

CO2 Implementation Plan

Implementation of CO2 Performance Ladder within FCC
Construcción S.A. (NL)



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1 Introduction

The CO2 performance ladder is a sustainability tool for VeenIX A9 BAHO to gain insight into and reduce our CO2 emissions. It is about CO2 conscious behaviour and decisions in our own business operations and execution of our project(s). VeenIX A9 BAHO will be engaged in energy savings and efficient use of materials and sustainable energy. VeenIX A9 BAHO will also ensure that its subcontractors and suppliers make serious efforts to reduce CO2.

In the Tender, VeenIX A9 BAHO has indicated that she will go for step 3/4/5 on the performance ladder. VeenIX A9 BAHO has received a discount on the registration price for this.

The CO2 Performance Ladder has five levels, rising from 1 to 5. Requirements are defined per level that apply to the CO2 performance of the company and its projects. These requirements arise from four perspectives: insight, reduction of emissions, transparency and participation. The location of the project on the CO2 Performance Ladder is determined by the highest level at which the project meets all requirements. The CO2 Performance Ladder helps VeenIX A9 BAHO to structure internal project processes around energy savings and CO2 reduction and to set up sustainability reporting with a focus on CO2. In addition, the CO2 Performance Ladder VeenIX A9 BAHO helps to reduce costs and recognize opportunities in business operations and in the chain.

This plan describes how VeenIX A9 BAHO will achieve this result and how this will be implemented within the organisation of FCC Construction S.A. (NL). The contract has asked to have this certification before the start date. Before VeenIX A9 BAHO can be certified, sufficient data records must be available and published, for example, which CO2 production VeenIX A9 BAHO will cause. The Veenix A9 BAHO CO2 performance program shall meet requirements:

- ME_03026 Compliance CO₂ Ambition level
- Afg_24923 CO₂ Ambition level

1.1 Preview and assumptions

In 2020 most of the activities of the company aka the project will be focussed on design and i.e. selection of subcontractors. The construction activities are limited to so called early works where mostly motorized equipment is being used. There are no site offices and very limited use of building materials. Construction activities will start around November 2020.

In 2021 most of the activities of the company aka the project will be focussed on design and purchase and i.e. selection of subcontractors. The construction activities are limited to so called early works where mostly motorized equipment is being used. There are three site offices (in the making) and very limited use of building materials. Construction activities will increase around august 2021.

Therefore, the actual CO2-emissions for base year 2020 and following year 2021 are limited to office activities, transfer of personnel and fuel /energy consumption of construction equipment. It is estimated to be a fraction of the CO2-emissions during the whole project (realization and maintenance).

The impact analysis of scope 1, 2 and 3 CO2 emissions initially will be based on data derived from preliminary and detail designs. During the project progress this data will be replaced by more accurate data of final and detailed design and finally real data of the realization phase. This may influence selected objectives and strategy but will strengthen the process on feasibility and reliability.

2 CO2 Performance ladder implementation in SMP

The goal of SMP CO2 Management is to obtain the CO2 Certificate Level 5 (according to CO2 Performance Ladder) for FCC Construcción S.A. (NL), aligned with:

- FCC Construcción S.A. policy on CO₂ emissions reduction.
- EPCM Contract requirements, based on DBFM Contract requirements.

This Certification will be obtained and maintained during the EPCM contract by means of applying specific processes of research, definition and application of reduction measures on CO₂ emissions, to be applied in the processes of design, procurement and execution of the works.

CO₂ Management scope include research, calculations, and defining, planning, monitoring-controlling, analysing and reporting on CO₂ reduction measures, and this scope is allocated within the WBS of VEENIX project in the work package "WP-01.08.04.01 - CO₂ Management".

CO₂ Management goal is in the essence getting Certification Level 5 on CO₂ Performance Ladder, but also reporting to CO₂ Management Board on CO₂ management and CO₂ reduction measures status for decision making.

This information and analysis must be precise but simple, to show at once sight the real status of the project on CO₂ to the CO₂ Management Board members. (See SMP CO₂ Management).

Monthly Factsheet of CO₂ Management, Quarterly and yearly reports on CO₂ Performance Ladder, provide in time this information to CO₂ Management Board for decision making headed to reach and maintain the CO₂ Certificate Level 5.

2.1 Management Review

The management review is a predetermined structure, dictated by the CO₂ Performance Ladder handbook, which describes which agenda points are mandatory. Due the importance, the review structure is incorporated into the SMP CO₂ Management. Implementation of all aspects (A. Insight, B. Reduction, C. Transparency, D. Participation) is predominantly governed by the CO₂ Management Board. The CO₂ Management Board reviews the CO₂ management system of the organisation twice a year in order to achieve continuous suitability, adequacy, efficacy and alignment with the strategic direction of the organisation.

The CO₂ Management Board reviews are held according to a standard structure as described below. This structure is part of the CO₂ Performance Ladder Sub Management Plan.

