compared to emissions associated with the core business operations.

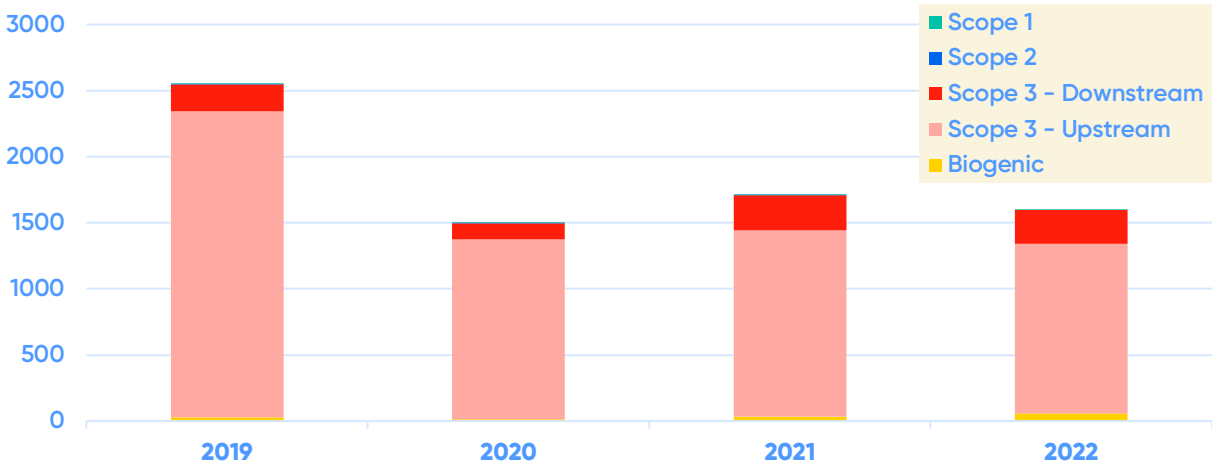


Figure 1 – GHG emissions per year [t CO₂e]

When comparing the emission intensity (or emissions per euro revenue) year by year, a steady reduction has been realised. It shows the effects of the first reduction measured, implemented since baseline year 2019.

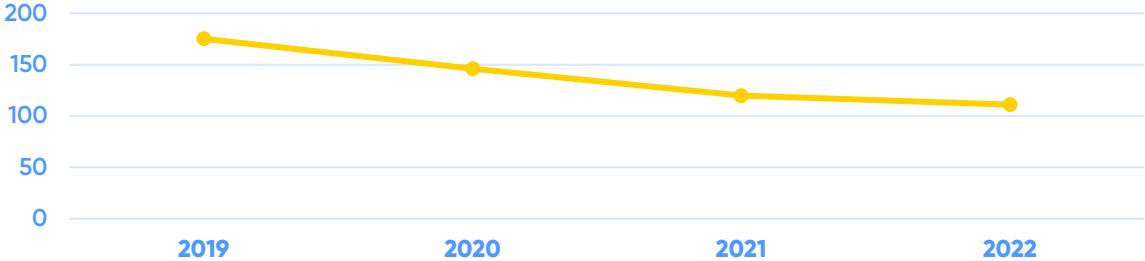


Figure 2 – Emission intensity [t CO₂/million €]

Scope 1 and 2

Securing renewable electricity for the Oceans building and moving the T&D losses to Category 3 has resulted in achieving the first Net Zero target for Scope 2.

The increase in emissions for Scope 1 is related to the new measurement methodology from the energy supplier.

Scope	2022	Baseline	Δ
Scope 1	2,7	1,4	+93%
Scope 2	0	4,8	-100%

Table 2 – Scope 1 and 2 emissions [t CO₂e]

Scope 3

Category 1: Purchased Goods and Services

Due to the nature of Dopper's value chain, the first category contributes no less than 78% of the company's total GHG emissions.

The most significant change in emissions has been the reduction in for Purchased goods and services. A policy has been implemented to stimulate purchasing, resulting in a 93% reduction compared to the baseline year.

Section	2022	Baseline	Δ
Purchased goods and services (non-production)	39,2	550,8	-93%
Purchased goods and services (production)	153,6	201	-23%
Material inputs of purchased goods and services	992,8	1368,5	-27%
Production waste of purchased goods and services	1,6	0,0	N/A
Transport of material inputs to tier 1 suppliers	20,7	33,5	-38%
Total	1207,9	2153,8	-41%

Table 3 – Category 1 emissions [t CO₂e]

Category 2: Capital Goods

In 2022 many new Dopper products saw the light of day. Therefore, quite some investments were made in new tooling.

Section	2022	Baseline	Δ
Emissions from tooling production	7,1	89,6*	-92%

Table 4 – Category 2 emissions [t CO₂e]

*In the baseline year all existing tooling was added to the balance

Category 3: Fuel- and energy-related activities

This category is a recent addition to Dopper's emissions reporting: emissions related to the production of fuel and energy, from well to tank (WTT) and up to the point of use, particularly within Dopper's operations. It includes upstream emissions that are not accounted for in either Scope 1 or Scope 2.

