CO_2 Performance Ladder Progress Report

VenhoevenCS
architecture+urbanism

Year	2024
Period	Q1 – Q4

General conclusion

We have set a very sharp ambition on the reduction of scope 1 and 2:
30% reduction in 2028 compared to 2022

It is good that the ambition is high, the question is whether we should invest so much time and energy in these ambitions.

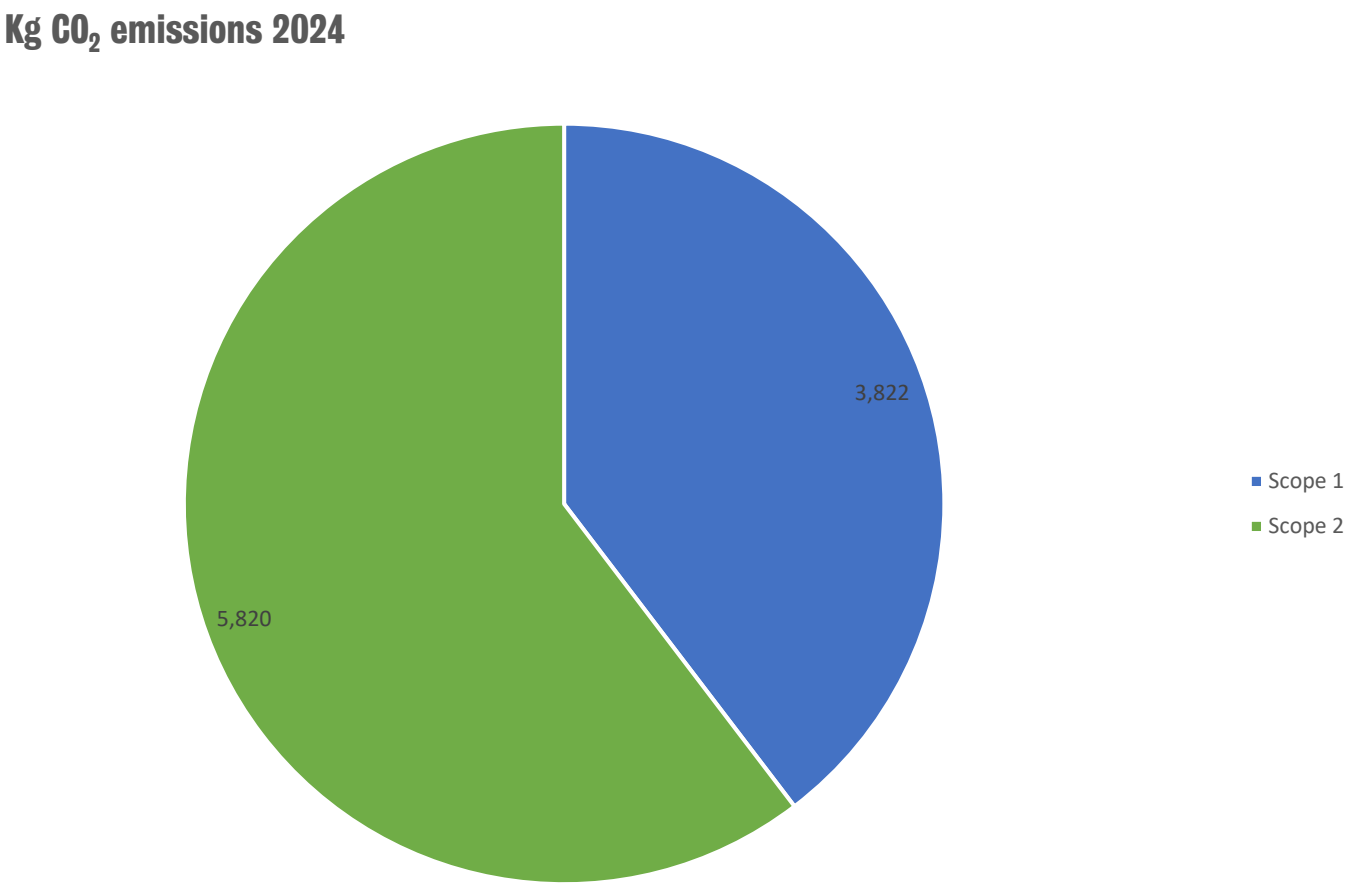
Average emissions in Dutch companies in the business services sector are between **3.000-4.000** kg CO_2 emissions per FTE.