Prior to the CO₂-board review the following input is to be provided:

- a) The status of actions resulting from previous management reviews, internal audits and audits of the Ladder CI;
- b) Changes in external and internal key points that are relevant to the management system;
- c) Information about the performance and efficacy of the CO₂ management system, including:
 - 1) energy policy and reduction measures;
 - 2) the energy performance, emissions and the current energy assessment;
 - 3) the progress towards the reduction objectives and the extent to which they have been achieved
 - 4) the communication and initiatives;
 - 5) the point of concern of the independent expert. The audit results: an internal audit (incl. objectives per requirement) and audits by the Ladder CI. In case of level 1 certification: the results of the internal audit;
 - 6) deviations and corrective measures;
- d) The adequacy of resources;
- e) The efficacy of actions taken to address reduction opportunities;

- f) Opportunities to improve;

The output for the management review includes at least decisions and actions related to:

- a) Opportunities to improve;
- b) The need for changes to the CO2 management system, reduction objectives, reduction measures and (participation in) initiatives;
- c) From level 3 conclusions on the probability of achieving reduction objectives previously published internally or externally;
- d) Efficacy of the CO2 management system, including an explicit statement about the extent to which the CO2 Performance Ladder functions as intended, based on the results of the internal audit with regard to the objectives per requirement;
- e) The need for resources.

During the meeting the CO2 Management Board as described in the SMP CO2 Management are present. During this meeting detailed minutes are taken. Minutes are used as input documents for communication with the internal and external stakeholders. For more information refer to the sustainability communication plan.

2.2 Implementation in the company

SMP CO2 Management will be shared by the CO2 Manager to the PMT (Project Management Team) in order to inform and communicate the scope of SMP CO2 Management, Plans and procedures described within in order to involve and commit all Management areas in the goals of SMP CO2 Management.

Project Director will send a communication email to all organization informing on CO2 goals and the needed collaboration of all the organization in reaching this goal.

Project Control Manager will include CO2 Management in the monthly "On Boarding Presentations", to explain to all new employees CO2 goals, plans and procedures.

Workshops on CO2 Management will be organized by CO2 Manager (and CO2 Team) to provide a general overview in CO2 goals, plans and procedures.

3 Deviations and action for implementation

3.1 Missing data

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

FCC Construcción International reports yearly on CO2 emissions scope 1, 2 and 3.

FCC Construcción S.A. (NL) needs to establish the collection of scope 1, 2 and 3 data. Level 1 and level 2 of the CO2 Performance Ladder require the reporting on scope 1 and 2 emissions on at a high level of detail.

The process of collecting, monitoring and reporting on this data is discussed during CO2 Management Board meetings. The members of the CO2 Management Board are therefore carrying the responsibility to implementing this process into the FCC Construcción S.A. (NL) organisation. Between every CO2 Management Board meeting, the CO2 Management Board members are responsible for implementing the day-to-day actions. All members of the CO2 Management Board are responsible to provide the CO2 Management Board meeting with all information the CO2 Management Board members require to manage effectively steer on the data collection, monitoring and reporting process.

3.2 Deviations

During the implementation phase of all requirement, deviations must be kept at a minimum. In case a deviation occurs, the CO2 Management Board will initiate the VeenIX A9 BAHO procedure 'Registering and Handling Deviations' as described in the CO2 Management Plan.

4 Planned steps Implementation CO₂ management within FCC Construcción S.A. (NL)/ VEENIX A9 BAHO

Project phase	Activities	Deliverables
Project Planning 2022 April	Set up a detailed time scale of activities of D-con consultancy, FCC Construcción S.A. (NL) and deliveries	<i>Overall Project planning</i>
Assigning CO₂ Core Team (CT) 2022	Design of CT (key functions/roles in CO ₂ management system) Representatives: PMT	<i>SMP CO2 Management PMT Meetings</i>
Project CO₂ emission inventory and Carbon Footprint 2022	Setting up a draft emission inventory (scope 1, 2, 3) Based on GHG/ISO14064 Emissions will initially be estimated (design specifications) and will be replaced by real time activity data during execution phase of the project	<i>Draft emission inventory (semi-annual updates)</i>
Training core elements CO2-Performance Ladder (version 3.1) 2022	Preparing and giving presentation essentials of CO ₂ PL to core team; preview new version SKAO	<i>Presentation (handout)</i>
CO₂ PL procedure (as part of HSE Manual NL) 2022	Setting up an CO ₂ PL Management Plan Containing among other things: <ul style="list-style-type: none"> • Organizational boundaries • CO₂PL-organization structure (Core Team, key functions in CO₂PL Management Plan) • CO₂/Energy Policy • Context Analysis (stakeholder analysis, risks and opportunities) • Communication Plan (internal external), e.g. 6 monthly progression reports on internet • Working instructions: <ul style="list-style-type: none"> ○ Emission inventory (data gathering, emission calculation) ○ Scope 3 chain analysis ○ Internal energy/CO₂ audits ○ 	<i>CO₂ PL procedure (based on ISO50001, ISO14061 and HLS ISO14001)</i>
Chain Analysis scope 3 emissions 2022	Together with CT conduct Chain Analysis team scope 3 to supplement emissions of activities the FCC Veenix contractors (upstream and downstream). This will initially be based on estimated emissions of upstream and downstream emissions (e.g. use of raw materials concrete such as asphalt and fuel consumption). Selection of progressive contractors in order to investigate and realize energy and CO ₂ reductions during project in design, realization and later on maintenance phase). This will also be the sector initiative. Detailed study of 1 or 2 relevant (significant) scope 3 emissions and reduction possibilities (external expertise comment). Invite external expert to review the stud(y)(ies) and provide with comments for areas of concern.	<i>Chain Analysis with commentary</i>
CO₂ Reduction Plan	Set up Reduction Plan with CT: quantitative	<i>Draft CO₂ Reduction Plan</i>

