

EDITORIAL

The United Nations 2030 Agenda sets the targets for sustainable development. Achieving them requires commitment from companies. Every company's operations have an impact, so they have an economic, social and environmental responsibility. COSUCRA contributes to this dynamic.



Our company's model itself addresses sustainable development challenges: we value natural raw materials, which are cultivated as close as possible to our production sites. We have been a part of the economy of our region since the company was created in 1852. Our strategic direction is based on our scientific expertise and our endeavours in R&D, which has enabled us to consolidate our operations. We have become a world leader in ingredients derived from chicory root and peas. This in turn enables us to meet the targets for sustainable and resilient food production. We provide solutions for improving nutritional quality and contribute to dietary transition.

Soil is the base on which COSUCRA has grown. That is why preserving this essential resource and reducing our environmental impact is at the heart of everything we do. The European Union has set the target to reduce CO_2 emissions by more than 50% by 2030. It is a challenge that we have made our own, as it has become one of the cornerstones of our strategy. We avoid creating a great deal of CO_2 by reducing the inefficient production of foods derived from livestock farming and focusing on the production of vegetable-based ingredients.

We are also working on the challenge of energy efficiency. Furthermore, we have developed several renewable energy production systems. We have already been able to scale back our energy consumption from fossil sources.

Being able to offer natural ingredients that are beneficial to consumer health, while still preserving the environment, is a challenge that COSUCRA is prepared to take on each and every day.

Sustainability: it's second nature for COSUCRA

COSUCRA – November 2022 - Proprietary information - All rights reserved



SUMMARY

COSUCRA together towards 2030

Our sustainability challenges

CHICORY, A SUSTAINABLE SOURCE OF FIBRE

The history of chicory

From the field to the factory

PEA, A POSITIVE IMPACT ON THE PLANET

Yellow pea: rich in protein

The yellow pea: a virtuous crop

COSUCRA: the importance of a

COSUCRA is committed to an i

MANAGING THE ENVIRONMENTAL IM

DEVELOPING RENEWABLE ENERGIES

Water as a sustainable resource

Minimising the impact on the surrounding area

COMMITTED TO BIODIVERSITY



0	4
	5
	6
	6
	7
	9
	9
0	10
a quality yellow pea	11
industry of excellence	12
1PACT	13
S	14
e	15
	16
	4-7
	17



COSUCRA has set itself the mission of being part of a healthy, sustainable and vegetable-based diet. With our help, those working in the agri-food industry are supported in making the necessary dietary transition. For us and our partners, this means producing better and thinking differently about the way we consume. To do this, we are building upon the 4 pillars that are guiding our 2030 strategy: Roots, Health, Talent and Planet.

THE 4 PILLARS THAT ARE GUIDING OUR 2030 STRATEGY

TALENT

The power of talent

Our markets are evolving ecosystems and COSUCRA must adapt and grow in line with these same dynamics. We are constantly recruiting new talent to support this growth and ensure innovation, from raw material to ingredient. We rely in particular on international candidates that we can bring into our professional environment. We offer our employees a wide range of training courses that enable them to develop their skills throughout their careers.

ROOTS

An international vision serving the local economy

COSUCRA promotes products that come from the earth. Created in Belgium 170 years ago, this family-run business has its roots firmly anchored in the local economy. We favour local supplies. We have been able to shift our production by anticipating consumer trends and needs. We have made the choice to produce ingredients with unique properties. Our dynamic is enabled by our commitment to developing a solid network with our partners around the world and our expertise in our sectors, both upstream and downstream. This enables us to contribute to the economic drive of our region, with and for growers.

HEALTH

Our commitment to consumer well-being

Consumers are more conscious than ever of the impact that food has on their health. Diabetes, obesity, heart problems are all due in part to what is on our plate. Well-being and the nutritional quality of our food are inextricably linked. That is why we have made health a major focus of our strategy. Our ingredients give plant proteins and fibres a much more prominent place in daily nutrition. They also meet the expectation of foods that are low in sugar and fat. Our ranges enable our customers, for example, to offer natural end products with "free from" recipes.

