

# Creating impact by integrating the SDGs in a company strategy

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**Abstract.** Aiming at integrating the Sustainable Development Goals (SDGs) in its corporate strategy, the company Corbion has developed and performed an impact assessment consisting of three steps: 1) Product and supply chain SDG impact assessment 2) Prioritization and 3) Target setting. As an outcome of this assessment, the company has chosen to focus on SDG 2, SDG 3 and SDG 12 as the goals on which it can make the most significant impact. The company aims for 80% of its revenues to contribute to these SDGs by 2030 and targets to minimize potential negative impacts of the value chain were set. The progress towards these targets is monitored and included in the company annual report.

## 1 Introduction

It is widely accepted that business has a critical role to play in the achievement of the Sustainable Development Goals (SDGs) adopted by all United Nations (UN) Member States in 2015. The SDGs cannot be fully accomplished by any company or government on its own and the greatest impact can be achieved as organizations create focus to contribute to the most relevant SDGs, based on their activities. However, there is no standard methodology for measuring and reporting business impact and progress on the SDGs. The UN SDG's and underlying targets and indicator were initially developed to measure progress at country level. These indicators are therefore not suitable for application to companies. The UN Global Compact offers various publications and tools to create awareness and guide companies to contribute to the SDGs but these documents do not include methodologies to report on business impact in a structured way [1,2], focus on KPIs to monitor potential negative impacts [3,4, 5] or provide a sector-based approach [6].

In this paper we describe an approach that can be followed by companies to identify the SDGs with the most significant impact for a company's business activities, based on [7]. The goal of this article is to describe the methodology to select the focus SDGs and the integration of SDGs in the strategy of company operating in the business to business (B2B) market.

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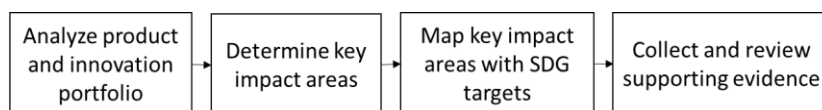
## 2 Methodology

The approach followed 3 steps: 1) Product and supply chain impact assessment 2) Prioritization and 3) Target setting. The different steps are described in the next section and were applied to Corbion<sup>†</sup>, a global B2B company, headquartered in the Netherlands.

### 2.1 Product and supply chain impact assessment

The product SDG impact assessment was inspired in the *Business reporting on the SDGs* [3] and is described in Figure 1. To perform this assessment, the company product and innovation portfolio was divided into different segments related to the market of application of our products. For the different business segments, the impact areas were defined based on the products functionality and market application. For example, the impact category 'Animal health' covers products with the function of promoting gut health without the use of antibiotics, such as ALOAPUR<sup>®‡</sup>.

For each business segment, the potential contribution of the products to the impact areas was analysed using desk research and by interviewing business development managers and application specialists.



**Fig. 1.** Steps to perform the SDG product impact assessment

The main assumption for the identification of the potential contribution of products to the key impact areas were:

- Products with a direct and an enabling impact were included. The analysis did not explicitly differentiate between direct and enabling impacts. This assumption is relevant for intermediate products and ingredients in the B2B sector.
- Products submarkets or items for which sufficient evidence to claim a positive contribution to the impact category does not yet exist, were not counted as positive impact.
- Contribution of a product to the SDGs was not considered for applications which may have potential negative impacts on any other SDGs, even if the negative contribution was not directly linked to the company products. For example, use of products in industries such as oil and gas were excluded.

The mapping of the key impact areas with the SDGs was done at SDG target level, aligned with the *'Business Reporting on the SDGs: An analysis of the goals and targets'* from UN Global Compact and GRI [3], which specifies possible relevant business actions to achieve the SDG targets. The last step was the collection of supporting evidence to substantiate impact claims and internal review by competence leaders and subject matter experts. For each product or product group contribution, the evidence collected included scientific publications, R&D studies by external laboratories, internal test results, customer feedback, examples of commercial application, certifications, or patents.

For the supply chain SDG impact assessment, the identification of the key impact areas was based on the Chemical Sector SDG Roadmap from the WBCSD [6] and report *'Business Reporting on the SDGs: An analysis of the goals and targets'* [3]. The Chemical Sector SDG

<sup>†</sup> [www.corbion.com](http://www.corbion.com)

<sup>‡</sup> <http://www.corbion.com/biochemicals/animal-health-nutrition/brands/aloapur>

Roadmap prioritizes 10 SDGs with impact opportunities to which the Chemical Sector can contribute, including opportunities to increase positive impact and to reduce negative impacts. Opportunities related to potential negative impacts were assessed for their relevance to Corbion. This assessment was augmented by a high-level review of the SDG targets to identify any other potential negative impacts. One of the limitations of this approach for the supply chain assessment is that it covers only the potential negative contributions while through a company engagement program there are potential positive contributions that are not considered currently.

## **2.2 Prioritization**

The prioritization of the product SDG impact was based on a revenue analysis. Sales data from all products were analyzed to determine the revenue contribution tied to impact areas and the percentage of the company revenues that contribute positively to the SDGs. The SDGs with the largest revenue contribution were selected as the company focus SDGs.