Section	2022	Baseline	Δ
Upstream emissions of purchased fuels	0,5	0,0	N/A
Upstream emissions of purchased electricity	0,0	0,0	N/A
Transmission and distribution (T&D) losses	0,1	0,0	N/A
Total	0,6	0,0	N/A

Table 5 – Category 1 emissions [t CO₂e]

Category 4: Upstream transportation and distribution

The notable observation in Category 4 emissions is the rise in road freight, primarily attributed to a change in focus countries. Also, the increasing sales of the heavier Dopper Insulated model led to an increase in road freight emissions.

The no-flying policy remained in effect in 2022, allowing only air transport for samples. This policy contributed to maintaining low emissions from air freight.

The warehouse emissions have been reduced due to the installation of LED armatures. The electricity was purchased with a renewable energy contract.

Section	2022	Baseline	Δ
Emissions from road freight	8,0	6.7	+19%
Emissions from air freight	0,0	10.5	-100%
Emission from warehousing	0,1	3.6	-97%
Total	8,1	20,8	-61%

Table 6 – Category 4 emissions [t CO₂e]

Category 5: Waste generated in operations

Dopper has included the reporting of Category 5 since the 2021 report. The current measurement of solid waste relies on average data, with the assumption that once precise measurements are conducted, the quantities can be reduced to match the levels of recycled waste.

Section	2022	Baseline	Δ
Emissions from incinerated waste	0,1	0,0	N/A
Emissions from recycled waste	0,1	0,0	N/A
Total	0,2	0,0	N/A

Table 7 – Category 5 emissions [t CO₂e]

Category 6: Business Travel

In 2022, the initial year after the COVID-19 pandemic, business travel gradually picked up throughout the year.

Section	2022	Baseline	Δ
Emissions from transportation (uncompensated)	12,2	33,2	-63%
Emissions from transportation (compensated)	0,5	0,0	N/A

Emissions from accommodation	1,6	2,3	-30%
Total	14,3	35,5	-60%

Table 8 – Category 6 emissions [t CO₂e]

Category 7: Employee Commuting

In 2022, teleworking remained the predominant mode of work. Throughout the year, employees slowly returned to the office, leading to mixed of working: 50% from home and 50% at the office.

Most of the remaining commuting kilometres were covered either by train (54%), which operates carbon neutral in the Netherlands.

Section	2022	Baseline	Δ
Emissions from commuting	16,2	17,7	-1%
Emissions from teleworking	25,7	0	N/A
Total	41,9	17,7	+137%

Table 9 – Category 7 emissions [t CO₂e]

Category 9: Downstream transportation and distribution

Dopper's operations continued to adhere to carbon-neutral transportation and distribution practices introduced in 2021. Only occasional shipments to overseas regions occurred. All of them utilised containership as modality. Consequently, emissions are reduced dramatically compared to the baseline year of 2019.

Section	2022	Baseline	Δ
Downstream transportation and distribution	0,2	6,9	-97%

Table 10 – Category 9 emissions [t CO₂e]

Category 12: End-of-life treatment of sold goods

The collection and disposal of sold goods continues to represent a significant portion of the company's emissions.

Within the category the incineration of sold goods remains the biggest contributor, accounting for 84% of the total.

Section	2022	Baseline	Δ
Emissions from recycling of sold goods	42,6	38,6	+10%
Emissions from incineration of sold goods	215,3	156,9	+37%
Emissions from landfilling of sold goods	0,0	0,0	N/A
Total	257,9	198,5	+30%

Table 11 – Category 12 emissions [t CO₂e]

Biogenic emissions

Currently, only far east shipping – using the GoodShipping program – contributes to the biogenic emissions. With an increase in sales of the heavier Dopper Insulated model and a new set of emission factors, shipping emissions have doubled.

Section	2022	Baseline	Δ
Emissions from sea freight	58,5	28,5	+105%

Table 12 - Biogenic emissions [t CO₂e]

Actions towards Net Zero

The global economy can only be decarbonised if every company sets goals to reduce its emissions, as fast and as much as possible. Dopper has already implemented various measures that have reduced the amount of GHG emissions with 40%. Additional measures are planned or have been implemented recently that will bring the emissions in line with the Net Zero goal.

Implemented reduction measures

Dopper has successfully reduced its greenhouse gas emissions year over year. The following initiatives have contributed since the company's founding in 2010.