PLANET

Working with and for the Planet

Faced with the major challenges of climate change, we contribute to the preservation of nature, which is an essential part of our business. Our endeavours are achieved by adjusting our practices. We are also working to change behaviours throughout our sectors, including consumption habits. COSUCRA continues the mission to participate in a healthy, sustainable and plant-based food





Our sustainablility challenges

The 2030 Agenda adopted by the United Nations lists 17 Sustainable Development Goals (SDG). Countries around the world have been invited to take up these goals and to plan their implementation.

To hope to achieve these objectives, companies must mobilise and change their practices through their CSR (Corporate Social Responsibility) strategies.

At COSUCRA, we are fully aware of this. This is why, beyond our ambition for food transition, we want to moderate our environmental impact. Although we are working on other areas for improvement, this document focuses solely on this topic.

This is played out on several levels, from the field to the transformation of the two raw materials that we promote: chicory root and peas. We have made 7 commitments for 2030.

Each can be linked to one or more of the Sustainable Development Goals defined by the UN.







CHICORY, A SUSTAINABLE SOURCE OF FIBRE

The history of chicory

A healthy crop

Chicory root cultivation goes back as far as ancient Egypt. At the time, its health benefits were already widely known. The plant also acclimatises well to more northern areas. It is among the traditional produce in Belgium and northern France. It even takes on a cultural dimension. Initially consumed as a coffee substitute, it is well established in the diet.

Today, just like 5000 years ago, chicory root is valued for its health benefits. It is cultivated for its inulin content. Although more than 36,000 fruits and plants contain inulin, the chicory root provides the richest source. It has a concentration of 17%. This is the plant's natural energy reserve. It is one of the dietary fibres.

Back in 1986, we were pioneers in the extraction of inulin from chicory root. We were able to offer two ranges: FIBRULINE[™] chicory root fibre and inulin & FIBRULOSE[™] chicory root fibre and oligofructose.

A production area invested in the environment

In 2014, an approach encouraging practices that favour soil and environmental preservation was introduced. It began in Belgium. Good agricultural practices, inspired by regenerative farming, have thus been developed in our supply area. Their job is, among other things, to restore the quality of cultivable soils. They also aim to restore and maintain biodiversity, reduce greenhouse gas emissions, store more CO_2 , moderate the use of inputs and improve the water cycle. Regenerative farming is based on crop rotation, permanent soil cover and promotes the no-till method.

Chicory cultivation fits well into long rotations

Planting it every 6 years limits the pressure of parasites, diseases and difficult-to-control weeds.

Permanent soil cover has many environmental benefits, such as providing biomass for subsequent crops. It also prevents erosion, as the root systems aid good soil structure and improve water infiltration.

Chicory root requires little nitrogen fertiliser compared to cereals or even beetroot. The use of compost and manure from livestock farmers instead of mineral fertilisers is also preferred. In the same vein, industrial organic amendments are reincorporated into the soil by spreading.

Chicory root does not require irrigation. Its pivoting root system allows it to draw water up to 2 meters deep. For example, it can grow in sandy soils. Sown in April, it is harvested between September and December, depending on weather conditions. Chicory should preferably be grown in soils that are not too heavy. This limits soil residue adhering to the root. Composition of chicory root



Long-term, committed partnerships



From the field to the factory

► A local supply

We source our chicory from 400 loyal growers within a 60-kilometre radius. Three-quarters are located in Belgium and the final quarter in France. Their production has increased by 20% since 2019.

THE VOLUMES PRODUCED BY COSU-CRA'S PARTNER GROWERS HAVE INCREASED 20% IN 3 YEARS.

We choose our partner growers. In particular, they must adhere to crop rotation practices and apply environmental best practices, which includes VEGAPLAN certification. This is a Belgian initiative, adopted by most producers, consisting of a guide to agricultural best practices that goes beyond European recommendations.

It includes:

>>> Reinforced crop traceability with strict control of inputs.

If farms are not certified, we impose specific controls. In France, there is no standard. These are specific to each cooperative. Non-certified growers must complete an audit independently.

