OVERVIEW OF SUSTAINABLE INITIATIVES

CO_2- PERFORMANCE LADDER

10/12/2024 – Version 4

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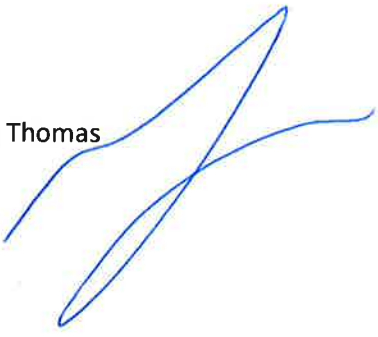

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1 INTRODUCTION

This document was prepared in accordance with the requirements of the CO_2-Performance Ladder 3.1 manual and relates to perspective D of the CO_2-Performance Ladder (Participation). This section requires companies to actively participate in sector and/or chain initiatives that result in CO_2 reductions. This allows SBE to share its knowledge and gain knowledge itself from other organizations. Initially, we made an inventory of possible initiatives in which already certified companies from similar sectors are participating. We visited the CO_2- Performance Ladder pages on their websites and their SKAO pages where we could consult information about their development projects, chain initiatives and CO_2 reduction programs. Furthermore, we also looked at Flemish initiatives of which we were informed through mailings. Going forward, we plan to further expand the initiatives in which we currently participate to include those from this list to maximize our contribution to reducing CO_2 emissions.

2 SBE SUSTAINABILITY INITIATIVES

2.1 VCSE SUSTAINABLE DEVELOPMENT GOALS

2.1.1 TARGET

SBE has been participating in the Voka Charter Sustainable Entrepreneurship (VCSE) since 2017. This is an initiative of Voka, the Flemish network of companies and the largest entrepreneurial network in Flanders, to support companies in achieving their sustainability objectives. Besides that Voka, the Flemish network of enterprises also organises different sustainability related trainings for all members (electrification of the fleet, calculating your own carbon footprint, CSRD learning network, …). Each year, they also organize different network and learning/ experience sharing events (e.g. yearly day of sustainable entrepreneurship).

2.1.2 EXPLANATION

The Voka Charter Sustainable Entrepreneurship is built around the 17 Sustainable Development Goals (SDGs) of the United Nations that are on the agenda by 2030. These 17 SDGs focus on five themes, also known as the 5 Ps: people, planet, prosperity, peace and partnership.

Annually, SBE must submit a new action plan to an independent evaluation committee with actions linked to the 17 SDGs and achieve at least 10 of the proposed action points in 4 of the 5 Ps. SBE is awarded the VCSE laureate following a positive evaluation. In the previous years we included objectives related to electrification of the fleet, installation of charging facilities, solar panels, energy efficiency measures, opening of new offices to reduce commuting distance, sustainable commuting actions, but also the environmental impact of our designs, for example with the establishment of a sustainability tool (SPIRIT) for the project, ECI calculations, business development plan sustainability,…

The table below shows the action plan for 2024-2025. Each of these actions is linked to one or more SDGs.

No.	Objective	Short description of the action
1	Draw up preventive measures through a policy to reduce the duration of sick leave and promote work resumption	Drafting a reintegration policy
2	**Reduce paper consumption**	Replacing the magazines in our library with their digital versions (if available)
3	Minimising impact of a disaster, crisis and ensuring business continuity	Drawing up business continuity plans
4	**Sustainable procurement**	Purchasing policy reviewed
5	Increasing safety awareness	Certification on the Safety Culture Ladder
6	**Collaborate on self-sufficient homes designed to lift residents out of poverty**	Steel calculations optimise tridealhouse 2.0
7	Creating a hub for colleagues to have conversations in an informal setting	Opening SBE cafe
8	**Increasing biodiversity**	Carrying out garden redesign
9	**Stop gas consumption**	Conducting alternatives study
10	Benchmark current wages with the market and ensure SBE pays above average	Conduct salary benchmark