The prioritization of the SDGs impacted by the company supply chain was based on the most recent company materiality assessment. SDGs related to topics with high materiality (implying that the topic is highly relevant to Corbion's stakeholders and that Corbion has a high impact on the topic) were considered to be material[7].

## **2.3 Target setting**

Targets were defined to maximize the positive impact by increasing the sales revenues of products contributing to the focus SDGs. For the supply chain, material SDGs with potential negative impacts the targets aim at minimizing the potential negative impact. Performance indicators were defined to address these impacts, when possible, based on a science-based approach or based on existent company's targets. Progress towards the achievement of these targets is included in the annual report.

## **3 Results and discussion**

The product and supply chain SDG assessment started with the identification of key impact categories (and sub-impact categories). Fig. 2 shows the nine product related impact categories which were identified and linked to SDG 2 (Zero hunger), SDG 3 (Good health and well-being) and SDG 12 (Responsible consumption and production), SDG 13 (Climate action) and SDG 14 (Life below water). Examples Corbion products linked to the impact categories and link to SDG targets are available in [8].

The supply chain impact assessment resulted (Fig 3) in the identification of eight impact categories related to potential negative impacts, which were linked to SDG 2, SDG 6 (Clean water and sanitation), SDG 8 (Decent work and economic growth), SDG 12, SDG 13 and SDG 15 (Life on land).

The focus SDGs were determined by the revenues analysis of products contributing to one or more SDGs. Based on this analysis (Table 1), Corbion has chosen to focus on SDG 2, SDG 3 and SDG 12 as the goals on which it believes it can make the most significant positive impact, given its business activities. For the total Corbion portfolio, including all business units, 61% of 2020 revenues contributed to one or more of the impact categories and, consequently, to one or more of the SDGs.

Impact category	Definition	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Linking SDGs
Animal health	Ensure sustainable food production by improving the health of production animals.	✓	✓		
Reduced environmental impact	Enable our customers to reduce their environmental impact by reducing Greenhouse Gas emissions, waste or land use	✓		✓	13 CLIMATE ACTION
Food safety	Protect food against food-borne pathogens by providing antimicrobial solutions	✓	✓		
Food waste	Ensure sustainable food production by preventing food waste	✓		✓	
Health & health care	Preserve health by providing health care solutions		✓		
Health & nutrition	Preserve health by providing food ingredients with nutritional benefits		✓		
Marine biodiversity	Ensure sustainable food production by protecting marine ecosystems	✓			14 LIFE BELOW WATER
Biobased economy	Enable the transition to a biobased economy using renewable biological resources sustainably to produce food and materials			✓	
Less hazardous chemicals	Reduce the risks associated with producing and using chemicals		✓	✓	

**Fig. 2.** Corbion product key impact categories and mapping with the SDGs.

Impact category	Definition	2 ZERO HUNGER	6 CLEAN WATER AND SANITATION	8 DECENT WORK AND ECONOMIC GROWTH	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	15 LIFE ON LAND
GHG emissions	The reduction of GHG emissions by Corbion and its partners in line with the Paris Agreement through increased energy efficiency, use of renewable energy and supplier engagement.					✓	
Deforestation	Create a sustainable agricultural supply chain by eliminating deforestation						✓
Environmental and social impact of agriculture	Create a sustainable and traceable agricultural supply chain through continuous improvement to reduce negative impacts on the environment while providing positive benefits such as carbon sequestration	✓					✓
Occupational health & safety	Provide a safe and healthy working environment for all employees, contractors and visitors, and promote a safety culture in the supply chain			✓			
Waste	Mitigating waste from production and eliminating landfill				✓		
Human and labor rights	Respecting human rights in Corbion’s own operations and within its supply chain			✓			
Water management	Minimize water consumption through efficient processes and ensure water quality when discharging by wastewater treatment.		✓				
Use of agricultural land for non-food use	Minimize competition between the use of land to produce feedstocks for biochemicals and the use of land for food production	✓					

**Fig. 3.** Supply chain: Impact opportunities related to potential negative impacts in the (bio)chemical sector and mapping to SDGs.

The material SDGs impacted by Corbion’s supply chain were identified based on the company materiality assessment performed in 2020 [7]. As shown in Table 2, highly material SDGs are: SDG 2, SDG 13, and SDG 15.

