CO_2 Performance Ladder Management Report 2025

FCC Construcción S.A. (NL)

Contents

1. Milestones 2025-2026

CO_2 Performance Ladder (CO_2 PL) Implementation & System Improvements

- Simplification of the CO_2 Performance Ladder management system to facilitate wider adoption across the company.
- Successful completion of the external AENOR audit for greenhouse gases emissions data for 2025.

Emission Reduction & Operational Improvements

- Reduction of on-site diesel consumption through change of strategy and acquiring more electricity.
- Continuous monitoring of emission reductions achieved through implemented best practices.
- Integration of subcontractors' best practices, such as the use of solar panels on site to supply clean energy.

Scope 3 improvements and inclusion of new categories

- Inclusion of two new carbon footprint categories within Scope 3; *waste management* and *indirect emissions from fuel- and Energy-Related Activities (not included in Scope 1 or 2).*
- Launch of a new employee survey to more accurately quantify commuting-related emissions.

Materials, Circularity & Life-Cycle Assessment

- Adoption of best practices for material reuse to minimize embodied emissions.
- Use of project-specific emission factors for materials, enabled by conducting LCAs for asphalt, concrete, and steel.

Reporting & Stakeholder Engagement

- First-time reporting of CO_2 performance results of the best practices implemented in the project regarding material circularity to Rijkswaterstaat, the project's client.
- Support to Rijkswaterstaat during a workshop on implementing the CO_2 Performance Ladder within the A9 BaHo project.

2. Preface

FCC Construcción Policy

FCC Construcción integrates the Environmental issues directly in its business strategy as part of its policy. Its environmental policy is the demonstration of its commitment towards compliancy, preventing and mitigating environmental impacts. With the implementation of its environmental management system, FCC Construcción aims preventing unnecessary burdening of the environment.

Where FCC Construcción sees that the work may have adverse effects on the environment, every effort is made to minimize these effects or prevent them where possible (prevention).

FCC Construcción not only complies with the requirements of the applicable laws and regulations but goes a step forward always working on being a driver changing through implementation of good practices in its works. Together with the client, FCC Construcción tries to find solutions that are even better for the environment. Good practices as ensuring the separate collection and processing of waste, efficient use of water and energy wherever possible, stimulating the environmental awareness and motivation of our employees and those working on behalf of FCC Construcción, etc., are developed in all the projects and fixed locations of the company.

FCC Construcción, as part of its Sustainability Strategy, put efforts on engaging with sector associations to encourage knowledge exchange on ESG matters. The company follows developments and sustainability tendencies, in order to always be able to apply the most up-to-date technology in materials, techniques and processes. By applying these developments itself, FCC Construcción has gained a lot of experience in building with materials, techniques and processes that combine sustainability, construction speed and cost savings. With regard to sustainability, making the right choice in application of materials and working methods is of great importance. FCC Construcción applies good environmental practices where possible on all its projects.

Through constant monitoring and meticulous follow-up of environmental indicators, they are identifying areas of opportunity to optimise their processes and maximise their positive impact.

The activities of the company have a direct impact on the environment; we are aware of our responsibility for nature and the environment. FCC Construcción carries out research into making the chain more sustainable, whether or not together with suppliers, knowledge institutes and sector organisations. We strive to continuously improve our environmental performance, which is reflected in our Sustainability Report 2023-2025 and the Environmental Communication 2025.

GHG emissions and Climate Change

FCC Construcción commitment towards climate change has encourage the company to annually publish its Greenhouse Gases Report where the annual quantification of the CO2 emissions of every country where FCC Construcción operates its included. This is quantified and verified based on the ISO 14064-1 Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals and ISO14064-3 Specification with guidance for the validation and verification of greenhouse gas assertions.

FCC Construcción allocates climate change as one of the greatest challenges to face, not only as a company, but also as part of the current society, and requires the involvement of all sectors to implement specific measures to reduce greenhouse gas (GHG) emissions. Aware of the urgency of the matter, FCC Construcción has developed its Climate Change Strategy, as part of the Environmental Dimension of the 2050 Sustainability Strategy, to deal with the strategic line of Climate Action. In this document, strategic lines of action covering actions and defined objectives have been designed. The strategic lines of action are the following:

- Mitigation: Moving towards climate neutrality
- Adaptation: Solutions for climate resilience in construction
- Improving climate change governance

CO2 Performance Ladder

One of the focal points of the environmental management policy and Sustainability Strategy, is the reduction of CO2 emissions and mitigation of climate change.

Reduction measures are sought within the activities of FCC Construcción, always striving for the most efficient ones in terms of viability and impact.

Besides, working together with stakeholders ensures that optimization is not limited to the individual company. Thus, integrating them in the company's management and activities increases their commitment and transparency, essential aspects to ensure the company's growth. By means of research and initiatives, FCC Construcción makes knowledge available to the sector and thus takes its social responsibility.

In terms of the implementation of the **CO2 Performance Ladder**, FCC Construcción will communicate its Energy Policy, Emission Inventory and Quantitative Reduction Objectives internally and externally every six months. The communication channels are further elaborated in document *"CO2 Communication Plan"*. The level at which FCC Construcción with Emissions Inventory deals with CO2 reduction, meets the requirements of the CO2 Performance Ladder for **level 5**.

3. FCC Construcción (NL) commitment towards sustainability and climate change

3.1. FCC Construcción Policies

FCC Construction's sustainability policy *(FCC Construcción Policies)* are designed to integrate environmental, social, and governance (ESG) principles into their construction activities, ensuring responsible and sustainable practices.

Regarding FCC Construcción NL, the Dutch branch has its own Policy which integrates the Health, Safety and Environmental guidelines to follow.