11	Raising awareness among employees about the environmental impact of the main materials used for design (concrete, asphalt, steel, etc.)	**Drawing up product sheets**
12	**Knowledge sharing around integrating sustainability and climate resilience into our designs**	Active participation in working groups Green Deal climate-proof environment
13	Elaborate long-term vision SBE for the next 3-5 years	Drafting Corporate strategic plan 2025
14	Promote healthy lifestyle (both mental and physical health)	Road to Paris 2024 action / Let's inspire well-being
15	Mapping the progress of our designs in terms of sustainability through the **ECI calculations** and SPIRIT	Preparation of SBE Sustainability dashboard

More information about the VCSE can be found here.

2.1.3 INTENDED RESULT

Through the VCSE, SBE integrates sustainable entrepreneurship into business operations using a customized action plan, for which the SDGs serve as a frame of reference. With the action plan, the organization invests in business operations that are profitable for the company, and beneficial for people and the environment. The action points related to the CO_2 emissions of the vehicle fleet and gas, will affect scope 1. Actions related to energy consumption affect scope 2. And actions related to sustainable design will affect scope 3.

2.1.4 BUDGET

- Annual contribution for organization membership: €4.830 excl. VAT
- Participation costs VCSE € 3.000 excl. VAT
- Employee time commitment from employees all over the organisation

2.2 SDG CHAMPION: SPIRIT THE SUSTAINABILITY ASSESSMENT TOOL

2.2.1 TARGET

Looking beyond our own direct carbon footprint. Transition to a sustainable business model with integration of the SDGs into the value chain and core activities.

2.2.2 EXPLANATION

Voka created an additional SDG pathway in collaboration with CIFAL Flanders/ UNITAR. This is an international training center that specializes in sustainable management and awards internationally recognized UNITAR certificates. The SDG pathway consists of 3 phases: SDG Pioneer, SDG Champion & SDG ambassador.

In 2020, SBE was named an SDG Pioneer because we had achieved the VCSE laureate for three consecutive years, achieving actions in each of the 17 SDGs. The next step in this journey was the SDG Championship. To do this, participating organizations must create a pilot project on sustainable transition in their core business.

In 2022, we became SDG Champion for the creation of our own SPIRIT tool for our projects. SPIRIT is short for **Sustainable Project Index to Reduce Impact Tool.** The purpose of the self-assessment tool is to assess the sustainability level of our projects and create awareness with both customers and colleagues to choose more sustainable alternatives/design more sustainable solutions.

The tool asks the project manager to answer various questions for each of the 9 relevant themes. These themes are: energy, materials, water, soil, ecology, spatial quality, social relevance, mobility and health/safety and wellbeing. The SPIRIT tool is based on the SDG targets. Based on a targeted questionnaire, it goes through all relevant sustainability domains.

Every question is linked to an internal knowledge library which proposes sustainable improvement ideas for the relevant theme. Different measures to reduce the CO_2 emissions of the project are a part of the library (e.g. the use of eco-friendly geopolymer concrete,…). After the PM of the project completed the SPIRIT questionnaire, an interactive sustainability workshop is organized with the client by the SBE sustainability development manager.

More information about the program is available here

2.2.3 INTENDED RESULT

Participation in the SDG pathway, and more specifically the SDG Championship pathway, was a good initiative to make us reflect on the environmental impact of our projects and to set up a pilot project to reduce this impact. We believe SPIRIT can be a valuable tool to reduce the environmental impact of our projects and that is why we decided to further develop the tool after becoming an SDG champion. Even though it does not directly contribute to our CO_2 reduction in scope 1, 2 or 3 on level three of the CO_2 performance ladder, it does contribute to the overall CO_2 reduction in the projects. In this way, we help clients to make their project more sustainable. SPIRIT is also presented during a lot of sustainability presentations (for example for schools, governments, clients, visitors, competitors,…). **Knowledge sharing** is crucial to accelerate the transition.

We are also looking into similar tools that other engineering companies / the government are developing and are open to share our knowledge with them (for example in the working groups on sustainability).