In 2024 we had an average of 47,57 FTE, resulting in **203** kg CO_2 emissions per FTE, less than 10% of the lowest emission benchmark.

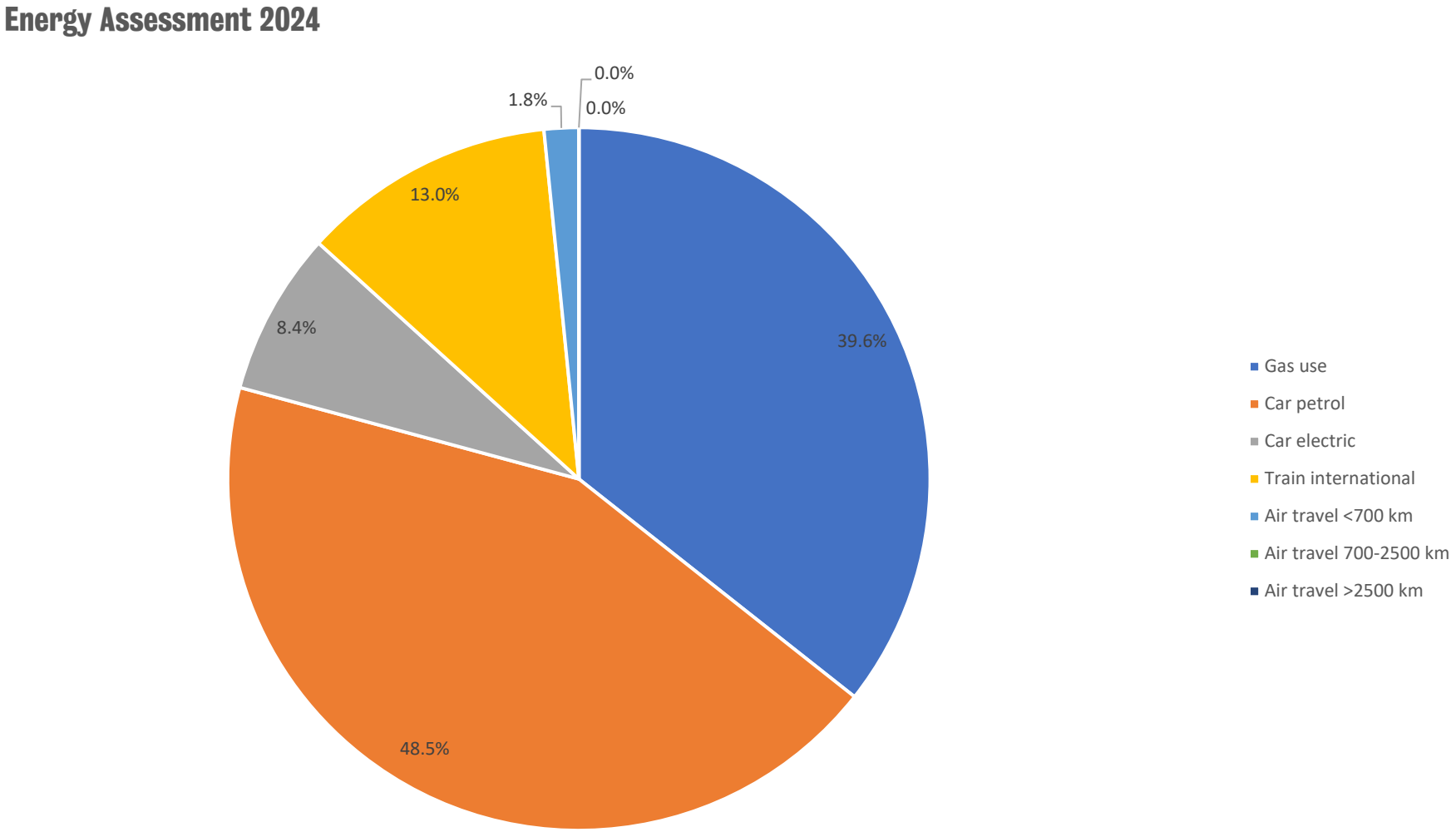
Perhaps it makes more sense to spend time, energy and money on the CO_2 calculation tool for the projects.

