CO_2 Performance Ladder Progress Report

VenhoevenCS
architecture+urbanism

Year	2022
Period	Q1 – Q2

CO_2 management system

Continuous improvement of insight and CO2 reduction measures regarding:

1. Our operations
2. Our projects
3. In our value chain

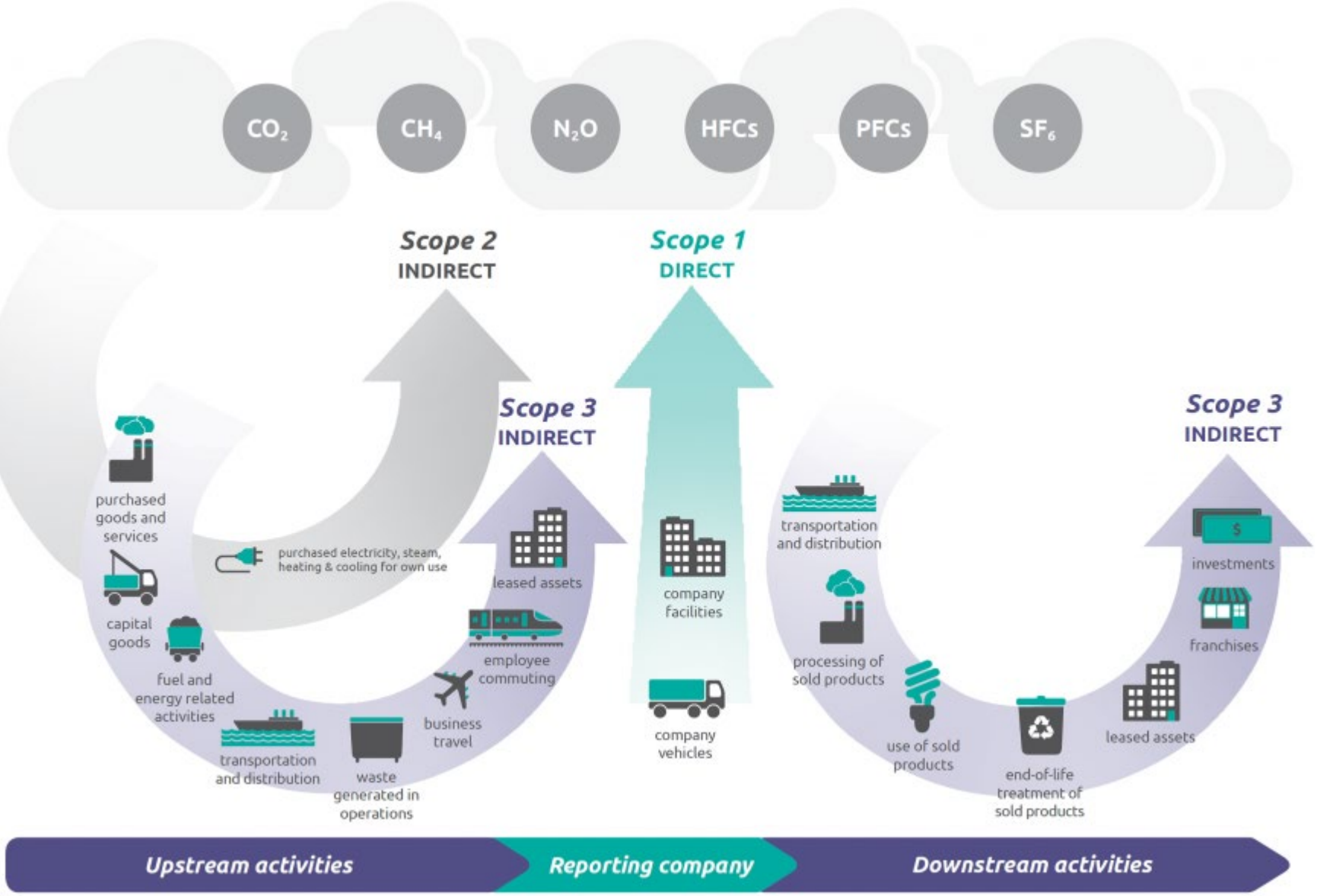
Additional requirements for

1. Communication – letting others know what you do
2. Participation - influencing

Scope Definitions

Scope 1	Direct emissions inside the company use of gas for heating the office
Scope 2	Indirect emissions inside the company through purchased energy e.g. electricity use in the office and mobility for business activities
Scope 3 *Upstream* *Downstream*	Indirect emissions in the value chain commuter mobility, use of paper, mobility by suppliers (e.g. cleaning, waste, all kinds of deliveries) and emissions made by subcontractors
Scope 3 *Analysis* *Initiative*	Value chain analysis and initiative the analysis of CO_2 emissions in one of the value chains we are active in a planned approach to realize a pre-determined reduction objective in the values chain on the basis of the analysis, together with the partners in the value chain

Scope Definitions



Value chain initiative

In 2020, we created a new chain analysis and set goals for the next 6 years.

Shadow costs of building elements

We have the ambition to design with shadow costs. We would like to show our clients and project partners the CO_2 repercussions of choices that are made regarding the material of building elements.

