

CO2-ladder

Policy & Reduction Ambitions

The Weather Makers B.V.

November 2024 - update

Author: Eduardo Vias

Date: 10th November 2024



Table of Contents

1	Summary.....	3
2	Introduction.....	3
2.1	Organisational boundary	3
2.2	CO ₂ -related award advantage	4
2.3	Company size – CO2 emissions	4
3	Insight.....	4
4	Reduction.....	7
5	Participation and Initiatives	7
6	Disclaimer & Ondertekening.....	9

1 Summary

In Q1 and Q2 of 2024, The Weather Makers have emitted 6.96 tonnes of CO₂. In comparison to the reference year of 2023, this is a large reduction for 2 reasons. First, less flights were taken, as the company focused more on national project instead of international projects. The second reason is that the company had to let go 33% of their employees.

The total amount of emissions of Q1 and Q2 2024 and the emissions of the reference year 2023 can be found in the table below:

Emissions 2024	CO2 emissions (kg CO2-eq/y) 2023 Ref	CO2 emissions in tonnes 2023 ref	CO2 emissions (kg CO2-eq/y) 2024 Q1+Q2	CO2 emissions in tonnes 2024 Q1 + Q2
Scope 1	4262	4.26	2067	2.07
Scope 2	5496	5.50	2603	2.60
Business Travel	16054	16.05	2294	2.29
Total	25811	25.81	6964	6.96

The reduction measures that are planned to be taken are to continue with the tire pressure check up every 3 months. Also, there will be a reduction of flights from Eduardo, traveling to The Netherlands. The last measure that will be taken is to reduce commuting by car with the two company vehicles.

2 Introduction

The present CO₂ Ladder Assessment document is completed in September 2024. Currently, The Weather Makers B.V. is considered a ‘small company’ based on CO₂ emissions, as she does not emit more than 500 tonnes of CO₂ per year. The requirements for the assessment are fulfilled accordingly, based on *CO₂ Performance Ladder 3.1* (22nd June 2020) by Stichting Klimaatvriendelijk Aanbesteden & Ondernemen (SKAO)¹.

In this document The Weather Makes share the following Angles within the CO₂-ladder approach:

- a. Insight
- b. Reduction measures and ambition

In this policy report, The Weather Makers B.V. describes what efforts will be taken to reduce emissions.

2.1 Organisational boundary

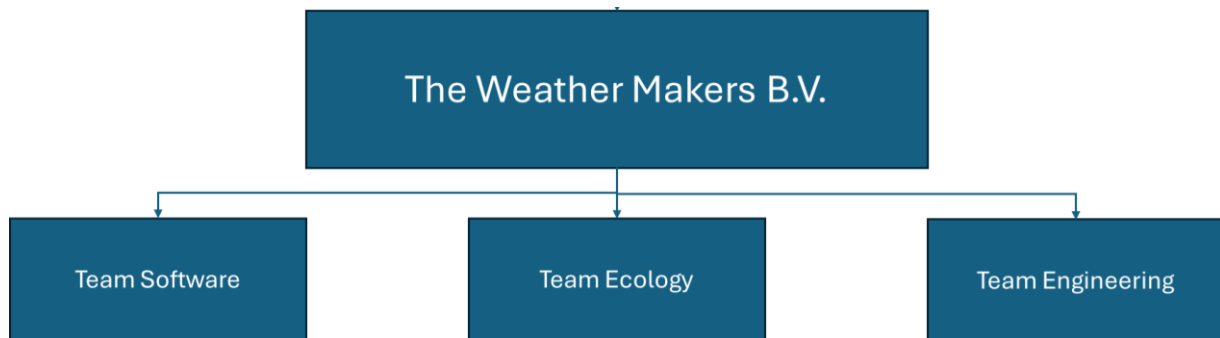
The Weather Makers consists of about 10fte in 2024. The company is small, but works in a niche sector, namely ecosystem regeneration. The main focus of the company is to ensure a liveable planet and to balance the climatic system on the mid-term (human lifetime).

The organisation is founded by Gijs Bosman, Maddie Akkermans and Ties van der Hoeven. The employees within the company are divided in 3 teams: Software, Ecology and Engineering.

The company is located in The Netherlands. The projects are international, but the main work is done from The Netherlands.

Please find the organigram below:

¹ <https://www.co2-prestatieladder.nl/nl/handboek>



2.2 CO₂-related award advantage

There are no ongoing or finalized projects with CO₂-related award advantages in correspondence with the demanded criteria in the current year. It is relevant to mention that The Weather Makers' main economic activity – environmental engineering consulting – is focused on advising measurements to sequester atmospheric CO₂ through ecosystem restoration and nature improvement.

2.3 Company size – CO₂ emissions

De total CO₂ emissions of The Weather Makers B.V. in the reference year 2023: 25,52 tonnes. The Weather Makers B.V. therefore is seen as a small company. Please see Table 1.