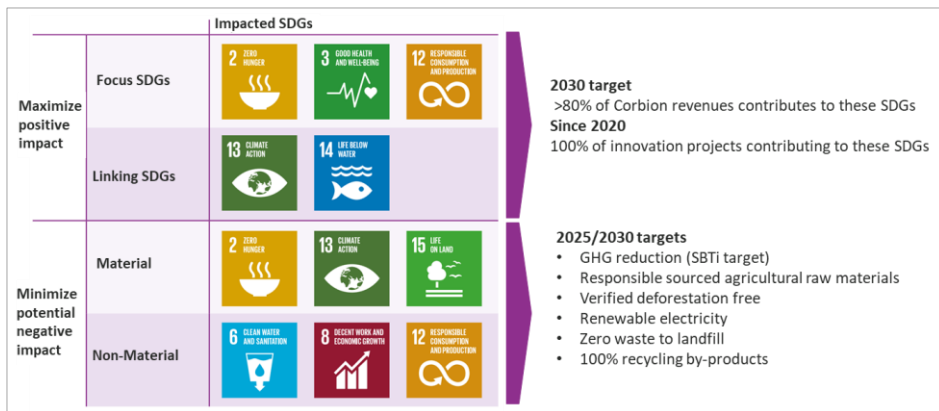
**Table 1.** Revenues contributing to an SDG divided by total Corbion revenues (2020). Note that some products contribute to multiple SDGs and, for this reason, the total revenue contribution is not equal to the sum of the percents in this table.

SDG 2	SDG 3	SDG 12	SDG 13	SDG 14
30%	34%	50%	7%	1%

**Table 2.** Supply chain: materiality assessment.

	Impact area	Materiality
SDG 2	Environmental and social impacts of agriculture Use of agricultural land for non-food use	High
SDG 6	Water management	Medium-low
SDG 8	Occupational health and safety Human and labor rights in supply chain	High Medium-Low
SDG 12	Waste	Medium-Low
SDG 13	Greenhouse gas emissions	High
SDG 15	Deforestation Environmental and social impacts of agriculture	High

To make a credible and meaningful impact on the SDGs, Corbion has set targets aiming to minimize any negative impacts while maximizing positive impact, as shown in Fig. 4. The targets aiming at maximizing the positive impact focus on portfolio steering, to increase the revenues of products contributing to the focus SDGs. An additional target is that 100% of innovation projects contribute to the focus SDGs, to ensure that future products have a positive impact. Through innovation we develop new products with improved functionalities and increase our positive impact.



**Fig. 4.** Corbion Advance 2025 targets, aligned with the SDGs.

To minimize the potential negative impacts on the value chain targets are set related to the material SDGs: greenhouse gas reduction (Science based targets initiative §), responsible sourced agricultural raw materials, verified deforestation free, renewable electricity, zero waste to landfill, 100% recycling of by-products etc. The progress towards the achievement of these targets is included in the annual report.

§ <https://sciencebasedtargets.org/>

## 4 Conclusions and recommendations

This study proposes an approach to integrate the SDGs in a company strategy. It provides a pragmatic and structured approach, with emphasis on KPI definition and target setting related to positive impact through a company activity.

Corbion has integrated the SDGs in its strategy, Advanced 2025, by focusing on SDG 2 (Zero hunger), SDG 3 (Good health and well-being) and SDG 12 (Responsible consumption and production). These SDGs were identified using the assessment described in this study and are the goals on which Corbion can make the most significant positive impact, given its business activities. The call for action is to increase the percent of revenues from products contributing to these SDGs. To achieve this ambition Corbion focuses on steering the portfolio of commercial and innovation products.

The next steps include considering the positive impacts in the value chain and taking a more detailed approach to the product use impacts, for example by using life cycle assessment (LCA) or Product social impact assessment (PSIA)\*\*. Companies need to minimize any negative impacts or “do no harm”, by setting targets to address potential negative impacts. Additionally, to meaningfully set targets to minimize potential negative impacts, it is important to set science-based targets for relevant environmental impacts, including but not limited to climate (for example with SBTN – Science based targets network††). Similarly, for social topics, target setting can be done using PSIA. Harmonization on SDG assessment for business is still needed, to improve transparency and credibility of sustainability claims.

## References

1. United Nations Global Compact, Making Global Goals Local Business: Responsible business in the era of the Sustainable Development Goals (2019), <https://www.unglobalcompact.org/library/4321>
2. Global Reporting Initiative, United Nations Global Compact, World Business Council for Sustainable Development, The SDG compass (2015), <https://www.unglobalcompact.org/library/3101>
3. Global Reporting Initiative and United Nations Global Compact, Business reporting on the SDGs (2017), <https://www.unglobalcompact.org/library/5361>
4. Global Reporting Initiative, Principles for Responsible Investment, United Nations Global Compact, In Focus: Addressing Investor Needs in Business Reporting on the SDGs (2018), <https://www.unglobalcompact.org/library/5625>
5. United Nations Global Compact, Ambition Guide: Setting Goals for the Decade of Action (2020), <https://unglobalcompact.org/library/5791>
6. World Business Council for Sustainable Development (WBCSD), Chemical Sector SDG Roadmap (2018), <https://www.wbcd.org/Programs/People-and-Society/Sustainable-Development-Goals/Resources/Chemical-Sector-SDG-Roadmap>
7. Corbion, Corbion annual report 2020, <https://annualreport.corbion.com/>
8. Corbion, Measuring what matters – Corbion SDG impact assessment (2021), <http://www.corbion.com/about-corbion/sustainability/sustainable-development-goals>

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\*\* <https://product-social-impact-assessment.com/>

†† <https://sciencebasedtargetsnetwork.org/>