2020	2021	2022	2023	2024	2025	
0%	25%	50%	50%	75%	90%	of projects*)
1	1	1	2	2	3	primary building elements**)

*) With a project, we mean a Dutch architectural project that will be built (no studies or urban planning)

**) With primary building elements, we mean supporting structure, floors, walls, roofs, foundation, installations, finishings, etc.

Goals

Our CO2 reduction goals

A. Scope 1 + 2: General CO_2 Reduction

20% reduction of emissions for scope 1 & 2 (operations and projects) in 2025 as compared to 2015, calculated as kg CO2 per FTE

B. Sub objective: gas consumption

VenhoevenCS will reduce their emissions caused by gas consumption with 60% per FTE in 2020 compared to 2015

C. Sub objective: Business travel

VenhoevenCS will reduce their business travel with 25% per FTE in 2025 compared to 2015

D. Scope 3

In 2025, 90% of our Dutch building projects will have a paragraph in the design text stating the shadow costs of 3 primary building elements, including a clarification of CO2 reduction possibilities **This is our Environmental Impact Tool!**

Progress General Reduction

A. General Reduction CO_2 of 20% (2015-2025)

	2015	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2025*	
Goal	4130	4047	3965	3882	3800	3717	3634	3552	3304	kg CO_2 per FTE
Realized	4130	2528	1953	1930	2438	1037	327	*522*	…	kg CO_2 per FTE

