

EU Code of Conduct (CoC) on Responsible Food Business and Marketing Practices

BASF Agricultural Solutions commitments

Introduction

The European Commission has developed a Code of Conduct (CoC) for Responsible Business and Marketing Practices for food businesses and associations - an element for an EU transition towards more sustainable food systems. This initiative appeals companies to promote voluntary commitments to contribute to the objectives of the European Green Deal, and it is an example of how all stages of the food value chain can contribute to the Farm to Fork Strategy.

As one of the world's leading agricultural solutions companies, BASF serves farmers with a connected portfolio of agricultural solutions from seeds, traits and crop protection to digital solutions. We are committed to clear and measurable targets to boost sustainable agriculture by 2030. We believe to be a valuable partner along the food chain to fulfill the EU CoC intention towards a more sustainable food system.

Therefore, we welcome the opportunity to contribute to the EU CoC with our vision of "Better Yield". Better yield means to produce in ways that are recognized as valuable by society, are kind to the planet and help farmers earn a living.

Rationale

We selected the CoC Aspirational Objectives (AO) where we can contribute best with our connected portfolio and have the largest impact towards more sustainability in agriculture. Therefore, we support:

- AO3 "A climate neutral food chain in Europe by 2050" with our Global Carbon Farming Program and our CO₂ emission reduction targets.
- AO4 "An optimized circular and resource-efficient food chain in Europe" with our digital solutions offer.
- AO5 "Sustained, inclusive and sustainable economic growth, employment and decent work for all" with our continuous increase of sustainable solutions in our portfolio and safe use of our products by the right stewardship.
- AO6 "Sustainable value creation in the European food supply chain through partnership" with our strong engagement with partners in industry, society and farmers directly.

Motivation

BASF Agricultural Solutions has released strong sustainability commitments in 2020 to boost sustainable agriculture by 2030. These commitments strengthen the implementation of the BASF's strategy in agriculture, which was launched in 2019. Our strategy in agriculture is based on innovations that enable farmers to feed a growing population and face challenges such as limited arable land, disease pressure and climate change. We actively steer our offer for farmers and the agricultural industry towards sustainable solutions by integrating sustainability into all business and portfolio decisions.

The aspirational objectives reflect our commitments in climate smart farming, resource efficiency through digital solutions for the farmer, a continuous increase of sustainable solutions for farming and consistently high safety standards by smart stewardship. We also value strong partnerships in reaching our commitments.

Commitments

In the following section we present our commitments which will serve best the EU CoC intention towards a more sustainable food system.

CoC Aspirational Objective	BASF commitment
Objective 3: A climate neutral food chain in Europe by 2050	We support growers worldwide to farm more sustainably and carbon-efficient: we aim for a reduction of CO_2 emissions by 30% per ton of crop by 2030.

With agriculture being responsible for about 20% of global CO₂ emissions, carbon-efficient agricultural practices can significantly contribute to a climate neutral food chain in Europe. We are exploring ways to help incentivize CO₂ efficiency and open new value streams for farmers. We will establish a program that allows farmers to track and profit from practices reducing CO₂ emissions, underlining its efforts to contribute to fighting climate change. The *Global Carbon Farming Program* will support our commitment to reduce the carbon footprint per ton of crop produced by 30% by 2030 in wheat, soy, rice, canola and corn. We will launch this program in phases starting in 2022.

The Global Carbon Farming Program will promote sustainable agricultural practices and foster the best use of our holistic portfolio for farmers – from seeds, traits, innovative chemical and biological crop protection products, to digital farming and fertilizer management solutions. The program will help farmers to reduce on-farm emissions and sequester more carbon into the soil. In addition, we will build the global framework to allow farmers to generate carbon credits from recognized certifiers that will lead to second revenue streams from their carbon reduction efforts.

CoC Aspirational Objective	BASF commitment
Objective 4: An optimized circular and resource-efficient food chain in Europe	We aim to bring digital technologies to more than 400 million hectares of farmland globally and cumulatively by 2030.

Digitalization can make agriculture more resource-efficient, inclusive and sustainable. Therefore, we will help farmers with digital tools to grow their businesses profitably, while reducing their environmental footprint. Using digital technologies allows farmers to produce more with less, to make farming processes more efficient from field monitoring to the food supply chain.