>>> All producers who supply us draw up a plot map.

This document ensures the traceability of its chicory production to our COSUCRA facilities. It contains the crop itinerary including tillage operations, seeds, phytosanitary products, harvesting equipment and water irrigation. Our teams monitor the work of producers.

Contracts are renewed each year with growers wishing to continue cultivation, knowing that they all must practise rotation and must manage crop rotations with a long-term vision.

Process improvement that benefits everyone

We have invested in equipment to improve the efficiency of harvesting work at partner grower sites.

The steps, which range from uprooting to delivery with defects, have been improved.

We have financed preloading cleaning machines, such as scrapers. This made it possible to better manage the soil tare.

>>> This refers to the earth that remains adhered to the roots after harvesting. Its proportion amounts to removing a fraction from the fields. Over the long-term, this affects soil composition. A higher soil tare also increases the volume to be transported and the requirement for washing at the factory. This earthy water must then be recycled.

>>> 75% of transport to the factory is by carriers. Work is facilitated by the provision of a mobile crane in the fields.









In-depth work to develop optimised varieties

COSUCRA is the world leader in chicory seed for inulin extraction. This expertise is supported by our CHICOLINETM business unit, which has been involved in selection since 1980.

In terms of sustainable development, it aims, among other things, to:

>>> Provide innovative solutions to growers' expectations

>>> Develop seeds with an optimised inulin/hectare yield

>>> Be part of the scientific progress of cultivation through collaborations with various private and public research institutions

Creating new varieties takes into account various criteria relating to agricultural production, logistics and processing. We run selection and testing programs in France and Belgium. The varieties that we develop, through natural crosses, take into account the regions, soil type and, indirectly, climate change.

COSUCRA is the world leader in chicory seed for inulin extraction

Thanks to COSUCRA, the yield of inulin per hectare has risen by 25% since the 80's



CHICOLINE™ offers ranges of seeds:

With a better ratio of inulin per hectare; the key is less mobilisation of agricultural land for the same production of ingredients.

>>>> Less susceptible to foliar and root diseases; this moderates the need for phytosanitary treatment.

With a root shape that is perfect for optimal uprooting and favours downstream work;

- A root that is too long runs the risk of breaking in the field, leading to yield
- The presence of resprouting chicory in the following crop will lead growers to use more phytosanitary treatments.
- A root that pulls out easily will lead to a lower soil tare.
- The root is easier to transport if it is smooth and unforked.

>>> Adapted to the inulin industry with:

- An increased harvest time with less degradation of inulin quality over time.
- A very good inulin quality. The use of industrial processes to remove free sugars is not necessary.

>>>> An improved industrial yield Our CHICOLINE[™] division, which offers varieties adapted to different terroirs and local conditions, intends to strengthen the selection because of climate change, and in particular is working on resistance to drought. But it is a complex exercise.

This characteristic presupposes the selection of varieties according to their reaction to several types of stress, which are often interdependent:

>>>> Abiotic: drought, strong temperature variations, frost, wind, hail, excess water, high salinity, etc.

>>> Biotic: triggered by attacks from fungi, insects, bacteria, weeds, etc.

>>> Biotics are also impacted by abiotic stresses

► A company invested in its sector

In the interest of progressing positively in terms of the environment, we host technical and scientific information meetings with growers to provide practical advice. For example: reducing chemical weeding in favour of mechanical weeding. Spreading this information has led to an increased use of the hoeing technique, from 40% in 2019 to 75% in 2022.

We also offer the extension sector new products or visits to test plots, with operational advice.

We surround ourselves with different operators, particularly when it comes to research, via:

>>> An agricultural centre dedicated to beetroot and chicory in Belgium, in which we collaborate with growers alongside other operators. Work focuses, for example, on the control of coatings, herbicide trials, harvesting or cleaning in the field;

>>> CHICOPROTEAM: a discussion group made up of selected growers, notably those who are open to change. Among the topics covered in this setting: the increase in the yield of inulin/ha using equipment.