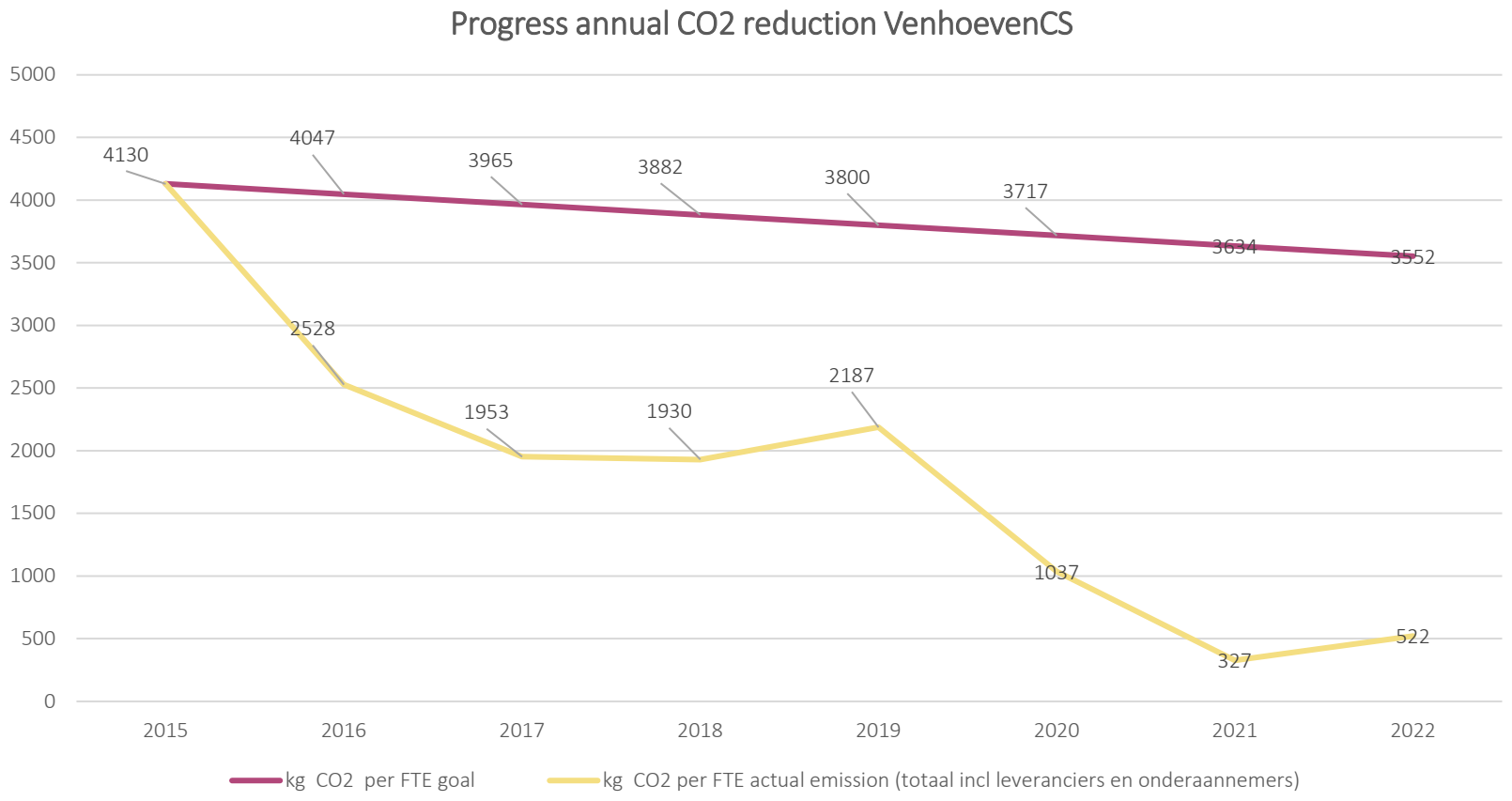
NB prognoses based on calculation Q1 and Q2 and then extrapolated for the whole year

Dutch benchmarks vary widely per type of organization. An organization that works

- mostly local and whose employees do not visit many relations, averages 1.000 kgCO_2 per FTE
- national and whose employees visit relations regularly, averages 4.000 kgCO_2 per FTE
- internationally and whose employees visit international relations regularly, or has a branch abroad, averages 12.000 kgCO_2 per FTE

Source: Climate Neutral Group

Progress General Reduction



2019
Increase!

2020
Covid-19

2021
Covid-19
AND 37% increase FTE
AND 65% increase m^2

2022
Decrease of FTE
No Covid-19

Progress gas-use reduction

B. Sub objective: gas consumption

	2015	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	
Goal	153,6	135,2	116,7	98,30	79,87	61,40	…	…	kg CO_2 per FTE
Realized	153,6	86,80	71,9	72,88	74,80	72,34	35,98	*54,88*	kg CO_2 per FTE

NB prognoses based on calculation Q1 and Q2 and then extrapolated for the whole year