Our xarvio® digital products enable more precise application of crop protection products, nutrient management, automated buffer zones and monitoring of biodiversity. Digital tools also have the capacity to reach vast numbers of farmers, including those in less developed countries, thereby increasing knowledge and raising awareness of on-farm sustainability. We aim to bring digital technologies to more than 400 million hectares of farmland cumulatively by 2030.

CoC Aspirational Objective	BASF commitment
Objective 5: Sustained, inclusive and sustainable economic growth,	We will annually increase sales share of solutions with substantial sustainability contribution by 7%.
employment and decent work for all	 We will ensure safe use of our agricultural solutions products with right stewardship.

It is our goal to increase the number of sustainable solutions we bring to farmers year by year. Therefore, we strengthen our activities in research and development (R&D) for sustainable agricultural innovations, helping farmers to overcome environmental and economic challenges as well as meeting consumers' demand for more sustainably produced food. Our R&D pipeline contains solutions that support the efficient use of resources and reduce the environmental footprint. These solutions contain amongst others:

- products enhancing yield and thus preserving natural habitat,
- BioSolutions based for example on our RAK® pheromone technology and
- breeding innovations helping consumers to avoid food waste.

By 2030, more than 30 major R&D projects will complement our connected offer of seeds and seed treatment products, chemical and biological solutions, as well as digital services.

In addition, we systematically assess our entire product portfolio against clearly defined and third-party validated sustainability criteria with the Sustainable Solution Steering method. With this steering tool we will direct an annually increase our sales share of solutions with substantial contribution to sustainability by 7%.

We take our commitment to safety for human health and the environment very seriously. We offer the right stewardship with every product to ensure the safe use of our products around the farm and in the field. We provide access to stewardship tools and services that are tailored to every farmer's daily work. These include protective equipment, customized training, digital solutions, and new and future-oriented application technologies such as drones that reduce working time and minimize potential exposure to agrochemicals. Initiatives using drones have already been launched in China and Colombia. Another example of our continuous efforts to make the handling of crop protection products easier and safer is the closed transfer system 'easyconnect'. It was developed with partners and is supported by key players in the agricultural industry with first market launches expected in 2022 in Denmark and the Netherlands, followed by other European countries in 2023.

CoC Aspirational Objective	BASF commitment
Objective 6: Sustainable value creation in the European food supply chain through partnership	We continuously engage with partners along the food value chain striving towards a sustainable food system.

We believe that partnerships along the food value chain are a key success factor for a sustainable transformation of the food system. Therefore, we strongly engage with partners to create shared value and stimulate sustainable production. Some examples are given below:

 A joint venture between Bosch and BASF Digital Farming will enhance the distribution of Smart Spraying solutions. The Smart Spraying solution offers real-time, automated preemergence ("green-on-brown") and post-emergence ("green-on-green") weed identification and management day and night. This new approach to weed management increases farm profitability through a more precise and efficient use of herbicides.

- Another collaboration in the area of digital farming is our partnership between xarvio® Digital Farming Solutions and John Deere. The aim is to help European farmers optimize crop production and reduce environmental impacts.
- In our Farm Network we bring together farmers and experts on biodiversity, soil health and other topics with the aim to manage a farm environmentally sound, socially responsible and economically viable.
- The project Riso Chiaro aims for a sustainable rice production in Italy. Innovative digital
 technology offers a new model for granting and certifying good cultivation practice, origin and
 quality of the "made in Italy" rice. Riso Chiaro promotes sustainable agriculture along the value
 chain.
- In Greece, we partner with an olive oil producer and use our AgBalance® tool to assess and improve the sustainable agricultural practices in their olive groves.
- BASF, Boortmalt and Sustainable Agriculture Initiative (SAI) Platform collaborate for sustainable barley production. In this partnership, the malted barley supplier Boortmalt improves sustainability throughout their value chain with AgBalance®, our sustainability assessment tool. The independently benchmarked Farm Sustainability Assessment module from the SAI Platform is now integrated in AgBalance.

Clarification

Commitments made in this submission were undertaken prior to the launch of the Code of Conduct and are already published on our external websites.

Information Sources

- BASF Agricultural Solutions Sustainability commitments
- BASF Global Carbon Farming Program
- BASF's strategy in agriculture
- BASF innovation pipeline for sustainable agriculture