Total Scope 1 & 2

Emissions Scope 1 & 2



Emissions Scope 1 & 2



Progress scope 1&2

Absolute emissions in kg

30% reduction of emissions in 2028 compared to reference year 2022

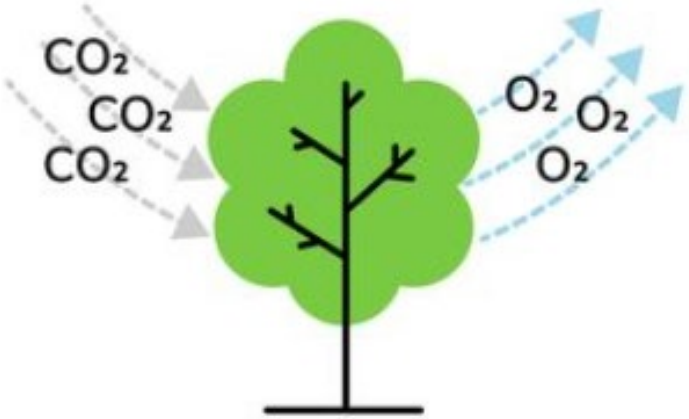
	2022	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	
Goal	-						14.883	kg CO_2
Realized	21.262	20.987	9.642					kg CO_2

The reduction is 100% due to less flights! Car travel increased!

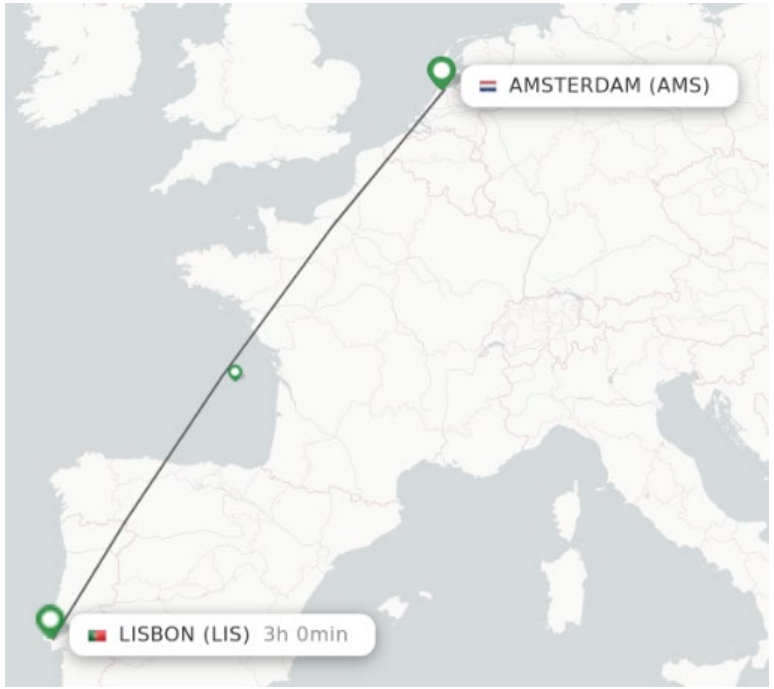
Emissions Scope 1 & 2

Our 2024 CO_2 emissions equal:

1 year of electricity for 15 average households



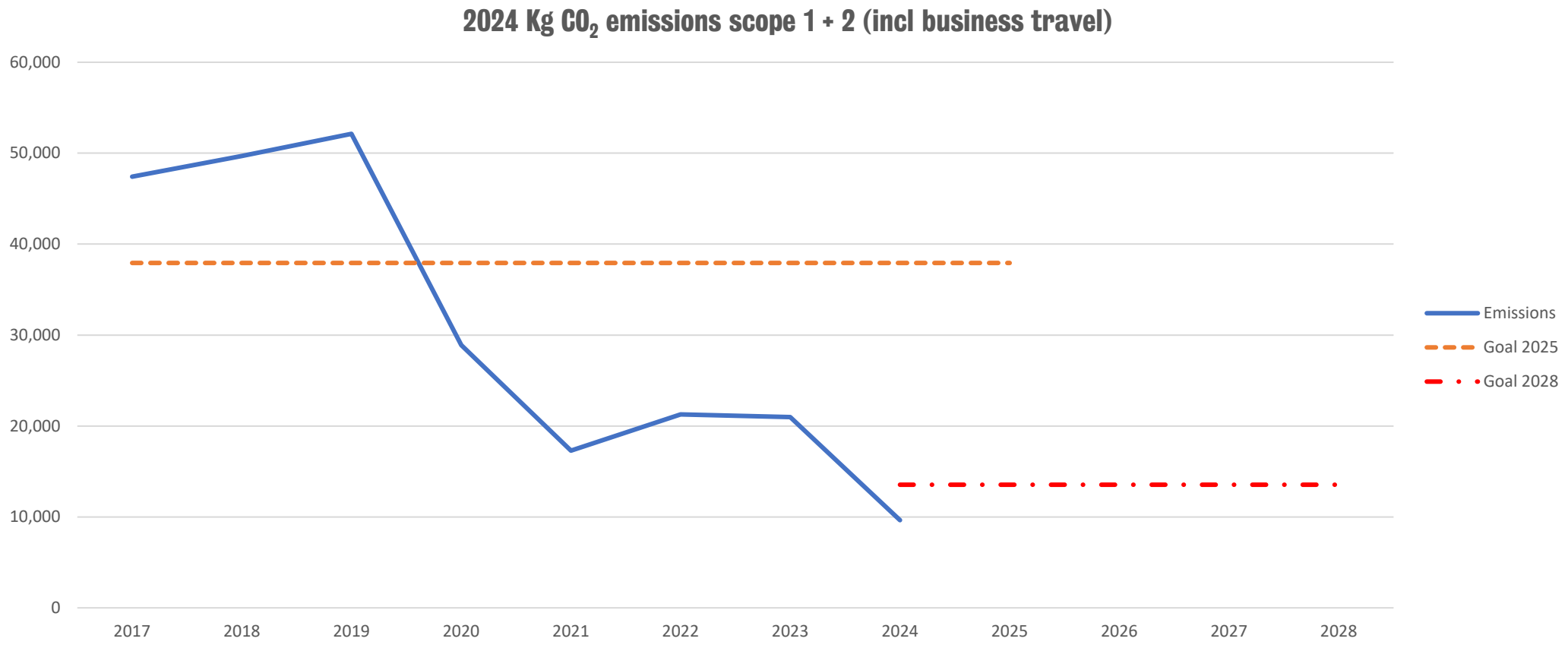
The growth of 438 trees for 1 year



18 return flights from Amsterdam to Lisbon (economy class)

1,5 times around the world with a regular car

Emissions Scope 1 & 2



Scope 1

Progress Scope 1

Gas use

49% reduction of emissions in 2028 compared to reference year 2022

	2022	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	
Goal	-	6,86	6,07	5,37	4,75	4,20	3,70	kg CO_2 per m^2
Realized	7,26	4,73	4,00					kg CO_2 per m^2

We switched to green (forest compensated) gas in May 2017

Scope 1 measures

Gas use

Measures 2023

✓Purchase and installation of smart thermostat	January 2023
✓Installation of smart gas meter	October/November 2023

Expected reduction 5.5 %

Measures 2024

~~✓Installing 1 hybrid heat pump~~	there are technical issues that need to be solved first – expected 2nd half 2025