Key initiatives include the transition to renewable energy sources, significantly reducing Scope 2 emissions from electricity consumption. Additionally, FCC Construcción has set ambitious targets in its Climate Change Strategy to reduce greenhouse gas emissions to achieve climate neutrality in 2050. The company also focuses on energy efficiency improvements, such as optimizing construction processes and materials to lower energy consumption and emissions. These measures are part of a broader strategy to ensure sustainable and resilient infrastructure development, contributing to global efforts to combat climate change. FCC Construcción NL and all sustainability plans of its CO_2 and Energy Management System are aligned with the *Sustainability Strategy 2026-2050* of FCC Construcción S.A.

In FCC Construcción NL, an Energy Management Operative Plan has been drawn up in accordance with the ISO 50001. The goal is to provide the company and its projects with a supporting document for setting up systems and processes to achieve energy efficiency and CO_2 emissions reduction.

Additionally, the report of energy consumption and quantification of GHG emissions is done under the ISO 14064:2018. Annually, the emissions are disseminated internally and externally.

3.2. Climate Change Commitments

FCC Construcción has set reduction GHG emissions goals, which are all described in the Climate Change Strategy 2023-2026. This strategy outlines ambitious goals, including achieving climate neutrality by 2050. As an intermediate target, the company aims to reduce greenhouse gas (GHG) emissions by 35% in Scope 1 and 2 by 2030. Their approach includes adopting renewable energy sources, enhancing energy efficiency, and implementing innovative construction practices to minimize environmental impact. Additionally, FCC Construcción focuses on adaptation measures to increase the resilience of their infrastructure against climate change. Through continuous monitoring and governance improvements, they ensure that their actions align with evolving climate policies and contribute to global sustainability efforts.

In 2026, an assessment of the compliance of all objectives will be carried out and also new objectives will be implemented.

At FCC Construcción NL and in its A9 BaHo project, the practical implementation can be demonstrated.

The company is leveraging the benefits of the CO2 Performance Ladder to achieve significant environmental benefits. The project aims to minimize CO2 emissions through various strategies involving implementing measures in all emissions categories. The total reduction is facilitated by transitioning to more sustainable sources of energy, optimizing energy efficiency in construction processes, and addressing emissions related to the most impactful materials.

These measures not only enhance the project's sustainability but also set a benchmark for future infrastructure developments.

3.3. Governance and Stakeholder Engagement in CO2 Reduction Initiatives in the A9 BaHo project

FCC Construcción NL is actively collaborating with various stakeholders to achieve significant CO2 emissions reductions in the A9 BaHo project in the Netherlands. This collaboration involves engaging with local authorities and with suppliers in order to ensure that the project meets stringent GHG reduction standards. FCC Construcción NL is implementing in its project measures such as transitioning to renewable energy sources, optimizing construction processes, and reducing

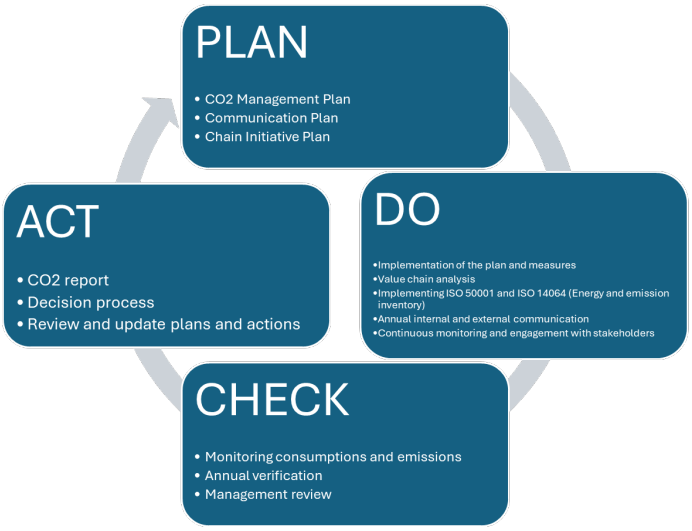
emissions from key materials like steel, concrete, ground, and asphalt. Through continuous dialogue and cooperation with stakeholders, FCC Construcción NL ensures that their CO2 reduction initiatives are effective and aligned with broader environmental goals.

4. Implementation of the CO2 Management System

This report helps FCC Construcción NL's to report its emissions in an exercise of transparency and striving for continuous improvement.

The aim is also to detail all planned actions that come from the CO2 Management System that it's implemented in the company in compliance with the level 5 of the CO2 Performance Ladder certificate, which is the highest possible level.

The CO2 Management System of FCC Construcción NL is implemented in accordance with the Plan-Do-Check-Act (PDCA) cycle, ensuring a systematic approach to managing and improving CO2 reduction initiatives.



The relationship between documents and actions is caused by the PDCA-dependence of the CO2 Performance Ladder by which the requirements must be fulfilled, allocating the different deliverables to one, or multiple, stage of the PDCA Deming cycle.

All document mentioned in the Table are either 1) a plan, 2) a procedure, 3) Inventory or analyse, 4) Report. All actions to first implement the CO2PL into the company are extracted from all operative plans and bundled into chapter 5 Implementation Plan.

The internal process to achieve the fulfilment of the CO2PL requirements its done by defining the actions and continuously monitoring the results and the progress of implementation towards the final goal.