By encouraging the shift towards regenerative agricultural practices, by selecting varieties that ensure better yields in cultivation and processing, we can help the entire chicory sector to reduce its impact on the environment.



PEA, A POSITIVE IMPACT ON THE PLANET

• Yellow pea: rich in protein

Well-known by populations since the Bronze Age, peas (Pisum sativum) continue to be consumed across continents and generations! In all its forms (round and smooth, bumpy or even wrinkled) and its colors (green, yellow), it integrates our plates, and contributes broadly to animal feed.

Belonging to the leguminous family, the yellow pea is known for its high starch and protein content. Its proteins are particularly interesting: rich in lysine and essential amino acids which cereals are poorly provided with. They are also particularly digestible and are low in anti-nutritional factors.

A short-cycle crop from Mediterranean origin, the pea is originally planted at the start of winter and harvested at the end of spring. It was then adapted for Northern Europe as a spring crop, sown in late winter and harvested in summer.

Pea crop











Composition of yellow pea



Pea protein	pisape
Pea fibre	Swelite [™]
Pea starch	NASTAR



The yellow pea: a virtuous crop

► A culture with low nitrogen and water supply

Like other legumes, peas have a symbiotic relationship with soil bacteria that allow them to use nitrogen from the air. So, there are no additional nitrogen fertilizer inputs to be expected for pea crops. The pea has a second considerable agronomic advantage: the use of minimal or even zero irrigation. Water requirements are lower than for soy or corn because its cycle is short.

► A culture favorable to other cultures

Efficient nitrogen fixation, little (or no) irrigation: so many agronomic advantages that make pea a major asset for the preservation of the environment, and crop rotation. Integrating a legume into your crop rotation sequesters carbon in the soil and stores atmospheric nitrogen. This enriches the soil with nutrients for subsequent crops. Integrated into a rotation, the pea ensures a reduction in the use of plant protection products and fertilizers, and an increase in yields. This is particularly the case for cereals and oilseeds which will follow a crop of peas. The pea is generally integrated into the rotation every 5 to 6 years.

► A sustainable culture for sustainable vegetable proteins

Pea is a very efficient raw material in the production of proteins: use of water, land and energy. In the rotations, the pea contributes to a significant reduction in greenhouse gas emissions.

The production of vegetable proteins, and in particular pea protein, requires 5 to 10 times less cultivated land than for the production of animal proteins.



^{**} Internal data

Pea crops limit greenhouse gas emissions



Based on Gonzalez et al (2011)



COSUCRA: the importance of a quality yellow pea

Supply at the heart of Europe

We source from 12 producers, located in France and Belgium. 80% of production comes from cooperatives and 20% from trade. We have a partnership with some of these cooperatives for even more than 20 years.

Since 2011, we have accelerated the use of waterways to supply our factory with peas. In 2019, this represented more than 75% of supplies.

Strict specifications

With our partners and our experts at COSUCRA, we act on several axes:

>>> The peas meet COSUCRA's specific specifications.

>>> A screening is carried out and transmitted to our teams on all deliveries. It focuses in particular on plant protection products (EC 396/2005 and more), mycotoxins (ochratoxin A, aflatoxins) and contaminants (heavy metals).

>>> Regarding cross-allergens, a very strict procedure must be followed. It is validated by an independent third party.





COSUCRA is committed to a sector of excellence

Partners who share our ambitions

The selection of pea suppliers is key. We opt for agile, responsive partners who are particularly concerned about the quality of the peas and capable of ensuring sustainable transport. With our partners, we are committed to mutual enrichment and continuous improvement is a central focus of our common approach.

▶ The potential of pea rich in proteins

Varietal optimization is essential for increasing the protein content of peas. The average protein content of yellow peas was 21.9% in 2020. The north of France, which is our privileged supply basin, records the highest protein rate (22.5%).