Expected reduction 11,5%

Measures 2026

✓Installing 1 hybrid heat pump

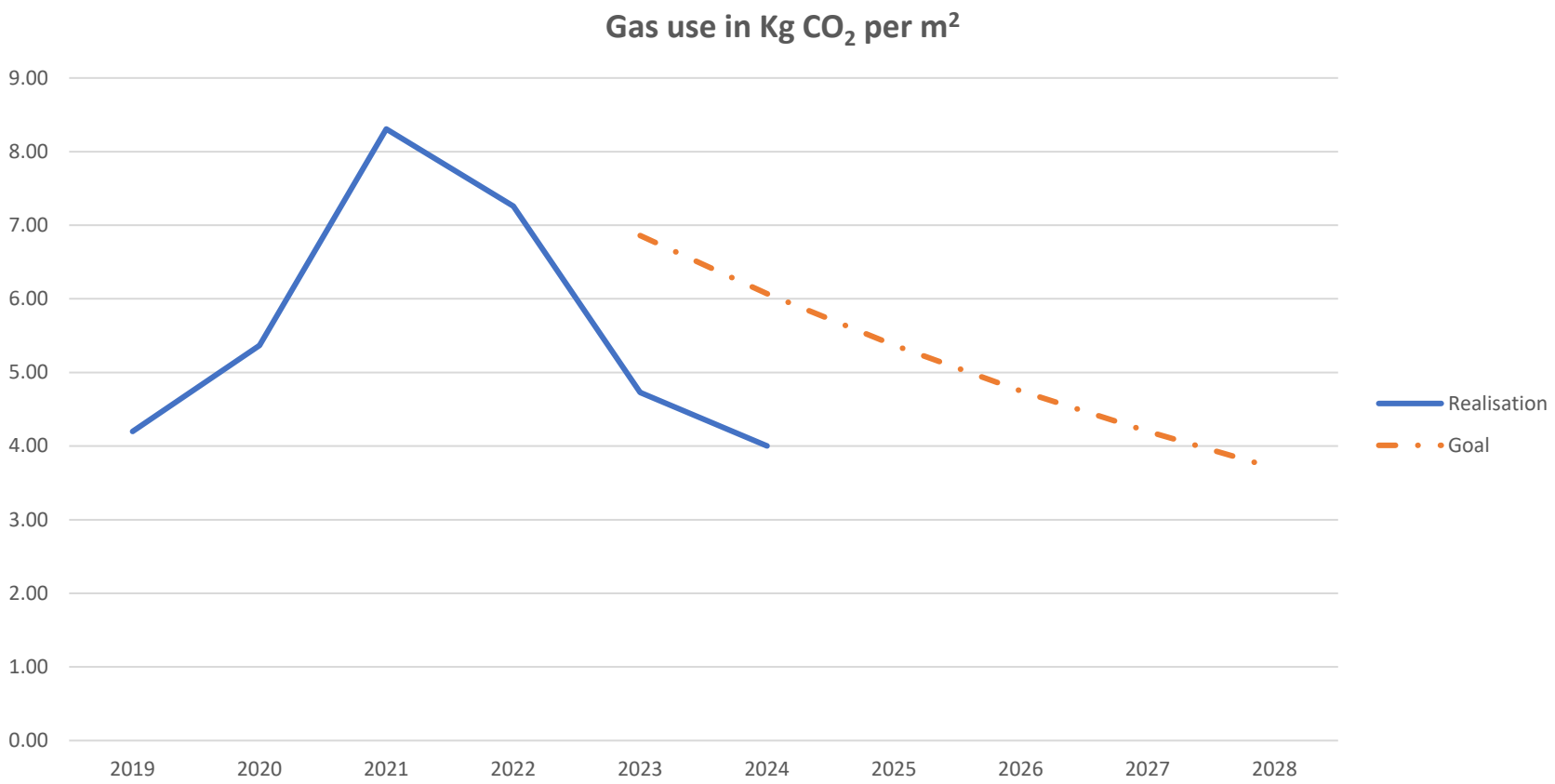
Expected reduction 11,5%

Measures 2028

✓Installing 1 hybrid heat pump

Expected reduction 11,5%

Progress Scope 1



Scope 2

Progress Scope 2 operations

Business Travel by Car: operations

49% reduction of emissions in 2028 compared to reference year 2022

	2022	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	
Goal	-	39	34	28	25	23	21	kg CO_2 per FTE
Realized	41	64	**32**					kg CO_2 per FTE

Below the goal for the first time!

Scope 2 measures

Business Travel by car - Operations

Measures 2024

✓At least 1 electric private car can show charging by renewal energy only. This will change the conversion factor from grey to green for the km driven of at least 1 electric private car.

Expected reduction: 15%

Measures 2025

✓All shared car use is electric (grey).
✓At least 2 electric private car can show charging by renewal energy only.