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

Progress Business Travel

C. Sub objective: Business travel

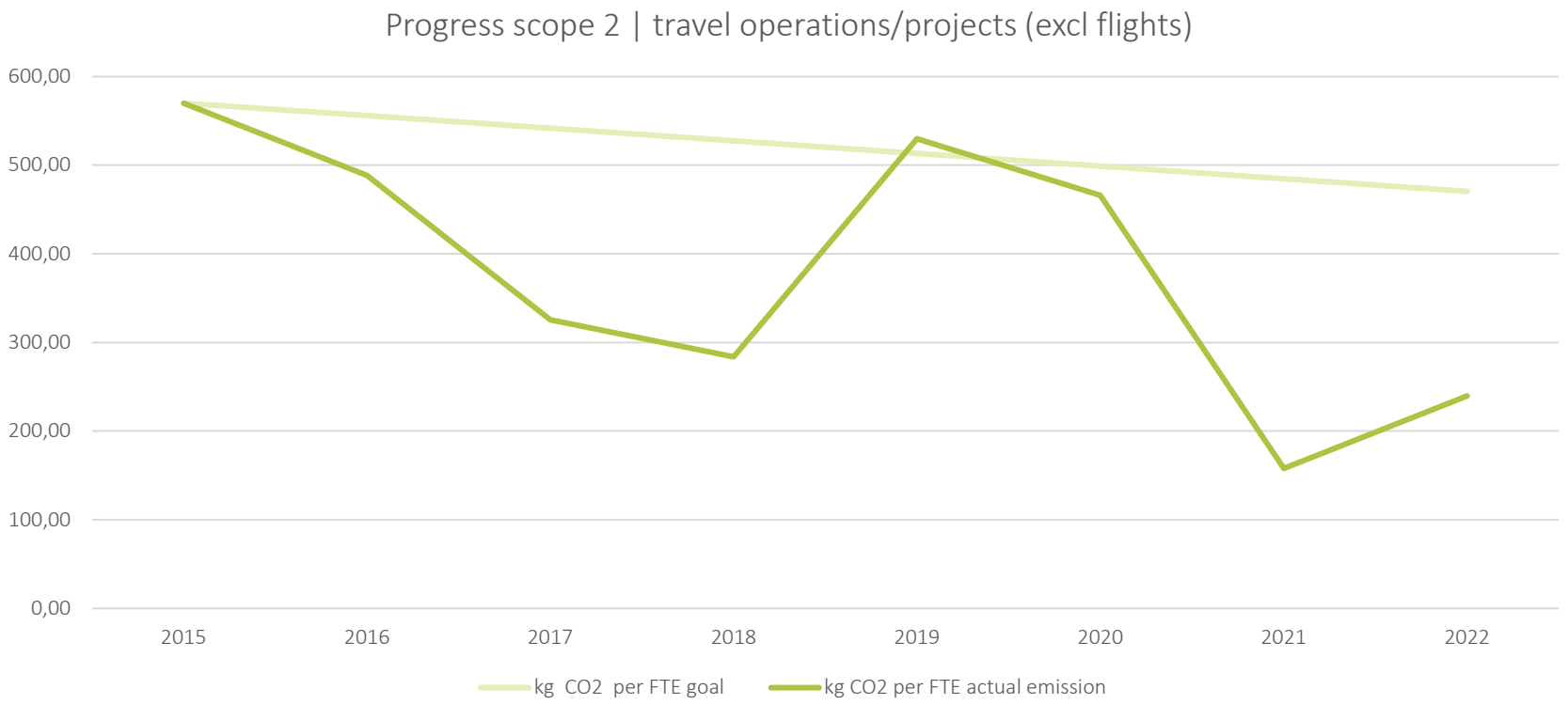
VenhoevenCS will reduce their business travel with 25% per FTE in 2025 compared to 2015.