That is why we participate in national working groups and present at (inter)national conferences. We are happy to share our insights and working methods in these groups, so that our competitors can learn from them and gain inspiration.

Besides that we are also developing a sustainable **building catalogue infrastructure** together with OVAM (Public Flemish Waste Company). The catalogue to be delivered by April 2025 will contain a lot of valuable knowledge around sustainable developments for different materials and structures and will be used by many designing engineers and architects from other organisations.

2.2.4 BUDGET

- Annual contribution for organization membership: €4.830 excl. VAT
- Participation costs € 3.000 excl. VAT
- Employee time commitment : PM who need to fill in the questionnaire, BDM and knowledge managers

2.3 GREEN DEAL CLIMATE-RESILIENT ENVIRONMENT

2.3.1 TARGET

The aim of the Green Deal Climate-Resilient Environment is to make our living environment more robust against the influences of the changing climate.

2.3.2 EXPLANATION

How do we all make smart use of space to protect Flanders from the impact of climate change and biodiversity loss?

With the Green Deal, we are working together across sector boundaries to make our living environment more resilient.

Green Deals are an initiative of the Flemish government to green organisations, companies and sectors. They are voluntary, ambitious agreements to realise sustainable projects together in the short term (around three to four years).

The Green Deal Climate-proof Environment focuses on protecting open space, encouraging biodiversity and smart water management to tackle both drought and flooding. Just how important wise management of water is, recent floods have demonstrated.

The Green Deal Climate-proof Environment mobilises a broad network involved in spatial development to jointly arm Flanders against climate change.

The Flemish government, local authorities, the private sector, civil society and knowledge institutes: for the first time, the whole sector is joining forces to scale up good sustainable examples from practice and channel them into policy.

SBE will within this green deal:

- share knowledge with other signatories
- realise specific projects
- work with other signatories on bottlenecks within the theme
- take part in focus groups and working groups
    - **Focus groups** work together on concrete field realisations. Starting from a thematic or methodical focus, we combine several projects of the participants. Participants set to work concretely to arrive together at new insights and solutions, specific to the type of project (spatial scale level, theme-specific, etc.). In this way, we raise the ambition level of each project participating in this Green Deal.
    - In **working groups**, we tackle bottlenecks, barriers and problems that are currently blocking the shift to climate resilience and nature enhancement. There, we transcend the concrete content of projects within this Green Deal. We translate common insights into policy recommendations, training and education, manuals, and so on. The focus is on the process of achieving a climate-resilient environment.
        - **climate-proof infrastructure** focus group wants to
            - The aim of this Focus Group is to identify which infrastructure urgently needs to be climate-proofed and what are possible quick wins in this.

- **working group on integral cooperation** wants to focus on professionals, companies and boards
    - stimulate cooperation within project processes
    - examine how to create (more) support
    - make a mind shift to a real transition
    - give the benefits of interdisciplinary cooperation more weight in design processes

2.3.3 INTENDED RESULT

Heat, drought, floods... In Flanders too, the consequences of climate change and biodiversity loss are closely linked to our spatial development. Despite hopeful initiatives in the field, there is a need for knowledge sharing and sector-wide cooperation to really make a difference.

The Green Deal Climate-resilient Environment has four strategic objectives:

- Building and sharing knowledge - through a learning network, we want to accelerate the development of practical principles and tools for climate-proof projects, and share them with designers, planners and managers.
- More and better cooperation - we want to explore what structural collaborations are possible and set up new partnerships where necessary.
- Scale up good practices - we want to embed the knowledge gained in public guidance documents, manuals, standard specifications and framework agreements, so that every project or plan has a climate-proof reflex built in.
- Pay attention to socially vulnerable groups - we are careful to ensure that our initiatives and measures certainly do not further increase the social injustice of climate change.

We are happy to share our insights and working methods in these groups, so that our competitors can learn from them and gain inspiration. Two SBE projects were presented to the work group for which SBE organized two sustainability sessions. On December 6th 2024, SBE also gave a presentation related to sustainability and the green deal on world-tunnel day.