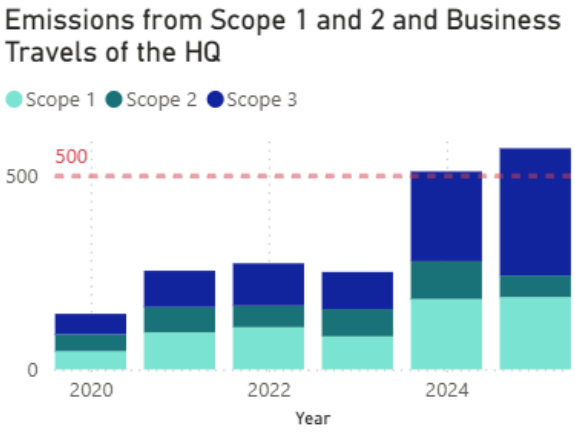
4.1. Organisational boundary

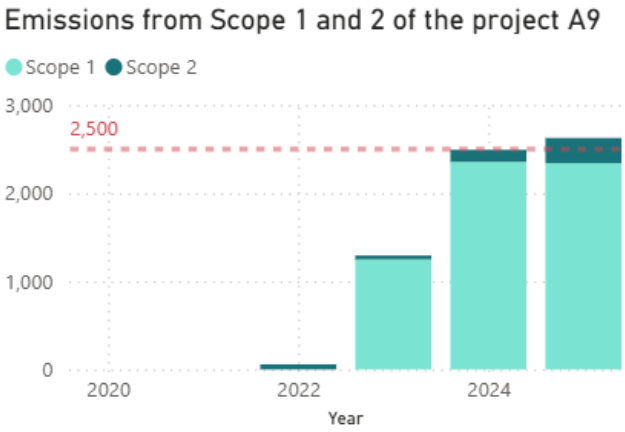
The organisational boundary is determined based on the contractual relationship of FCC Construcción S.A (NL). The applicability of the CO2 PL is for the VeenIX A9 BaHo project. FCC Construcción S.A. (NL), has a EPCM contract with Veenix BaHo B.V. and Veenix BaHo B.V. has a DBFM contract with RWS. By means of the EPCM contract all Engineering, Design, Construction and Maintenance requirements of the DBFM contract are transferred to FCC Construcción S.A. (NL).

4.2. Size of the organization

The CO2 Performance Ladder distinguishes between organisation sizes. It distinguishes organisations as small, medium or large based on their annually CO2 emissions.

According to the GHG Emissions of FCC Construcción NL showed in the following pictures, FCC Construcción (NL) does not exceed the limit emissions from scope 1 and 2 and the business travels of 500 tons of CO_2 in its offices, neither the 2.000 tons of CO_2 in the site project. Thus, the size of the organisation is **medium**.





4.3. CO2 MS Implementation in the company

In 2025, The CO2 Management Plan was updated plan was devised to implement the CO2 Performance Ladder within FCC Construcción S.A (NL). The implementation proved successful, and the next objective is to uphold the certification. This requires the CO2 Management team to undertake various tasks, including research, calculations, and the definition, planning, monitoring, analysis, and reporting of CO2 reduction measures.

Additionally, to maintain the certification, it is necessary to provide reports to the CO2 Management Board regarding the status of CO2 management and reduction measures for decision-making purposes. We have conducted analyses to gather information on these matters, presenting the findings concisely yet accurately to inform the CO2 Management Board. Fact sheets and reports have been utilized to guide decision-making processes aimed at achieving and sustaining Level 5 of the CO2 Certificate.

The Sustainability Management Plan was shared with the PMT at the start of the project in order to inform and communicate the scope of Sustainability Management Plan, Plans and procedures described within in order to involve and commit all Management areas in the goals of Sustainability Management Plan.

The Project Director sent a communication email at the beginning of the project to all organization informing on CO2 goals and the needed collaboration of all the organization in reaching this goal. Over the past year, we have further informed the organization about the progress of the goals we've achieved by conducting a comprehensive presentation for the entire organization.

4.4. Deviations and action for implementation

Missing data

Data collection is key for gaining insight into our energy consumption and CO2 emissions. This enables us to set CO2 targets, measures, forms the base of the strategy and serves for creating continuous improvement.

The process of collecting, monitoring and reporting on this data is responsibility of the Sustainability team, as well as implementing this process into the FCC Construcción S.A. (NL). The sustainability team is responsible for putting information requests in the CO2 Management Board meeting agenda.

Deviations

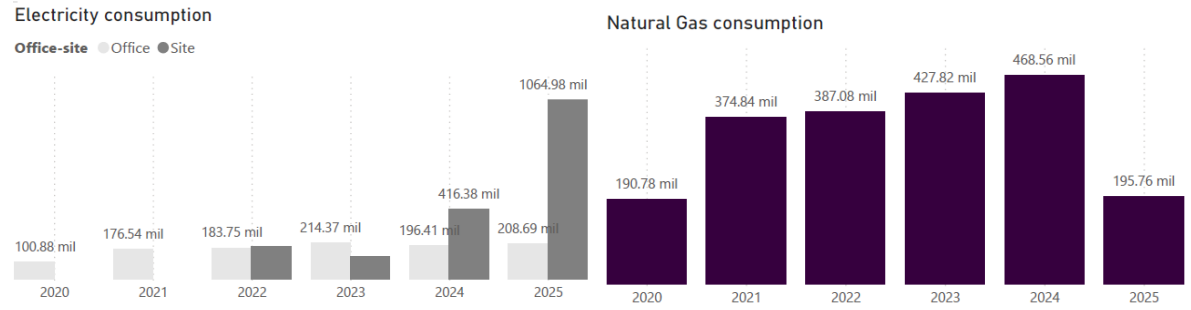
All deviations are allocated and addressed systematically to ensure continuous improvement and maintain operational integrity. The process typically involves several key steps: identification, analysis, corrective action, and monitoring.

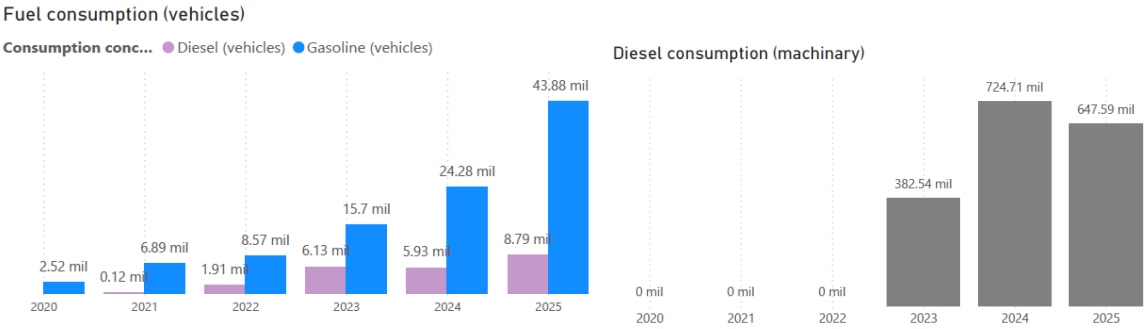
5. Insight on the energy performance

As part of the implementation of the CO2PL System, the energy consumption is meticulously monitored and analysed throughout the project's construction phase. This report presents the comprehensive results of our energy consumption analysis.