Main factors impacting protein content: >>> The varietal selection >>> Agricultural practices >>> Terroir

Regenerative farmers use farming practices that improve the health of their land

Rotating crops

Minimising chemical inputs



No-till

systems

Integrating livestock

Cover crops





Halving the carbon footprint in 10 years

MANAGING THE ENVIRONMENTAL IMPACT



We are committed to reducing our carbon footprint by 50% by 2030 compared to the 2019 reporting year.

We have carried out a carbon assessment to evaluate where our current strengths and areas for improvement are in terms of CO₂ emissions.

We have assessed our direct greenhouse gas (GHG) emissions (Scope 1) and those from indirect sources associated with energy (Scope 2).

We have also studied the other most impacting indirect emissions (Scope 3).For the 2019 reporting year, the total CO, emissions emitted amounted to 131,029 tCO₂-eq.

•Our main source of emissions is the purchase of raw materials (peas and chicory roots: 53.2%).

This is followed by natural gas (40,4%) (scope 1). Compared to scopes 1 and 2 (49,079 tonnes of CO_2), the targeted reduction is therefore 24,539 tonnes by 2030.

Total CO, equivalent emissions of COSUCRA for the year 2019 (scopes 1,2 and 3)



eq CO ₂ e total (tonne)	COSUCRA 2019	Pea plant 2019	Chicory plant 2019
CO ₂ e Scope 1	44,755	15,523	29,232
CO ₂ e Scope 2	4,323	2,589	1,734
CO ₂ e Scope 3	81951	20,269	61,683
TOTAL	131,029	38,381	92,649

- ▶ 1% Shift: 1,360.27 T 3,6% - Electricity: 4,730.35 T 1,1% - Freight: 1,517.82 T 40,4% - Heating: 52,904.67 T
- 53,2% Purchased goods: 69,701.38 T
- 0,6% Waste emissions: 799.52 T



50% of our electricity needs are produced by our cogeneration facilities

DEVELOPING RENEWABLE ENERGIES

Cogeneration

To limit our carbon footprint, we use several cogeneration installations to produce electricity, in addition to the heat required for our manufacturing process. In 2021, a new cogeneration unit was installed and a second underwent a major overhaul. Electricity production by cogeneration was thus increased from 25,399 MWh in 2020 to 27,321 MWh in 2021.

	2019	2020	2021
Electricity production by cogeneration (MWh)	26,334	25,399	27,321

Solar power

In 2021, our 760 solar panels provided 214 MWh of electricity, a slight decrease compared to 2020 (229 MWh), which is partly explained by lesser periods of sunshine.

	2019	2020	2021
Production/ consumption of PV electricity (MWh)	224	229	214

Our wind turbine produced **3,752 MWh** in 2021



Wind turbine

In 2020, COSUCRA and Luminus erected a wind turbine with a power of 2,35 MWh. Our wind farm produced 3,752 MWh in 2021. Our electricity consumption from this source was 2,776 MWh, the rest having been reintegrated into the grid. This is the equivalent consumption of around 800 Belgian households.

Biogas

Wastewater from our two production sites are processed by our onsite treatment facilities. The effluent first passes through anaerobic tanks where the absence of oxygen enables the methanisation process. This results in the production of biogas. Biogas consumption increased between 2019 and 2021 from 13,463 to 13,636 MWh.

	2019	2020	2021
Biogas consumption (MWh)	13,463	13,451	13,636

Our 760 solar panels provided 214 MWh of electricity







Water as a sustainable resource

We have launched a partnership with SWDE (Société Wallonne des Eaux) to recover mine water from Tournaisis quarries and transport it to our production sites.

This recycles millions of m³ of groundwater discharged by the very active quarrying industry in the region into drinking water. We preserve the water table and this will also ensure that our monthly water consumption is better monitored.

Supply to COSUCRA is planned from the start of 2025. The Convention spans the next 25 years.

We treat the water from the two plants on the Warcoing site, which handles 2,25 million m³.

The water discharged into the Scheldt adheres to strict quality standards. Our teams take daily samples to check the discharge.





Minimising the impact on the surrounding area

Noise management

We care about the noise pollution we may cause. Equipment such as silencers and sound insulation for conveyor belts or roofs have been integrated into the pea factory in recent years. Nearly €300,000 was spent in 2019 to comply with noise standards. We monitor the noise level of our installations and stay in contact with neighbours in order to react as quickly as possible.