Reduction CO_2 25% through travel (excl. flights) in our operations/projects (2015-2025)

	2015	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2025*	
Goal	570	555,8	541,5	527,5	513	499	484,5	470,25	427,5	kg CO_2 per FTE
Realized	570	488,5	325,3	283,6	529,9	466,1	157,89	*208,5*	…	kg CO_2 per FTE

NB prognoses based on calculation Q1 and Q2 and then extrapolated for the whole year

Progress Business Travel



2019
Increase!

2020
Covid-19
No flights!

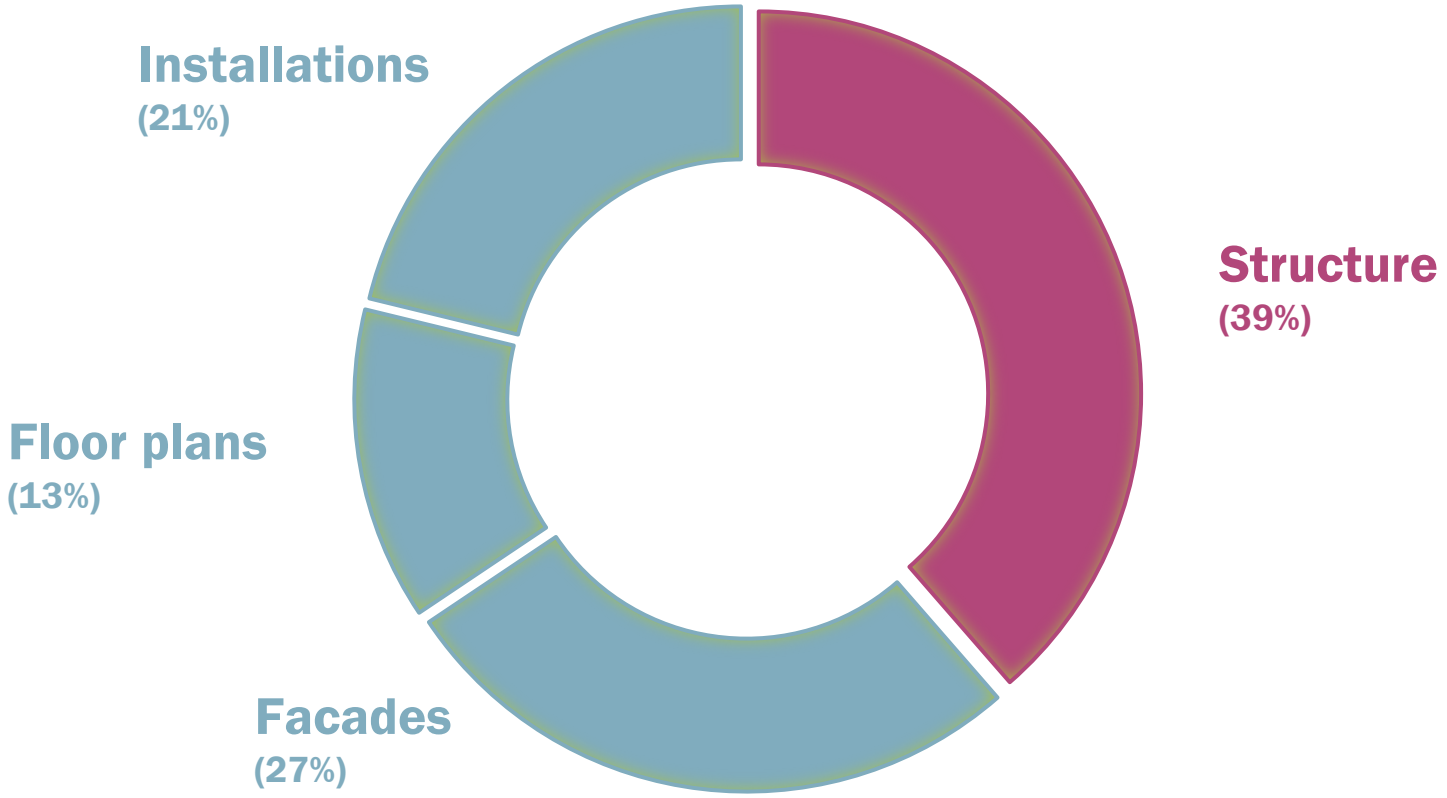
2021
Covid-19
No flights!
Most public now has zero CO2-emission

2022
No Covid-19

Progress Scope 3

D. Scope 3

The goal for 2021/2022 was to have a template for 1 building element ready. But we had a delay in the implementation of the Environmental Impact Tool because we decided to work together with IMd for the further development of the tool.