Scope 2

- 2020: Electricity at Head office (Oceans building) is based on renewable energy

Category 1

- 2010: Moulds implemented for 20% of plastic parts that produces without residue
- 2010: 99% of production residues are recycled (paint overspray is the exception)
- 2014: Final manufacturing of Dopper Original model runs on renewable energy
- 2018: Final manufacturing of the Dopper Insulated model runs for 5% on renewable energy, all of which are generated by on-site solar panels
- 2019: Final manufacturing of Dopper accessories runs for on renewable energy
- 2019: Cutting waste of the banderol is eliminated by applying smart sheet layout
- 2020: Coating of Dopper Insulated models changed from paint to powder coating, reducing production waste by 20%
- 2021: 5% of services are purchased carbon neutral or as low emission alternatives.
- 2021: Printing of Dopper bottles runs for 41% on renewable energy
- 2022: Final manufacturing of the Dopper Insulated model runs for 50% on renewable energy, of which 35% is generated by on-site solar panels
- 2022: Green purchasing policy in place

Category 4

- 2018: All sea freight is powered by biofuel through the GoodShipping program
- 2021: No flying policy is introduced for production batches

Category 6

- 2021: No flying policy is introduced for business travel to selected cities in Europe

Category 7

- 2018: 100% of the leased fleet is emission-free
- 2019: 91% of the employees commute by train or bike instead of by car

Category 9

- 2021: All forwarding transportation and distribution movements are purchased carbon neutral

Reduction strategy

Dopper has committed to Net Zero 2030. This means that the GHG emissions for Scope 1 and 2 are reduced to zero. For Scope 3 the reduction target is 5% year-over-year, resulting in an absolute target of 1450 t CO₂e in 2030. The challenge is that this reduction needs to happen against an ambitious revenue increase of 20% year-over-year.

Scope 1 and 2

Scope 2 already has achieved Net Zero with the purchase of green electricity. For Scope 1 Net Zero is expected in 2024 with the connection of the head office to the geothermal heating facility.

Scope 3

Achieving the reduction targets for Scope 3 are more challenging. The initial phase involves pinpointing potential areas of concern, considering the percentage of the current carbon footprint and the potential for reduction.

All emission reports have shown that certain sections of Category 1 and Category 12 contribute the most to the overall footprint:

Hotspot 1

Category 1: Section - Emissions from material inputs of purchased goods and services

Hotspot 2

Category 1: Section - Emissions from purchased goods and services (production)

Hotspot 3

Category 1: Section - Emissions from purchased goods and services (non-production)

Hotspot 4

Category 12: Section - Emissions from the incineration of sold goods

An additional Hotspot has been identified. With the increase in teleworking, the energy used for the home office has significantly increased. Therefore, it is included as the 5th hotspot:

Hotspot 5

Category 7: Section - Emissions from teleworking

Planned reduction measures

Hotspot 1

Target reduction

1.000 t CO₂e against baseline

KPI: Reduce the footprint of the Dopper Original materials by 100%

- Use biobased feedstock for the production of PP (implemented in 2022)
- Use recycled feedstock for the production of PCTG (implemented in 2022)

KPI: Reduce the material footprint of other Dopper products by 50%

- Use recycled feedstock for the production of PCTG (implemented in 2024)
- Use recycled feedstock for the production of stainless steel (implemented in 2024)
- Use biobased feedstock for the production of PP (ambition for 2025)

Hotspot 2

Target reduction

193 t CO₂e against baseline

KPI: Use 98% renewable energy for producing Dopper products

- Use renewable energy for production of the Dopper Steel (implemented in 2024)
- Use renewable energy for Cup print production (ambition for 2025)

Hotspot 3

Target reduction

60 t CO₂e against baseline

KPI: 25% of purchasing value through climate neutral partners

- Expand green purchasing protocol (ambition for 2025)

Hotspot 4

Target reduction

45 t CO₂e against baseline

KPI: 10% of yearly goods sold are taken back and recycled by Dopper

- Expand take-back program with at least 10 return locations (implemented in 2024)

KPI: 25% of incineration emissions are biogenic

- Use biobased feedstock for the production of PP (implemented in 2022)

Hotspot 5

Target reduction

10 t CO₂e against FY2022 (no homeworking was active in baseline year)

KPI: 50% of homeworking energy is based on green electricity

- Create an inventory of employees having green electricity contracts

GHG removals

Dopper has allocated funds to compensate for all remaining greenhouse gas emissions of the reporting year. Climate Impact Partners has been selected to supply the verified carbon offsets and certify the company through the CarbonNeutral scheme. The greenhouse gas emission inventory will be evaluated by RSK.

As Dopper is dedicated to achieving Net Zero status, the offset initiative will focus on afforestation to ensure the capture of greenhouse gas emissions. The remainder of offsets will be dedicated to renewable energy initiatives, in line with C2C Certified requirements to offset production electricity 1-for-1. All offsets are – again to adhere to C2C Certified standards – verified by either Gold Standard or Verified Carbon Standard.

Project name	Type	Country	Standard	Volume
Renewable energy portfolio	Renewable energy	Global	Gold Standard	768 t CO ₂ e
3 Rivers Grasslands restoration	Reforestation	China	VCS	362 t CO ₂ e
Guanare afforestation	Afforestation	Uruguay	VCS	411 t CO ₂ e
Total				1541 t CO₂e

Table 13 - Offset projects

Appendices

Appendix I - Dopper GHG emissions (2022) - Data quality

Appendix II - Dopper supply chain

Appendix III - GHG Inventory

Appendix IV - Data sources

Appendix V - Dopper GHG emissions (2022) - Inventory