Analysing the electricity and natural gas consumption of the project, we can see that, once the project started its full activity (after the covid pandemic in 2020), the consumption has been stable in the offices.

In the initial years, specifically 2020 and 2021, electricity consumption was predominantly in the offices, reflecting the preparatory and planning phases of the project.





Considering the consumptions from fuels as gasoline and diesel, its evidenced that, as the project progressed into active construction phases in 2022, on-site electricity consumption began to increase significantly.

This shift highlights the dynamic nature of energy usage throughout the project's lifecycle, emphasizing the growing energy demands of on-site activities as construction progresses.

Considering the data from 2025, an effort has been made to not increase the demand of fossil fuels but instead use more electricity, even when the project has been at high production levels. On the other hand, because of the need of more FCC employees working at the site, the gasoline consumption has increased.

6. Carbon footprint

The carbon footprint of the project is calculated based on FCC Construcción S.A. methodology, under the ISO 14064:2018 "*Greenhouse gases. Specification with guidance, at the level of organisations, for the quantification and reporting of greenhouse gas emissions and removals*" and under the sectoral reference of the European Network of Construction Companies for Research and Development (hereinafter, ENCORD).

The methodology of the calculation, as well as the organisational and operational boundaries and exclusions, is described in every GHG Emissions Reports of the company, that it's published annually.

Following the guidelines of the international standards, FCC Construcción NL has made its own materiality analysis for the VeenIX A9 BaHo project, which is updated annually, based on the criteria of FCC Construcción S.A. which are, magnitude of emissions, level of influence on sources, access to information and data accuracy level.

At the beginning of the project, a materiality analysis was done, concluding that the main materials of the whole project will be the following.

- Crushed rubble (site paving or as a foundation for roads and site construction)
- Geotextiles (used in combination with soil, in road construction applications)
- Asphalt
- Steel
- Concrete
- Soil

Additionally, working towards improving the GHG emissions accountancy and alignment with the international standards, in 2025 two new categories of scope 3 were included in the total footprint of the project. In the next table the total carbon footprint of the project is shown, per scope and category.

Scope *Based on GHG Protocol*	Category *Based on ISO14064*	Description	Status	Total CO2 emissions (ton)
Scope 1	Category 1	Direct emissions and removals	Relevant, calculated	2.528,25
Scope 2	Category 2	Indirect emissions from imported electricity	Relevant, calculated	396,37
Scope 3	Category 3	Employee Commuting (In-Itinere Travel)	Relevant, calculated	268,71
Scope 3	Category 3	Business Travel	Relevant, calculated	59,76
Scope 3	Category 3	Upstream Transportation	Relevant, calculated	6.504,32
Scope 3	Category 4	Downstream Transportation	Not applicable to FCC Construcción	-
Scope 3	Category 4	Purchased Goods and Services	Relevant, calculated	55.707,39
Scope 3	Category 3	Capital Goods	Not relevant	-
Scope 3	Category 4	Fuel- and Energy-Related Activities (not included in Scope 1 or 2)	Relevant, calculated	27,13
Scope 3	Category 4	Waste Generated in Operations (Solid and Liquid Waste Disposal)	Relevant, calculated	21,72
Scope 3	Category 3	Upstream Leased Assets	Not applicable to FCC Construcción	-
Scope 3	Category 4	Processing of Sold Products	Not applicable to FCC Construcción	-
Scope 3	Category 5	Use of Sold Products	Not applicable to FCC Construcción	-
Scope 3	Category 5	Downstream Leased Assets	Not applicable to FCC Construcción	-
Scope 3	Category 5	End-of-Life Treatment of Sold Products	Not applicable to FCC Construcción	-
Scope 3	Category 4	Franchises	Not applicable to FCC Construcción	-
Scope 3	Category 3	Investments	Not applicable to FCC Construcción	-
			Total	65.513,65

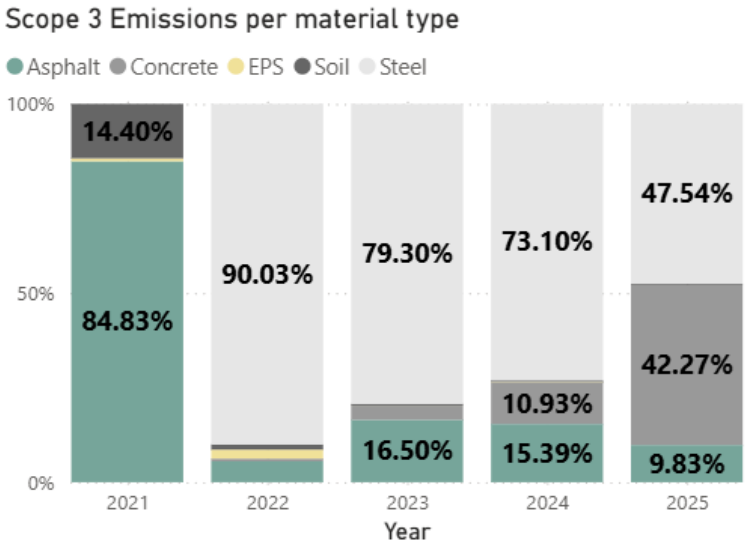
An more in depth analysis of category of *purchased goods and services* is done as it's the category that most impacts the carbon footprint. The contribution per material is below.

Over the four years of the VeenIX A9 BaHo construction project, the use of materials evolved significantly due to the different phases of construction. In 2021, asphalt was the dominant material used for temporary road pavements while soil was the second relevant material reflecting the primary focus on earthworks.

