

# **OVERVIEW OF SUSTAINABLE INITIATIVES**

## **CO<sub>2</sub>- PERFORMANCE LADDER**

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# 1 INTRODUCTION

This document was prepared in accordance with the requirements of the CO<sub>2</sub>-Performance Ladder 3.1 manual and relates to perspective D of the CO<sub>2</sub>-Performance Ladder (Participation). This section requires companies to actively participate in sector and/or chain initiatives that result in CO<sub>2</sub> 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<sub>2</sub>-Performance Ladder pages on their websites and their SKAO pages where we could consult information about their development projects, chain initiatives and CO<sub>2</sub> 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<sub>2</sub> 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.

#### 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.

The table below shows the action plan for 2022-2023. Each of these actions was linked to one or more SDGs. The action plan of 2021-2022 included objectives related to CO<sub>2</sub> reduction of the fleet, installation of charging facilities, CO<sub>2</sub> reduction in the HQ and the establishment of a sustainability score for the projects.

No.	Objective	Short description of the action
1	Sustainable reuse of spaces	Perform initial renovations
2	<b>Sustainable energy</b>	Renewable energy consumption in the office (installation solar panels)
3	Boosting biodiversity in our office garden	Maai Mei Niet
4	<b>Encouraging electric driving</b>	Examining expansion of charging stations
5	Offering healthier alternative for soft drinks in the office	Offer drinks that contain less sugar
6	Sharing sustainable future urban development with city residents	Bicycle simulator vijfstraten experience centre City of Sint-Niklaas
7	Benchmarking sustainability and identifying opportunities for improvement	Ecovadis completing sustainability assessment for Lanxess
8	<b>Sharing knowledge around fleet electrification</b>	Testimonial SBE + site visit training Voka: "All your company cars electric"
9	<b>Reduce emissions for business travel</b>	Adapting travel policy
10	Achieve sustainability reflex among employees and clients	Incorporate SPIRIT into business processes
11	Promoting safety on the roads	Developing action around road safety
12	Getting students excited about higher engineering education	Schools project bicycle bridge Vijfstraten
13	Encouraging colleagues to exercise	Sport Vlaanderen - Becoming a sports company

14	Encouraging students to collaborate multidisciplinary	Organise student challenge
15	Digital inclusion	Donate IT material
16	Better understanding of impact business activities and progress compared to previous years	Calculate carbon footprint
17	Creating a culture of safety and respect	Writing a code of conduct
18	Supporting team coaches for leadership and coaching skills	Roll out leadership programmes team coaches
19	Preventing psychosocial strain, including stress and burnout, at work	Further roll-out of the stress and burnout policy

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, you as a company invest in business operations that are profitable for the company, and beneficial for people and the environment. The action points related to the CO<sub>2</sub> emissions of the vehicle fleet, will affect scope 1. The action point on energy consumption will affect scope 2.

### 2.1.4 BUDGET

- Annual contribution for organization membership:: €2.861 excl. VAT
- Participation costs € 2.750 excl. VAT
- Employee time commitment

## 2.2 SDG CHAMPION: SPIRIT

### 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 is the SDG Championship. To do this, participating organizations must create a pilot project around sustainable transition.

In 2022, we became SDG Champion for the creation of SPIRIT for our projects. SPIRIT stands for Sustainable Project Index to Reduce Impact Tool. The purpose of the score is to create awareness with both customers and colleagues to choose more sustainable alternatives/design more sustainable solutions. To this end, the actions from the action plan were more closely linked to SBE's core business,

and sustainability is more incorporated into project work. For the pilot project we had to award a sustainability score to at least 5 diverse projects.

A sustainability work group (consisting out of engineers from different departments, landscape designers and the sustainability coordinator) within SBE is currently finalising the SPIRIT manual. Once the manual is finalised, we will organise trainings on how to use SPIRIT and we will implement SPIRIT in our business processes.

The tool asks you to answer various questions for each of the 9 themes and by project phase (study, construction, use phase and end of life) using a scoring scale. These themes are: energy, materials, water & soil, ecosystems, spatial quality, social relevance, safety, project work and accessibility. The calculation of the score therefore also takes into account the CO<sub>2</sub> emissions of the project.

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. Even though it does not directly contribute to our CO<sub>2</sub> reduction in scope 1, 2 or 3 on level three of the CO<sub>2</sub> performance ladder, it does contribute to the overall CO<sub>2</sub> reduction in the projects. We are also looking into similar tools that other engineering companies / the government are developing and are open to share our knowledge with them.

### 2.2.4 BUDGET

- Annual contribution for organization membership: €2.861 excl. VAT
- Participation costs € 2.750 excl. VAT
- Employee time commitment + sustainability project team time commitment

## 2.3 SDG AMBASSADOR

### 2.3.1 TARGET

This is the final step in the additional SDG pathway in collaboration with CIFAL Flanders/ UNITAR. Looking beyond your own organisation, also looking at your supply chain. Set up a policy around human rights and due diligence. Also includes environmental actions.

### 2.3.2 EXPLANATION

This is the last step of the SDG trajectory to become SDG-proof. This step focuses on human rights due diligence, among other things. The completion of this step will require 1 to 2 years. The ambassadorship consists out of 10 explicit actions listed below.

No.	Objective
1	The organisation understands its position on the international stage and in the supply chain, knows where the associated risks are, makes conscious choices as a result within sustainability efforts and shares these experiences.
2	Is active in a form of consultation regarding sustainability in which the organisation's efforts from an external perspective are periodically challenged and inspired.
3	Has a due diligence strategy on human rights (human rights test)
4	Has an organisational-level (international) code of conduct and applies also applies it to the organisation's resources
5	Has a written future scenario on the core business of the organisation
6	Has or is supporting a (pilot) project that contributes to the SDG's in the Global South and that is linked to the organisation's core mission
7	<b>Has a science-based action plan that contributes to the restore biodiversity and climate neutrality of the organisation and is externally is validated</b>
8	Applies ethical values in practice by incorporating ethical reflection and using it as a starting point in dilemmas where legal requirements are less stringent than the ethical requirements
9	Informs in business terms about the SROI and the 'business case' (business opportunities) of working with the SDG's
10	Does periodic, public and integrated sustainability reporting

Action 7 does imply science based targets for climate neutrality and the restoration of biodiversity. In the context of the ambassadorship and knowledge sharing, we are taking part in a core group about sustainability for BEPASIN (a network of companies in the industrial zones in Sint-Niklaas.

### 2.3.3 INTENDED RESULTS

The learning objectives of the SDG Ambassadorship include:

- understanding human rights due diligence and the link with the SDGs;
- understanding and implementing integrated reporting based on GRI principles;
- understanding the link between sustainable development and international cooperation and solidarity.

### 2.3.4 BUDGET

- Annual contribution for organization membership: €2.861 excl. VAT
- Participation costs € 2.750 excl. VAT
- Employee time commitment (HR, Prevention & wellbeing, Sustainability, Quality,...)

## 2.4 CIRCULAR CONCRETE AGREEMENT FLANDERS (UNDER DEVELOPMENT)

### 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<sub>2</sub> 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?

### 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 the digitisation 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, we aim for a 50% reduction in CO<sub>2</sub>-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, we work towards 0 kg CO<sub>2</sub>-eq emissions per m<sup>3</sup> 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