	DIENSTEN¹²	WERKEN/ LEVERINGEN
Kleine organisatie	Totale CO ₂ -uitstoot bedraagt maximaal (≤) 500 ton per jaar.	Totale CO ₂ -uitstoot van de kantoren en bedrijfsruimten bedraagt maximaal (≤) 500 ton per jaar, en de totale CO ₂ -uitstoot van alle bouwplaatsen en productielocaties bedraagt maximaal (≤) 2.000 ton per jaar.
Middelgrote organisatie	Totale CO ₂ -uitstoot bedraagt maximaal (≤) 2.500 ton per jaar.	Totale CO ₂ -uitstoot van de kantoren en bedrijfsruimten bedraagt maximaal (≤) 2.500 ton per jaar, en de totale CO ₂ -uitstoot van alle bouwplaatsen en productielocaties bedraagt maximaal (≤) 10.000 ton per jaar.
Grote organisatie	Totale CO ₂ -uitstoot bedraagt meer dan (>) 2.500 ton per jaar.	Totale CO ₂ -uitstoot van de kantoren en bedrijfsruimten bedraagt meer dan (>) 2.500 ton per jaar, en de totale CO ₂ -uitstoot van alle bouwplaatsen en productielocaties bedraagt meer dan (>) 10.000 ton per jaar.

Tabel 1: Indeling groottecategorieën volgens Handboek CO₂-Prestatieladder 3.1.

3 Qualitative goals

The goal of the energy management system and the reduction ambitions is to continuously improve the energy efficiency and reduction of the CO₂ emissions of the organisations. The goal for 2025 is to continue with the measure of checking the tire pressure of all cars used in scope 1 and in business travel. In Q3 in 2025, a decision

will be made to see if the company will buy green energy certificates to compensate all electricity used by the company. These emissions will be reduced before the end of 2025 by the measures taken described in chapter 5.

4 Insight

In comparison to the reference year 2023, the emissions of The Weather Makers have been reduced dramatically. The reason for this is that there was a reduction in flights, due to less international projects and more national projects. Also, the number of full-time employees was reduced by 33%.

The total emissions for Q1 and Q2 for 2024 can be found in the table below:

Emissions 2024	CO2 emissions (kg CO2-eq/y) 2023 Ref	CO2 emissions in tonnes 2023 ref	CO2 emissions (kg CO2-eq/y) 2024 Q1+Q2	CO2 emissions in tonnes 2024 Q1 + Q2
Scope 1	4262	4.26	2067	2.07
Scope 2	5496	5.50	2603	2.60
Business Travel	16054	16.05	2294	2.29
Total	25811	25.81	6964	6.96

As The Weather Makers B.V. rents their office with a vacant property managing company, it pays a standardised fee for electricity and heating. Within the building there are no measuring points, thermostats or other possibilities to track the electricity or gas usage of the company solely.

Therefore, The Weather Makers calculated their CO2-emissions equivalent using the Green House Gas (GHG) Protocol and related Emission Factors². With this approach an inventory is made of the different sources of CO2eq emissions (GHG inventory). This allows for quantification and management of the related emissions. To get to CO2 equivalents emissions factors are used and related to the usage of different appliances that are used in the office and the research facility.

The table below gives an overview of the direct emissions related to Scope 1:

Scope 1: Direct Emissions				
	MEANS OF TRANSPORTATION	Activity	Total distance traveled (km)	CO2 emissions (kg CO2-eq/y)
1	Company car / petrol / medium	Commuting	10445	2067
	Total Scope 1			2067

Table 2: Scope 1 Emissions

The total emissions for Scope 1 are 2067 or 2.1 tonnes of CO2.

As shown in the above table, the appliances that use the most electricity are the computers used by the consultants and engineers. As the main service of The Weather Makers is on consultancy, this would be expected. The research facility called the Eco Oasis Dome also uses electricity. In this R&D facility, The Weather Makers conduct research on ecosystem regeneration.

The indirect emissions or emissions within Scope 2 are shown in Table 3.

² <https://www.co2emissiefactoren.nl/wp-content/uploads/2024/03/CO2emissiefactoren-2024-2015-dd-20-3-2024.pdf>

Scope 2: Indirect Emissions						
	OFFICE	Units	Electricity consumption (kWh/d)	Electricity consumption (kWh/y)	CO2 emissions (kg CO2-eq/y)	Reduction
1	Fridge	2	1.6	584	266	266
2	Freezer	1	0.8	146	67	67
3	Microwave	1	0.2	23	11	11
4	Tosti-maker	1	0.05	6	3	3
5	Coffee machine	1	0.5	58	26	26
6	Computer	11	0.52	661	301	301
7	Screen	11	0.20	254	116	116
8	Television	1	0.09	11	5	5
9	Radiator	11	0.06	53	1350	1080
10	Eco Oasis Laboratory R&D			1006	459	459
	Total Scope 2				2603	2333

Table 3: Scope 2 Emissions

Emissions related to scope 2 entail all indirect emissions. These emissions are generated on behalf of the company. The reason is that The Weather Makers have a contract with the vacant property managing company that also covers electricity and gas. Therefore, the related emissions are calculated using the GHG Protocol approach to gain insights. The total emissions for Scope 2 in Q1 and Q2 2024 are 2603 or 2.6 tonnes of CO2.

In Table 4, the emissions related to Business Travel are given.