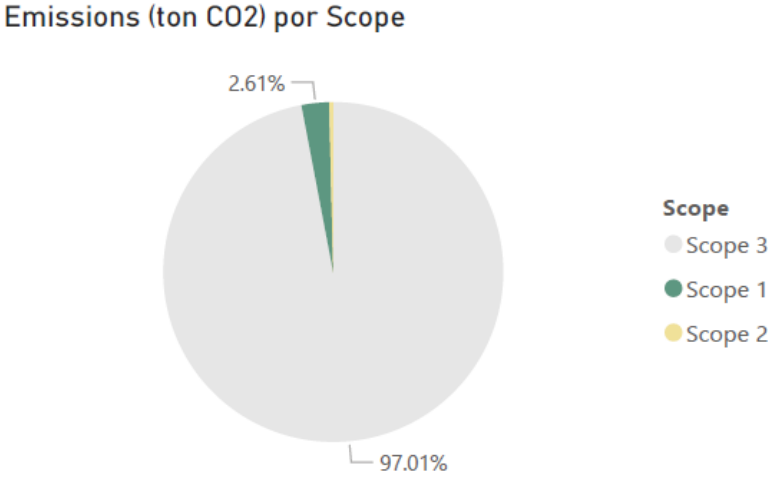
From 2022 onwards, the contribution by soil and asphalt decreased, as steel got more relevant, suggesting a shift towards other construction activities. The main activities in 2022 focused on foundation and structural elements, as most of the ground keeping activities were developed (including the use of sheetpiles and piles).

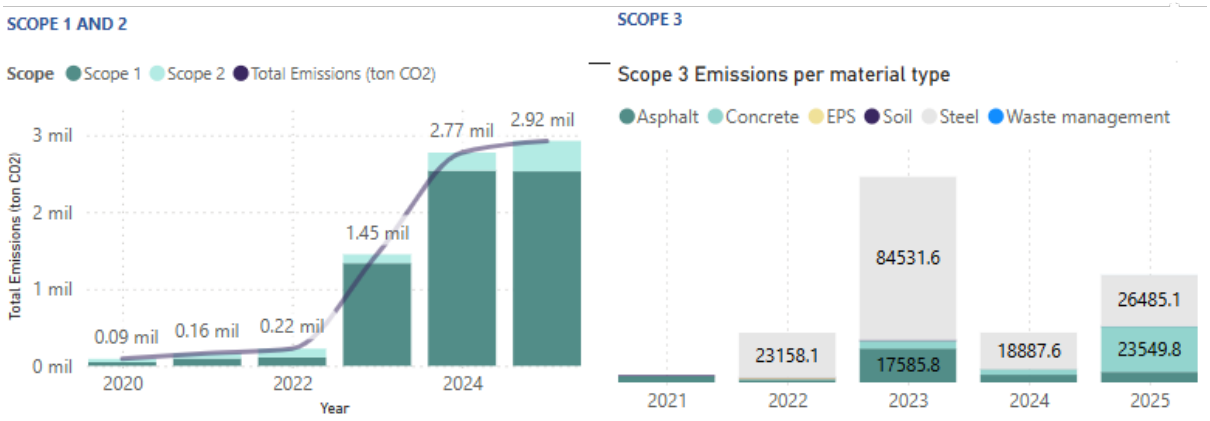
In 2024, steel also played a relevant role, however, not because of the sheetpiles, but because of the use of Gewi anchors as foundation on the deepcut of the project.

In 2025, asphalt, concrete and reinforcement steel have been the main materials consumed, as a result of the progress made in the concrete floors, walls and roofs of the structures and implementation of the final asphalt in several main sections of the project, as in 2025 traffic was open to key parts of the road.

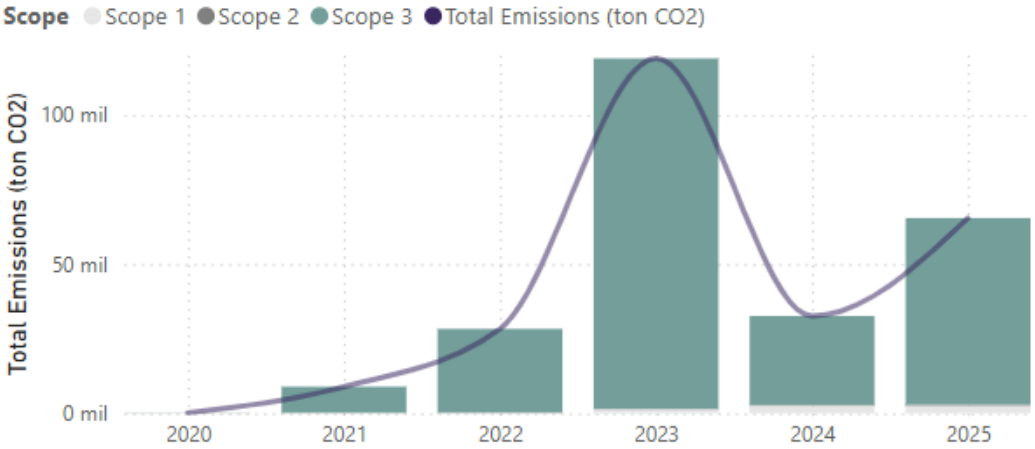


In terms of total emissions, the following graphics show the total quantification of the project.