2.3.4 BUDGET

- Employee time commitment

2.4 CIRCULAR CONCRETE AGREEMENT FLANDERS

2.4.1 TARGET

The concrete sector wishes to be 100% committed to helping realise the policy ambitions (European Green Deal, Flemish Energy and climate plan,…) by reducing the environmental impact of concrete.

2.4.2 EXPLANATION

Reducing the environmental impact of concrete requires actions at different levels involving commitment and efforts from all stakeholders that are involved with an infrastructure project. Think of building owners, in particular the government as a major client, construction promoters, architects,

engineering offices, research institutes, demolishers, graders, crushers, contractors and producers of raw materials , concrete and concrete products.

Concrete is the most widely used building material worldwide because of its intrinsic qualities such as its long service life, very limited maintenance, fire safety, and easy architectural adaptability.

Consequently, its environmental impact is also considerable.

This is situated at two levels:

- Use of primary raw materials (aggregates, building sand, clinker,...)
- CO_2 emissions in the production of the components and in the production of concrete.

More information about the concrete agreement can be found here.

We signed the agreement and declare to make every effort based on our role in the building and concrete chain to make a maximum contribution to achieving the common objectives included in the agreement, limited to those where we as an organisation have influence on.

2.4.3 WHAT CAN WE AS AN ENGINEERING CONSULTANCY DO?

Currently SBE is actively invested in getting some of our clients excited about circular concrete applications.

2.4.3.1 Bearing respect for planetary boundaries

- ... by including environmental and health aspects as central criteria in key decisions on the life cycle of the structure (or try to convince the decision maker), but also in the components and the materials (including concrete) of which they are composed.
- …by choosing production, construction and design processes preferring those that lead to a very low, neutral or even negative carbon footprint (or try to convince the decision maker),
- … by choosing thorough processes for demolition dismantling and (re)building, thus releasing more usable building components or high-quality materials that can be reused (several times) or recycled (several times). (or try to convince the decision maker)
- …by designing buildings in a targeted way to respond to changing needs of users and society; Buildings and structures are designed in a way that buildings are adaptable to the needs of time with maximum preservation of elements, including the load-bearing structure. Elements are easily demountable wherever possible.

2.4.3.2 Encouraging innovation and collaboration in all its forms

- … by defining the correct composition of concrete for the requested application.
- ... by (as the construction and concrete sectors) resiliently dealing with societal challenges, such as changes in population density and population composition.
- ... by (as the construction and concrete sectors) demonstrating a growing awareness that we need to deal differently with our 'resources' and technological evolutions such as new production, sorting and recycling processes , optimised products and thedigitisation of information on the life cycle of construction works and building products.
- ... by (as the construction and concrete industries) communicating openly about the positive and negative impacts of current and future concrete practices and sharing desired 'transition paths' for making them sustainable.

- ... by (as knowledge institutions and frontrunner companies) sharing science-based knowledge and valuable data, including through monitoring pilot projects and experiments, in order to take big steps together.
- ... by forging smart alliances inside and outside the concrete sector to jointly drive the transition(s) within the construction industry.
- ... by (as the construction and concrete sectors) attracting talent in the right place within the value chain.

2.4.4 INTENDED RESULTS

The ambitions can be divided into two categories:

- the material concrete (concrete & concrete products)
- the applications of concrete in buildings and infrastructure

2.4.4.1 Materials

- By 2030, the circular concrete agreement Flanders aims for a 50% reduction in CO2-eq emissions from concrete applied in the Flemish Region (including extraction and reuse of raw materials, transport and construction/installation) compared to 1990 emissions.)
- By 2050, they work towards 0 kg CO2-eq emissions per m^3 concrete applied in the Flemish Region.
- By 2030, all concrete released from demolition whose quality is suitable for the production of high-quality concrete aggregates reused in ready-mixed concrete, road concrete and/or prefabricated concrete.