Progress Scope 3

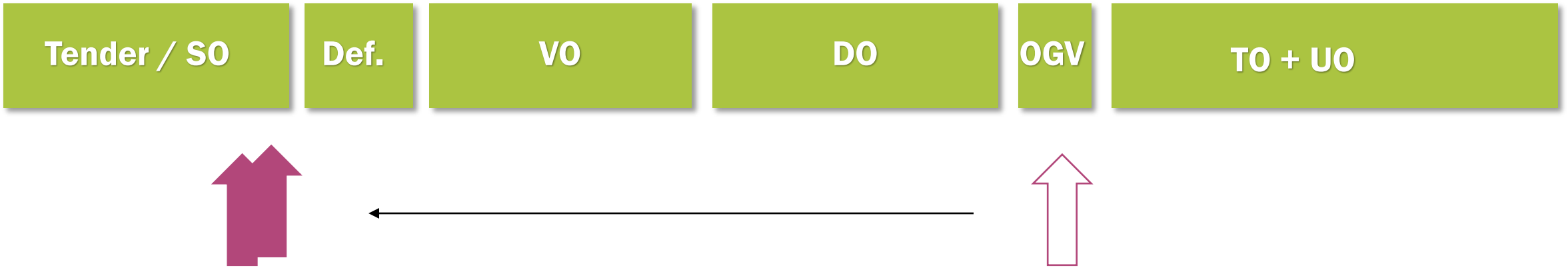
D. Scope 3

This is when the decision about (the sustainability of) the structure takes place

This is when the environmental impact of the structure is calculated for the first time

Progress Scope 3

D. Scope 3



This is when the calculation of the environmental impact of the decision on the structure should take place

Progress Scope 3

D. Scope 3

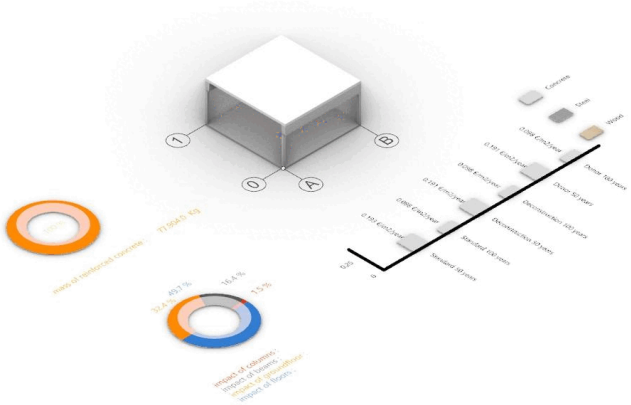
There is a working Beta-version of the Structural Embodied Carbon Calculator V 1.0

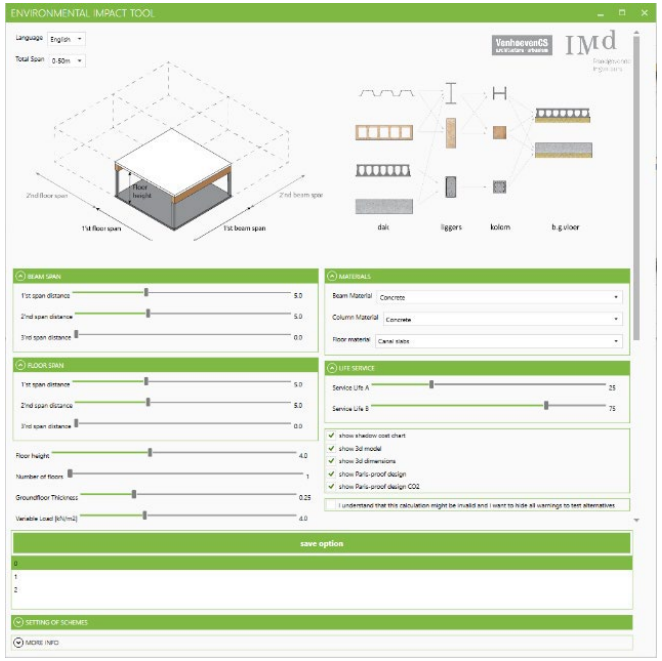
Also known as: The Environmental Impact tool