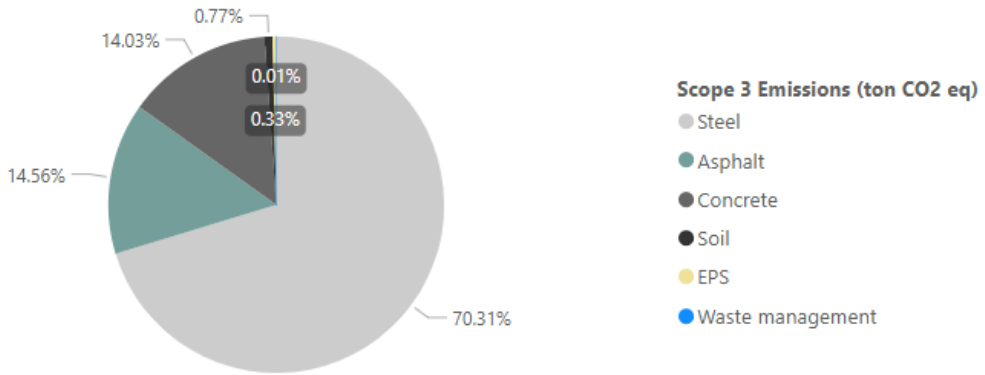




The influence of sheet piles and anchors has become more noticeable in 2023, as reflected in the total CO_2 emissions as steel is one of the most impactful materials in terms of CO_2 emissions. In 2024, the first phases of the deepcut were carried out, such as groundworks and dewatering. These activities had less impact in terms of CO2 emissions. However, in 2025, high amounts of underwater concrete in the deepcut was used, as well as in situ concrete for the superstructures of East and West.



For 2025, the contribution of each material to the total of the emissions is the following;

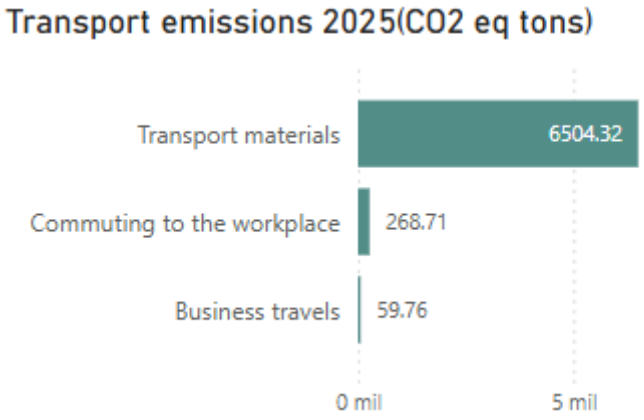


The project also considers the transport as part of their emissions, both from the staff (divided into the emissions produced by the business travels and commuting to the workplace, and the upstream transport of materials from the origin of fabrication to the site).

The emissions of the transport of the materials are calculated based on the distances from the suppliers of the project, and the emissions of the staff are calculated based on the information provided of the Head Quarters of FCC Construcción.

To improve the accuracy of the emissions of commuting to the workplace, a survey among the employees was carried out to gather detailed information on their travel modes and distances, and an option to include ideas to reduce the carbon footprint.

Regular surveys are essential because they capture changes in employees' commuting behaviours over time—such as shifts to public transport, cycling, car-sharing, or increased remote work—ensuring that the emissions inventory remains current, representative, and aligned with real mobility patterns.



7. Commit towards CO2 Reduction Objectives

FCC Construcción demonstrates a firm and long-standing commitment to reducing CO_2 emissions and addressing climate change, positioning environmental responsibility as a central pillar of its corporate strategy.

Since developing its first greenhouse gas (GHG) measurement protocol in 2010, the company has progressively strengthened its approach, culminating in an updated **Climate Change Strategy** that defines a clear roadmap with quantifiable emission-reduction objectives aimed at achieving climate neutrality by 2050. This strategy is structured around three strategic lines—mitigation, adaptation, and improved climate governance—and is supported by comprehensive risk and opportunity assessments aligned with TCFD recommendations. Key targets include a 35% reduction in Scope 1 and 2 emissions by 2030 as an intermediate milestone toward full carbon neutrality.

In the A9 BaHo project, the CO_2 Performance Ladder aims to take reduction measures at project level. At VeenIX, most of the CO_2 emissions take place on the construction site where the equipment consumes a lot of fuel.

At the moment, about half of the certified companies take measures in the production process. This ranges from equipment use to planning optimization to changes to production locations. The CO_2 Performance Ladder aims to take reduction measures on the projects.

FCC Construcción S.A. (NL) declares to be committed to pursue a reduction of approximately 3750 tons of CO_2 emission per year. The total expected reduction comprises 30.000 tons of CO_2 over the lifetime of the project (2020 till 2028).

The reduction targets for the A9 project based on the scope are the following:

Scope 1 emissions (gas consumption): 300 tons of CO_2 reduction

Scope 2 emissions (electricity & business travel): 300 tons of CO_2 reduction

Scope 3 emissions (related to materials): 29.400 tons of CO_2 reduction

The company is putting all efforts in both implementing sustainable good practices in the project and gathering all the information to know the real impact of the measures. The measures which are already implemented and with their impact quantified can be seen in the graph below. Some other in progress actions are to quantify the real impact of using asphalt with high percentages of reused material, the reuse of beams, and the reuse of the demolish concrete as mix granulite for the project.

Implementing and getting the information is a continuous process, which is still in process, with the final goal of achieving the expected CO_2 emissions reduction and contribute to building more knowledge about how the sector can implement mitigation measures in their projects and to the fight against climate change.

The Declaration statement of CO_2 reduction can be consulted in the following link.

8. CO2 Reduction Initiatives in the A9 BaHo.

Currently, the project is working on gathering all the information of all the good practices made and to be made in order to calculate their impact in terms of emissions.

After the phase of exploring opportunities for collaboration, knowledge sharing, and leveraging externally developed expertise, the A9 BaHo project has identified initiatives for CO_2 reduction that our organization can pursue. FCC must have three different types of initiatives to meet the requirements.

Publicly, FCC Construcción commits towards reduction initiatives through the SKAO reduction measure list, which is updated every year.

Regarding the development projects, FCC Construcción NL have chosen to proceed with the following initiatives: EPS recycling, Pilot Project Sustainable Concrete, Reuse Beams, Reuse Guardrails, Reuse Noise barriers and application of recycled sand in structural concrete. By using the principles of the circular economy, it becomes easier for companies that join the initiative to save in CO_2 emissions in terms of the production of the parts. The projects are still in progress, but they will eventually benefit the impact of the project in terms of GHG emissions.