2.4.4.2 Applications

- By 2030, buildings and structures will be designed so that concrete elements can be maximally reused, or that the functional adaptability is maximised and the use of interfering substances that hinder high-quality recycling is avoided.
- By 2030, the most appropriate sustainable concrete mix should be used for every concrete application. Sustainable concrete mix should be used for each concrete application. Calculation rules and quality assurance should be adapted accordingly.

2.4.5 ROADMAP

2.4.5.1 Further innovating and realising solutions (at the application level)

- Modular and demountable construction with eye on making adaptable buildings and structures, longer lifespan of the supporting structure and the reuse of elements;
- Design of buildings and structures in function of adaptability to needs;
- Optimising the sizing of structures;
- Avoid using materials that make reuse and recycling difficult and/or impossible;

2.4.5.2 Sustainability as a criterion

- Sustainability is a criterion in both design, construction and delivery;
- The environmental cost of materials is integrated into projects;

2.4.5.3 Organisation/competence within the sector

- Sharing knowledge (e.g. via the Concrete Circularity Centre)

2.4.6 BUDGET

- Employee time commitment

2.5 BUILDING AGREEMENT STEEL (PASSIVE PARTICIPATION)

2.5.1 TARGET

Provide an overview of which (sub)sector can and will realise which ambitions by when, to keep the steel construction chain up to date about the sustainable developments in their sector.

2.5.2 EXPLANATION

The social, economic and political evolution towards a more sustainable society is - certainly in Europe - high on the agenda. The construction sector too must, can and will do its part. In the Belgian context, the initiative Belgian Alliance For Sustainable Construction (BA4SC), among others, is actively working on this.

As for any sector, the steel construction chain certainly still has challenges to overcome. But the steel construction chain also sees an important opportunity in this evolution.

Designers and customers are asking themselves: where does the steel construction chain stand now, and how fast is the evolution going? Keeping in mind the adaptation of conditions in specifications.

Companies in the steel construction chain are asking themselves the question: how quickly and in which technology should we invest as a priority, depending on the ambitions of designers and clients.

The Steel Building Agreement aims to balance these two questions. More specific to give an overview of which (sub)sector can and will realise which ambitions when. They call these the action perspectives.

Companies that are ahead of the big pack in the steel construction chain (frontrunners) show what can be done and what preconditions must be fulfilled for it to happen. It also lists the number of companies committed to pursuing the same ambitions as the frontrunners. This gives designers and clients an insight into the prescriptiveness of ambitions.

2.5.3 INTENDED RESULT

2.5.3.1 Frontrunners

Front-runners are companies that are actively working to make the construction projects they participate in or supply products for more sustainable, more circular and with a lower carbon footprint. As part of the Steel Building Accord, the front-runners group together in working groups by industry, pooling their knowledge and experience to ultimately draw up a set of action perspectives.

Front-runners understand that for a chain-wide approach, such as the Steel Building Accord, they must also pay attention to what upstream and downstream in the steel construction chain are proposed as

perspectives for action, and they are therefore doing what is necessary to contribute to this as much as possible.

Sector organisations can be frontrunners if they represent a sector that as a whole meets the above requirements and is representative; the sector organisation therefore has a sector covenant with the same ambitions endorsed by all members, and its members represent at least 80% of the market.

2.5.3.2 Action perspectives

Action Perspectives are concrete actions companies can take to achieve the ultimate goal of a more sustainable, circular steel construction. The Action Perspectives also give clients an insight into possible clauses that can be included in specification texts.

Each Action Perspective also indicates the expected improvement.

Action perspectives are based on concrete experiences of the front-runners. They have therefore already been tested in practice to some extent for feasibility and effectiveness.

Action perspectives can have different approaches :

- Realisable in the short term in the current market context or only in the longer term after a more complex technical transition
- Without much impact on the final construction cost, or with a significant impact on the construction cost that may level off after a longer period of time
- Valid for all steel products and steel applications, or specific to one product group or application.
- ...

2.5.4 BUDGET

- Employee time commitment