2022	reduction measures (based on significant scope 1,2 and 3 emissions and "list of measures" of SKAO) In addition the Reduction Plan contains commitment to a government or NGO CO ₂ emission reduction program.	
Internal audit February 2023	Internal system audit for components up to level 5	<i>Internal audit program system audit Internal audit report Self-evaluation list</i>
Management Review 2023	CT Meeting Setup agenda and report format Review of MR Inviting Certification Body for external audit and CO ₂ PL Level 3/4/5 Certificate	<i>Management Review Report</i>
6 monthly CO₂ Footprint and progression reports 2023 April And semi-annually following years	Draft reports for internal and external communication	<i>Draft Carbon Footprint Report (ISO14064) Internet publications</i>
External audit 16 March 2023	CO ₂ Manager, support during external audit by Certifying Body	<i>PM</i>
Aftercare	Depending on results external audit and additional actions/wishes VeenIX	<i>PM</i>
Maintaining CO₂ PL certificate following years	Maintaining the certified CO ₂ PL management system as part of the operational HSE management system directed by the CO ₂ Core Team. By among other things: <ul style="list-style-type: none"> • Quarterly CO₂ Core Team meetings • Semi-annual update of our emission inventory and CO₂ Footprint • Semi-annual reporting of CO₂ Footprint and progression of our Reduction Plan and initiatives (internally and externally) • Annual internal system and energy/CO₂ audits • Annual Management Review and update of Reduction Plan • Annual visits of Certification Body for confirming level 5 and continuation of certificate 	<i>PM</i>

Attachment: A list of requirements of the contract with Rijkswaterstaat

Requirement ID	Requirement title	Requirement description
AFG-2492	CO ₂ ambitie niveau	Opdrachtnemer dient invulling te geven aan een CO ₂ -reductie op CO ₂ -ambitieniveau 5 zoals in bijlage 7.2 A van de aanbestedingsleidraad is omschreven.
ME_03026	Naleven CO ₂ -ambitieniveau	<p>De Opdrachtnemer dient jaarlijks aan te tonen dat ten minste aan het in Bijlage 8 (Kwalitatief deel inschrijving) vastgelegde CO₂-Ambitieniveau is voldaan, door:</p> <p>(a) een CO₂-Bewust certificaat te overleggen dat past bij het aangeboden CO₂-Ambitieniveau, of</p> <p>(b) door projectspecifieke bewijsstukken te leveren dat de opdracht is uitgevoerd met toepassing van de criteria zoals vermeld in de tabellen opgenomen in [Handreiking Aanbesteden Versie 3.0: Het EMVI criterium CO₂-Prestatieladder voor aanbestedende diensten].</p> <p>Indien de Opdrachtnemer bestaat uit een samenwerkingsverband (combinatie) van bedrijven, dient bij aanpak (a) iedere deelnemer een CO₂-Bewust certificaat te overleggen dat past bij het aangeboden CO₂-Ambitieniveau.</p> <p>Indien de Opdrachtnemer kiest voor aanpak (b) dan dient de Opdrachtnemer aan te tonen dat de bij inschrijving opgegeven certificerende instelling die de toetsing zal uitvoeren geaccrediteerd is voor certificering op het niveau van het laddercertificaat dat correspondeert met het aangeboden ambitieniveau en dat de persoon die de toetsing uitvoert namens de certificerende instelling aantoonbaar ervaring heeft met certificeringen van bedrijven op het niveau van het laddercertificaat dat correspondeert met het aangeboden ambitieniveau.</p> <p>Indien in dat samenwerkingsverband bedrijven deelnemen die geen ontwerp- en/of bouw- en/of onderhoudswerkzaamheden verrichten, bijvoorbeeld omdat zij alleen een financiële bijdrage leveren, dienen deze bedrijven geen CO₂-Bewust certificaat te overleggen en telt het CO₂-ambitieniveau van deze bedrijven niet mee voor de bepaling van het CO₂-ambitieniveau van het samenwerkingsverband. In plaats van het CO₂-Bewust certificaat dienen deze bedrijven een verklaring te overleggen waarin staat dat zij in het kader van het project geen ontwerp- en/of bouw- en/of onderhoudswerkzaamheden zullen verrichten.</p>