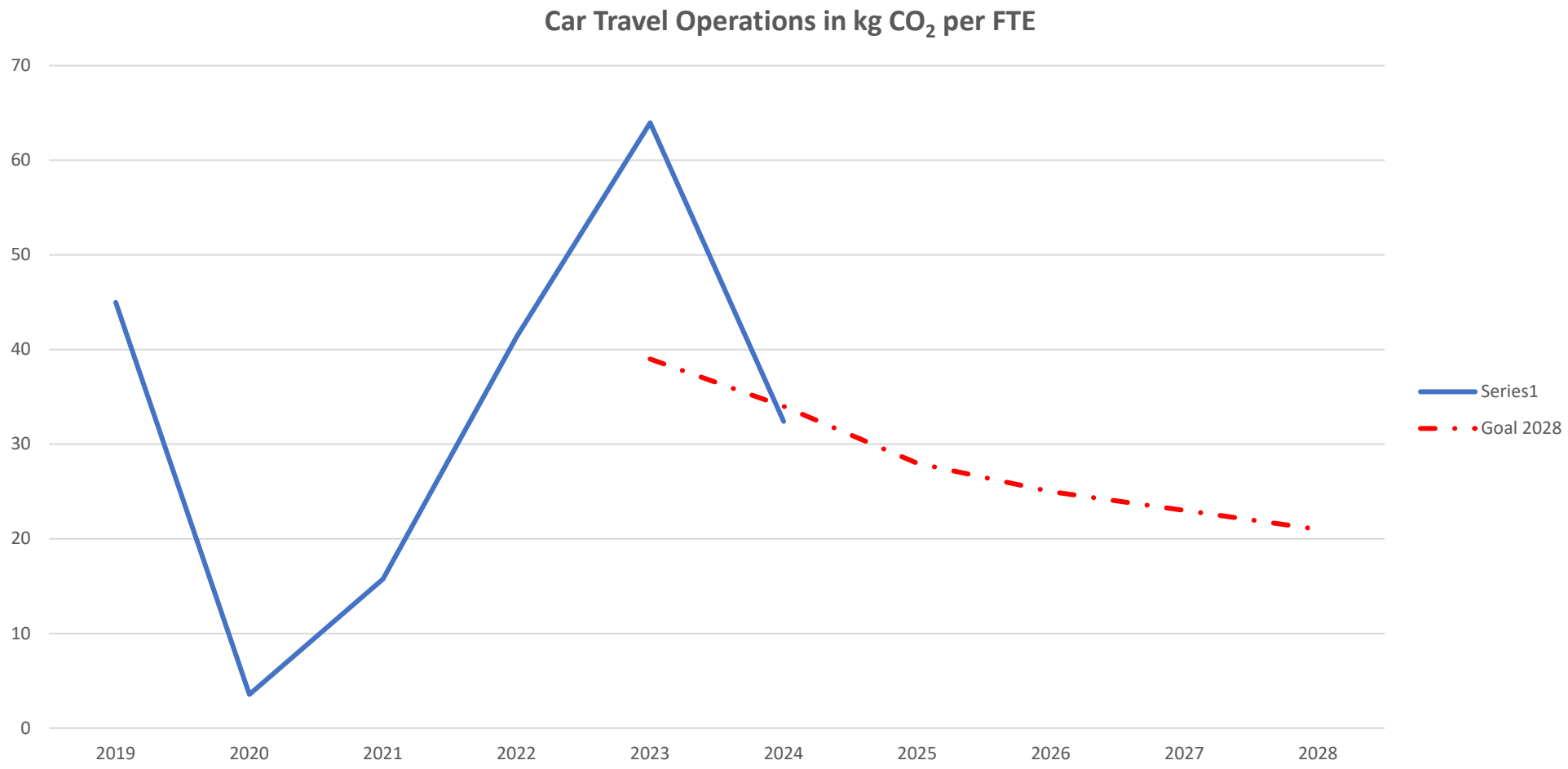
Expected reduction: 17%

Measures 2026 - 2028

✓Every year another 1/3 of all kilometres driven by private car will be done by electric private car (grey) instead of petrol, so in 2028 all kilometres driven by private car will be electric.

Expected reduction: 9% per year

Progress Scope 2 operations



Conclusions Scope 2 Operations

We travelled 3.500 km less for BD/PR purposes last year than the year before (11.041 vs 14.752 km). Of those 11.041 km, 2.271 km was driven with an electric car charged with 100% renewable energy (vs zero in 2023).

For the first time we are well below pre-corona levels!

	2019	**2020*)**	**2021 *)**	**2022**	**2023**	**2024**
Emitted	45	4	16	41	64	**32**