The chosen initiatives of FCC Construcción S.A. (NL) are:

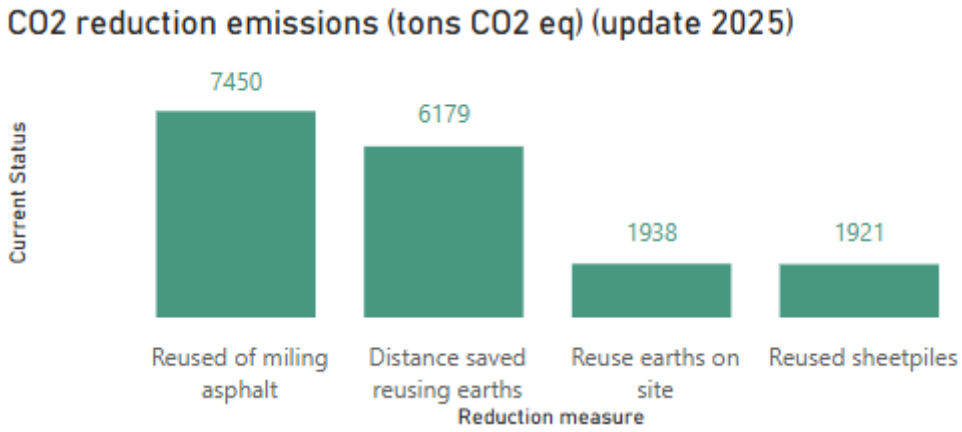
Development projects:

- Ground
  - EPS recycling
  - Application of recycled sand in structural concrete (Renewi and Heidelberg)
- Concrete
- Pilot Project Sustainable Concrete (Kijlstra, Heidelberg and Renewi)
- Re-use Noise barriers
- Re-use Beams (SBIR, RWS, province of North Holland)
- Steel
  - Re-use Guardrails (Heijmans)

Sector-wide program:

- Concrete
  - Re-use Beams (SBIR, RWS, province of North Holland)
  - Pilot Project Concrete (Kijlstra, Heidelberg and Renewi)

Even though is still work in progress, the project has started to quantify the impact of the measures in terms of CO_2 emissions reductions. With the information provided by the suppliers and the information of the project, the reduction impact quantified so far is the following:



Note that this is not the total reduction implemented in the project, and that these numbers will be updated every year.

8.1. Concrete recycling

FCC Construcción actively applies and promotes sector-wide CO_2 reduction initiatives in cooperation **with chain partners**.

For the demolition and reconstruction of two viaducts of the A9 motorway, FCC Construcción collaborated with Renewi, Kijlstra and Heidelberg Materials to enable the high-value recycling of concrete, focusing on selective demolition, separation of material streams and reuse of recycled aggregates in new concrete applications.

This cooperation goes beyond FCC Construcción's own operational boundary and contributes to the reduction of embodied CO_2 emissions in the concrete value chain by reducing the demand for primary raw materials and lowering transport and production emissions. By actively initiating, implementing and sharing this approach within the project and with its supply-chain partners, FCC Construcción demonstrates both awareness and active participation in oriented CO_2 reduction initiatives that are relevant to the infrastructure sector.

9. Transparency

9.1. Communication

Up-to-date information is important for knowledge exchange and stimulation of innovation. Sharing efficient solutions inspires others. This also ensures that each other's good ideas can be used on project components and entities.

FCC Construcción Provides transparency about its ESG information, both internally and externally, through its Sustainability Reports based on the GRI (Global Reporting Initiative). The sustainability information of the projects of the company is reported annually in FCC Construcción website. Also, the company publishes its Greenhouse Gases Emissions annually. This fact is also recognizably implemented in the CO_2 ladder system. VeenIX contributes to the company's report with the environmental information of the project. All relevant news and sustainable projects are published in [FCC Co NL website.]

Aligned with this strengthened communication approach, FCC Construcción seeks not only to implement sustainable practices but also to make them visible, accessible, and inspirational for employees, partners, and the wider public.

VeenIX, in line with its commitment to transparency and sustainability, consistently publishes its CO2 emissions results and reduction plans on its website. By openly sharing these reports, VeenIX ensures that stakeholders can track its progress and verify its efforts to minimize environmental impact. This practice not only aligns with the highest standards of the CO_2 Performance Ladder but also reinforces VeenIX's dedication to reducing CO_2 emissions and promoting sustainable construction practices.

Internally, the project communicates its emissions and progress towards achieving the maximum score in the CO2PL system.

The certification of VeenIX A9 BAHO in accordance with the CO2PL has been published several times both in the website news or in the Sustainability Report of FCC Construcción.

In this spirit of open knowledge-sharing, in 2025, Rijkswaterstaat invited VeenIX to participate in the **Procura+ CityMatch** with other partners along with the CO2 Performance Ladder, as a leading example of circularity in Dutch infrastructure, emphasizing the reuse of materials to lower environmental impact. This initiative aimed to exchange best practices, enhance sector-wide climate action, and encourage continuous improvement in carbon reduction strategies across major infrastructure stakeholders. Through these combined efforts, FCC Construcción reinforces its role as a proactive communicator and a key contributor to accelerating sustainability across the construction sector.

"From a viaduct over the highway, RWS and FCC Construcción shared their experiences with the Ladder and their joint mission to carry out the project as sustainably as possible. In doing so, they not only demonstrated that the Ladder works internationally, but also how market parties are collaborating in innovative ways to reduce CO2 emissions, including through the use of sustainable cement and low carbon machinery and materials."

Additionally, in 2025 Environmental Report, FCC Construcción shared the Good Practices from the A9 Project.

Reuse of concrete beams

Project: VeenIX A9 BAHO
Client: Rijkswaterstaat
Location: Amsterdam (Netherlands)

Description of the work

The VeenIX A9 BaHo project is one of the largest road infrastructure improvement initiatives in the Netherlands. Its objective is to increase mobility and safety on the A9 motorway through actions in an 11.4 km section that include the widening of three to four lanes in each direction, the renovation of 11 existing structures and the construction of a 1.7 km deep cut to optimize the route and reduce the visual and acoustic impact.