Business Travel				
	MEANS OF TRANSPORTATION	Activity	Total distance traveled (km)	CO2 emissions (kg CO2-eq/y)
1	Particular e-car / green energy	Commuting	825	2
2	Particular car / petrol / small	Commuting	7265	1264
3	Particular car / petrol / medium	Commuting	1611	329
4	Particular e-bike	Commuting	10445	31
5	Train national / NS	Commuting	51642	0
6	Train international	Commuting	170	3
7	Plane	Commuting	3090	531
8	Particular car / petrol / small	ZLTO (through the year)	768	134
	Total Business Travel			2294

Table 4: Business Travel

The total emissions for Business Travel are 2294 or 2.3 tonnes of CO2.

The GHG Protocol uses conversions factors to calculate the emissions related to Scope 1, 2 and Business Travel. The conversion factors can be found in Table 5 below:

Conversion factors			
Item	Unit	Value	
Petrol car / small	kg CO2-eq/km (WTW)	0.174	
Petrol car / medium	kg CO2-eq/km (WTW)	0.204	
E-car / green energy	kg CO2-eq/km (WTW)	0.002	
E-bike	kg CO2-eq/km (WTW)	0.003	
Plane / 700 - 2,500 km	kg CO2-eq/km (WTW)	0.172	
Plane / > 2,500 km	kg CO2-eq/km (WTW)	0.157	
Train national / green energy	kg CO2-eq/km (WTW)	0	
Train international	kg CO2-eq/km (WTW)	0.017	
Gray current	kg CO2-eq/kWh	0.456	
Average heating networks	kg CO2-eq/GJ	25.37	
Working days per month	d/m	21	
Working months per year	m/y	11	

Table 5: Conversion factors used in GHG Protocol

5 Reduction

The Weather Makers will implement several measures to reduce emissions related to all three scopes. The measures that will be implemented can be found in the table 7 below.

	Source	Measure	Reduction
Scope 1	Company cars	Tire Pressure - continue	3%
Scope 1	Company cars	Less use	2%
Business Travel	Private cars	Tire Pressure – continues	3%
Business Travel	Flights	Reduce flight of Eduardo with 33%	33%

Table 7: reduction measures The Weather Makers

The effect of these measures is calculated into the expected total emissions for 2025, these are given in Table 8 below.

Emissions 2024	CO2 emissions (kg CO2-eq/y) 2023 Ref	CO2 emissions in tonnes 2023 ref	CO2 emissions (kg CO2-eq/y) 2024 Q1+Q2	CO2 emissions in tonnes 2024 Q1 + Q2	Reduction measures
Scope 1	4262	4.26	2067	2.07	2%
Scope 2	5496	5.50	2603	2.60	10%
Business Travel	16054	16.05	2294	2.29	8%
Total	25811	25.81	6964	6.96	

Table 8: effects of measures on expected emissions

6 Participation and Initiatives

The Weather Makers is looking on the website of SKAO to see if they will join any new initiative in 2025. One of the initiatives that could be of interest is <https://positieveimpact.nu/>.

Memberships that The Weather Makers have are with the Netherlands Water Partnership and the Dutch Metropolitan Innovations. Both these organisations have a goal to increase sustainability in the Netherlands and on a larger scale, Europe and globally.

With The Netherlands Water Partnership, The Weather Makers have pledged to the Water Action Agenda³.

Also, The Weather Makers have presented themselves and won the Prestige Award at the Green Innovation Hub in Almere with DMI, to promote regreening and water resilient cities in The Netherlands.

³ <https://sdgs.un.org/conferences/water2023/action-agenda>



The Weather Makers
2,444 followers
6mo • 🌐

The Weather Makers is trotse winnaar van de Prestige award bij de Green Innovation Hub contest in Almere, waar we de eer hadden om onze oplossing om Natuurwaarde bij gebiedsontwikkeling te presenteren.

Onze felicitaties aan Vennster, winnaar van de Golden award voor hun burgerparticipatie app. Veel succes met de uitrol en verdere ontwikkeling.

Dank aan het team van Green Innovation Hub voor de organiseren van deze dag. We wensen jullie veel ontmoetingen en innovatieve ideeën op jullie prachtige nieuwe locatie.

Show translation

🌐 41 1 comment · 2 reposts

👍 Like 💬 Comment 🔄 Repost

Comment as The Weather Makers... 😊 📷

7 Disclaimer & Ondertekening

The information in this document is confidential to the person to whom it is addressed and should not be disclosed to any other person. It may not be reproduced in whole, or in part, nor may any of the information contained therein be disclosed without the prior consent of The Weather Makers B.V. A recipient may not solicit, directly or indirectly (whether through an agent or otherwise) the participation of another institution or person without the prior approval of the directors of The Weather Makers. This document does not grant any right or license in relation to the information herein contained, nor does it transfer any intellectual property rights

Signature

Kenmerk: CO2-ladder

Datum: 14-11-2024

Versie: 3

Verantwoordelijke Directeur: Maddie Akkermans

<< voor akkoord per 14 november 2024 >>

<< No signature has been placed due to privacy reasons as this document is published online >>