The tool can now be used for internal use – in our projects and with our clients

In 2023 we are focusing on implementing the tool in the office.

Besides that, we are looking into what else to do with the tool:
Perhaps we make the tool available for free, perhaps we will make it into a marketable and sellable product, further develop the tool for facades, etc.





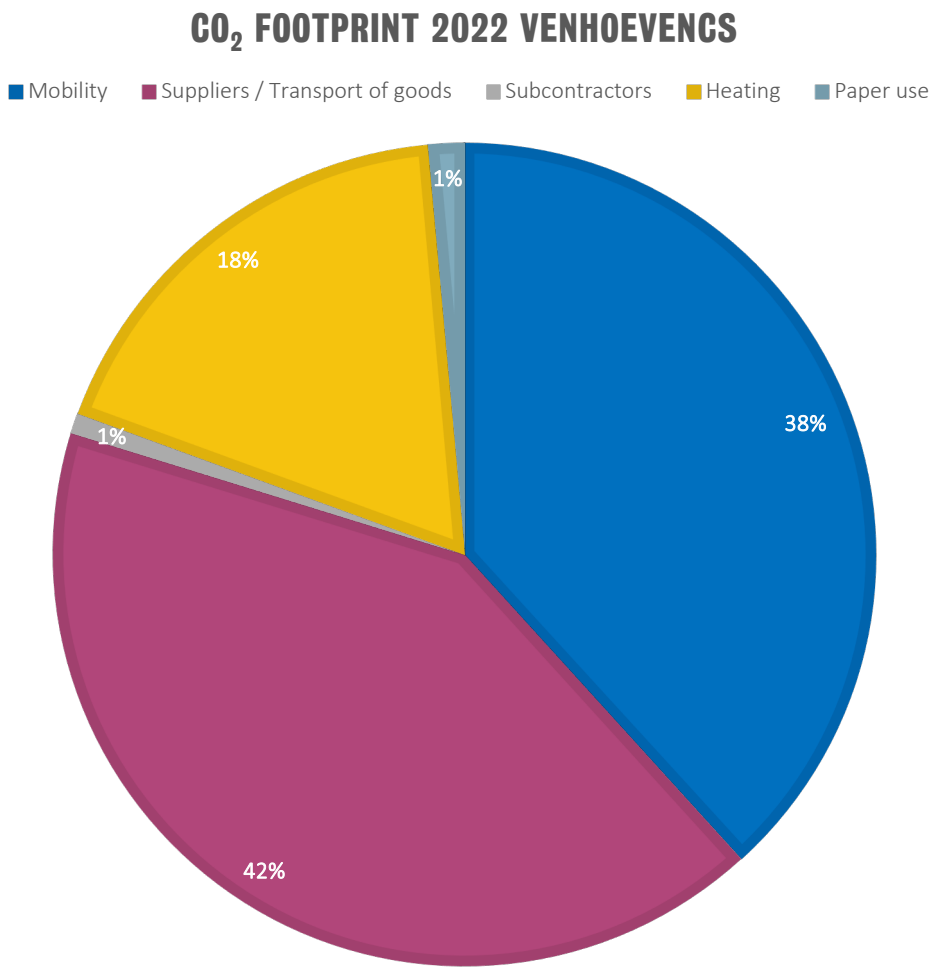
Total footprint 2022

Prognose 2022:

31.841 kg

[2021: 18.690]

[2020: 44.577]



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Thank you for your participation!

Colophon

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