*) corona period

Progress Scope 2 projects

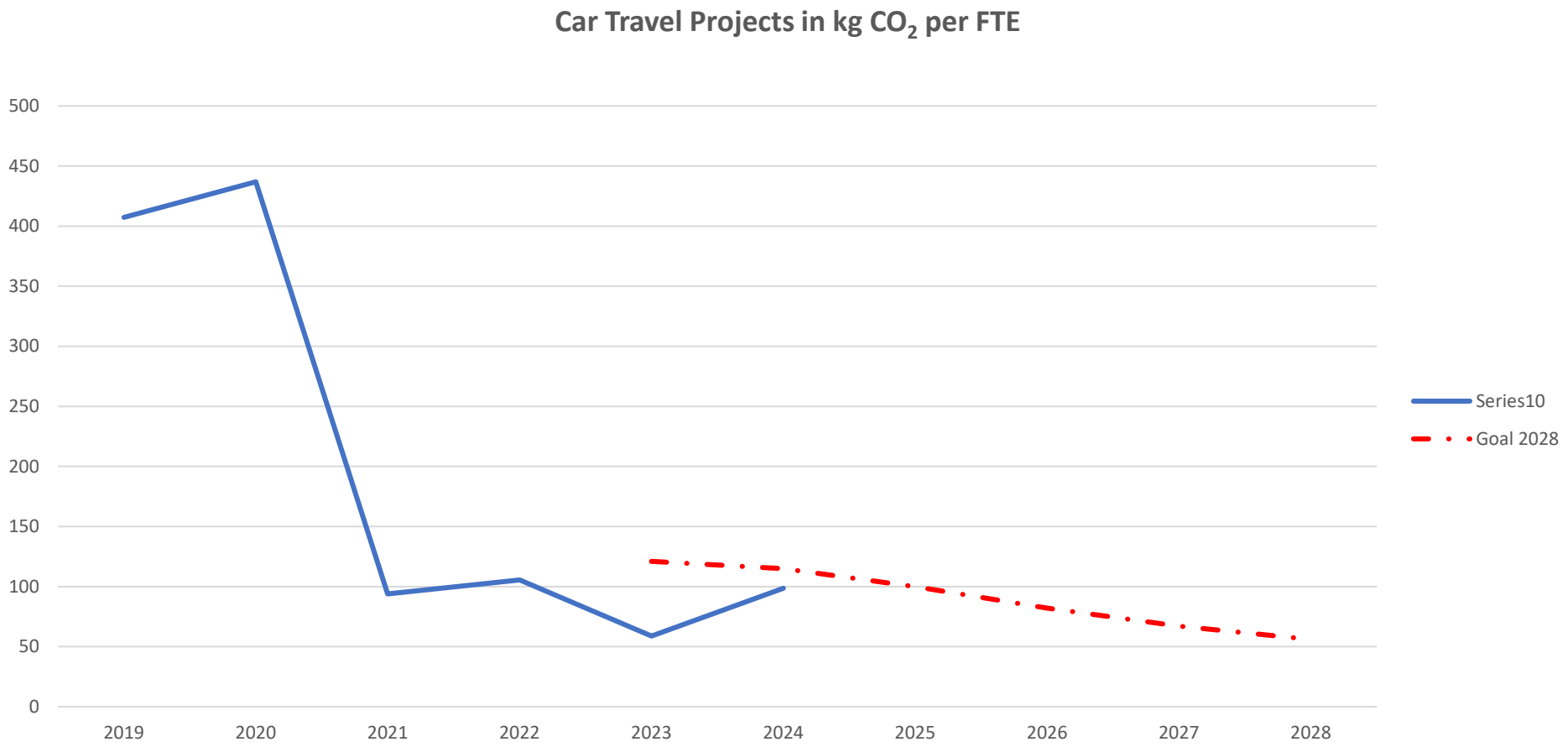
Business Travel by Car: projects

54% reduction of emissions in 2028 compared to reference year 2022

	2022	*2023*	*2024*	*2025*	*2026*	*2027*	*2028*	
Goal	-	121	115	100	82	67	56	kg CO_2 per FTE
Realized	105	59	99					kg CO_2 per FTE

Even though we are below the goal, there is a sharp increase compared to 2023!

Progress Scope 2 projects



Conclusions Scope 2 Projects

We drove a lot more for projects in 2024 (32.576 km) than in 2023 (15.814 km).

Increase in km driven:	106%
Increase in CO_2 emissions:	68%

So how come we emitted relatively less CO_2?

% EV km in 2024	43%
% EV km in 2023	26%

Scope 3: Chain Analysis

Goal Scope 3

Scope 3 Chain Responsibility

VenhoevenCS
To create impact awareness of the CO_2 emission impact among ourselves, our clients and our project partners, we will use the Environmental Impact Tool in at least

- 75% of new Dutch architecture projects in 2023
- 50% of all new architecture projects in 2024
- 75% of all architecture projects in 2025

We will use it in all architecture projects, not in consultancy, studies or urban planning.
We will use it in all category of projects, including complex sports and mixed-use buildings

Chain Analysis

We did not make our goal in 2023.

Therefore, we are:

1. Making an inventory on why the tool is not used more and what we should change in order to make the tool more accessible
2. Applying for external funding to adjust and finalize the tool, based on the outcome of the inventory

Funding received!