Challenge

The project faces the challenge of meeting the strict sustainability requirements of the Dutch Ministry of Infrastructure and Water, aimed at reducing the environmental impact of building materials. As a result, key opportunities were identified, such as the valorization of in-situ debris and the reuse of different materials, including structural components such as planks, anchors, and steel beams.

Among the initiatives developed, the **reuse of the concrete beams** that were part of the pavement of the bridge near Ouderkerk aan of Amstel stood out, considered one of the actions that could have the greatest impact. This proposal posed important challenges such as replacing traditional demolition practices in a large-scale project, such as the remodeling of the A9 BaHo Motorway, with more selective methods, without compromising the stability of the infrastructure or traffic in the surrounding areas, in addition to evaluating the technical feasibility of the beams for reuse.

Solution

In collaboration with the client **Rijkswaterstaat**, the solution adopted by FCC Construcción was to implement a bold **circular economy strategy** in which the feasibility of giving beams a second life through direct reuse or transformation into concrete aggregates to be used as secondary materials in other processes was evaluated.

In March 2024, the beams were selectively and carefully removed for inspection. In total, **360 beams** were evaluated, verifying that they were in excellent condition and with a useful life of more than 100 years. Of these, **220 were destined to be integrated into new viaducts and the Kaagbrug bridge of the A44 motorway**, while the rest were stored at the Nationale Bruggenbank (National Bank of Bridges), a national repository that ensures the availability of high-quality materials for future projects.

Life Cycle Analysis of Materials

Project: VeenIX A9 BAHO
Client: Rijkswaterstaat
Location: Amsterdam (Netherlands)

Description of the work

The VeenIX A9 BaHo project is one of the largest road infrastructure improvement initiatives in the Netherlands. Its objective is to increase mobility and safety on the A9 motorway through actions in an 11.4 km section that include the widening of three to four lanes in each direction, the renovation of 11 existing structures and the construction of a 1.7 km deep cut to optimize the route and reduce the visual and acoustic impact.

This project is part of the Schiphol-Amsterdam-Almere (SAA) road widening program, promoted by Rijkswaterstaat, where FCC Construcción acts as main contractor.

Result

This methodology produces significant benefits in three dimensions:

- **At the operational level:** Informed decision-making is achieved to minimize the **ecological footprint of the infrastructure throughout its life cycle**, concentrating efforts on the materials with the greatest environmental impact.
- **At a strategic level**: Carrying out verified **Life Cycle Assessments (LCAs) for the selected materials represents a key opportunity for FCC Construcción**, which demonstrates its ability to accurately quantify the environmental impact of its activity and **reaffirms its commitment to high-level sustainable performance.**
- **On an environmental level:** Choosing materials with a lower ecological footprint from the purchasing process not only reduces MKI values, but also **significantly decreases the overall environmental footprint of the project.**

9.2. Commitment towards reduction

FCC Construcción demonstrates a clear, public and externally oriented commitment to CO_2 emission reduction at both organisational and project level. This commitment is embedded in the company's Climate Strategy, which sets out short, medium and long-term objectives, interim CO_2 reduction goals and concrete measures aimed at reducing greenhouse gas emissions across all activities and projects, in alignment with European and international climate objectives.

Within this strategic framework, FCC Construcción actively participates in multiple government- and NGO-aligned initiatives that promote CO_2 reduction beyond the company's own boundaries.

Participation in the *Liggers 2.0* and *Closing the Loop* Consortiums

FCC Construcción actively participates in the cooperation agreement between Rijskwaterstaat and Groene Liggers VOF through the Liggers 2.0 and Closing the Loop consortiums, a sector-wide initiatives aligned with national circular-economy and climate policies. The consortiums promotes structural material reuse, knowledge sharing and innovation to significantly reduce embodied CO_2 emissions in infrastructure works.

In the A9 BaHo motorway renovation project, this commitment is concretely demonstrated through the reuse of existing structural beams, preventing the production and transport of new materials and leading to substantial CO_2 savings. By applying this kind of actions directly at project level and collaborating with public and private stakeholders, FCC Construcción shows a tangible contribution to externally driven CO_2 reduction objectives consistent with its Climate Strategy.

Engagement through EIC (European International Contractors)

FCC Construcción is an active member of EIC – European International Contractors, an international industry association (NGO) that promotes sustainability, decarbonisation and climate-aligned infrastructure development in line with European climate policy. Through participation in EIC working groups, knowledge exchange and sector initiatives, FCC Construcción contributes to the development and dissemination of best practices aimed at reducing CO_2 emissions across the construction sector.

The sustainability and decarbonisation principles promoted within EIC are reflected in the company's Climate Strategy and are actively applied within projects such as the A9 BaHo motorway renovation, reinforcing FCC Construcción's public commitment to CO_2 reduction at both organisational and project level.

Public CO_2 Disclosure through the Carbon Disclosure Project (CDP)

In addition, FCC Construcción demonstrates transparency and accountability by disclosing its CO_2 emissions, reduction ambitions and climate actions through the Carbon Disclosure Project (CDP), a leading international non-governmental organisation supporting emission reduction by companies and governments worldwide. Participation in CDP represents a public commitment to measuring, managing and continuously reducing climate impact in line with international climate frameworks.

The disclosure scope covers organisational performance and is supported by project-level measures, including those implemented in the A9 BaHo motorway renovation, thereby directly linking project execution to the achievement of FCC Construcción's stated CO_2 reduction goals.

Through the combined application of its Climate Strategy, active participation in Liggers 2.0 and Closing the Loop consortium, engagement with EIC, and public disclosure via CDP, FCC Construcción demonstrates a robust, verifiable and publicly oriented commitment to CO_2 emission reduction. These actions clearly extend beyond internal operations and are consistently translated into concrete measures at project level.