Monitoring dust emissions

We are continuing our efforts to reduce our accidental dust emissions. We continuously monitor our probes, which enables us to detect any problems with our installations.

► Waste

We recycle most of our by-products as animal feed. Other production-related waste is sent to an external biomethanation unit. The sewage sludge produced during wastewater treatment is used as fertiliser on fields within a 15km radius of our company. Around fifty farmers benefit from these contributions. We reuse and recycle our packaging as much as possible. Our wooden pallets, for example, are taken back by our suppliers. Our used big bags are recovered to be transformed into raw materials, then into recycled big bags. Thanks to this enhanced sorting work, the quantity of residual waste was approximately 250 t in 2021, compared to 403 t in 2019. Anything that cannot be recycled or reused is disposed of in an incinerator.

	2019	2020	2021
Class 2 waste (t)	403,16	302,365	251,055

We encourage our employees to throw their cigarette butts in the ashtrays by taking part in the "TchaoMegot" project. Since the start of this project, in September 2021, nearly 49,464 cigarette butts have been

collected. This is approximately 10 pools worth of water that would not be contaminated with toxic substances.



Noise level monitor Reduction of dust emissions Recycle of packaging

Areas benefiting from a supply of fertiliser from the methanizer



Sewage sludge is used as fertilizer on the fields

A wall in the basins allows us to welcom a colony of bank swallows



COMMITTED TO BIODIVERSITY

Committed to biodiversity

We are working to preserve biodiversity on our sites and more particularly in our reservoirs. No phytosanitary products have been used in this area since 2020. And late mowing is preferred whenever possible. Since 2020, a wall built in the reservoirs has enabled us to accommodate a colony of bank swallows.

Additionally, a Biodiversity Management Committee has been set up in collaboration with representatives of the municipality, the "Contrat de Rivière Escaut-Lys" and naturalists. The first meeting took place on 11 May 2022.

The objective is to draw up a management plan for the preservation and development of biodiversity. The first actions involve creating floats for gull/tern nesting and maintaining the wall sheltering the bank swallows.

We are also now part of Natagora's Nature network. This organisation manages nature reserves. It initiates actions that promote sustainable development, involving all society stakeholders in part of Belgium. The goal is to "stop the degradation of biodiversity and restore nature to a good general condition, in balance with human activities".

Since 2019, biodiversity inventories have also been taken. They made it possible to identify approximately 140 faunal species and 129 floral species on our site. These figures are increasing thanks to the management measures that we have

applied. In particular, we have found native but uncommon species of birds in the region: the common sandpiper and yellow wagtail.

Nurturing exchanges with local residents

We are committed to an annual exchange with our neighbours and representatives of the municipality about our projects and everyone's expectations.

Meetings which must enable:

- >>> Our accessibility
- >>> The presentation of any future changes to the site. This is the case for the wooded embankment with bee-forage plants requested by local residents to improve the quality of the landscape. It is scheduled for 2023
- >>> Our ability to listen to each other and be proactive





COSUCRA Groupe Warcoing S.A. Rue de la Sucrerie, 1 B-7740 Warcoing Belgium BE 0883.812.926 www.cosucra.com

The contents above have been created with greatest care. However, COSUCRA cannot guarantee, express or implied, the accuracy, reliability, usability, completeness and timeliness of the contents above. The respective user is therefore obliged to check or have professional to check the suitability of all content for its intended use. The contents above are for professional use only, not intended for consumers. Except in case of willful misconduct, COSUCRA shall not be liable for damages that are caused by or in connection with the use of the content. Furthermore, in any case, COSUCRA shall not be responsible for and assumes no liability for any indirect, incidental or consequential damages that are caused by or in connection with the use of such content. The trademarks and logos used in this document are legally protected; in particular, PISANETM, NASTARTM, SWELITETM, FIBRULINETM, FIBRULOSETM are protected trademarks of COSUCRA.