



## SUSTAINABILITY REPORT

Responsibly Fresh Goodness by nature  
2021



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2021



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Rita Demaré  
Chair



Luc Vanoirbeek  
General Secretary

#### Foreword

## A collective sustainability project

In February 2019, we – the sector organisation VBT, in conjunction with our member producers' organisations – launched a follow-up to the collective sustainability project that we started a good five years previously. Responsibly Fresh was renamed Responsibly Fresh Goodness by nature. And as promised we are now presenting – some two years later – the first report about Responsibly Fresh Goodness by nature.

Through this collective sustainability project and in conjunction with the producers' organisations and the producers themselves, we are making an active contribution to the Sustainable Development Goals or SDGs of the United Nations and the European Union's Farm to Fork Strategy. Our goal: to achieve a more sustainable agri-food chain.

Working with five participating producers' organisations – BelOrta, Belgische Fruitveiling (BFV - Belgian Fruit Valley), Coöperatie Hoogstraten, Limburgse Tuinbouwveiling (LTV), REO Veiling, and our 3,400 cooperative producers – in this report, we provide an overview of the challenges facing the sector and the efforts being made to achieve sustainable development.

All of the participating producers' organisations and producers have started working on various aspects of sustainability. From making limited adjustments that have had an internal effect, to more large-scale projects with an impact far beyond their own walls. In this report, we illustrate their collective efforts, motivation and involvement.

Achieving further sustainable development is what we, together with our five member producers' organisations and 3,400 member producers, have been doing in recent years and which we will continue to focus on in the years ahead. Because the process of achieving sustainability is always changing and on the move and so can never come to an end. However, if we continue to work together with as much passion and enthusiasm as we have in the past, we will definitely make progress towards more sustainability.

Rita Demaré  
Chair

Luc Vanoirbeek  
General Secretary

# 0.1 Responsibly Fresh

# GOODNESS

by nature

### THE THREE PILLARS OF RESPONSIBLY FRESH GOODNESS BY NATURE

1 The producers opt deliberately to take a cooperative approach, because they are stronger when they stand together. Cooperative entrepreneurship is sustainable entrepreneurship.

2 Fruit and vegetables are naturally healthy. They provide a wealth of flavours and contribute towards a varied diet. The sector is focused on food safety and being economical with the use of food.

3 The sector is committed to progress, while respecting the elements of nature by growing fruit and vegetables with minimal impact on the environment.

1.1

## FROM RESPONSIBLY FRESH TO RESPONSIBLY FRESH GOODNESS BY NATURE





1.2 THE COLLECTIVE LABEL

THE IMAGE

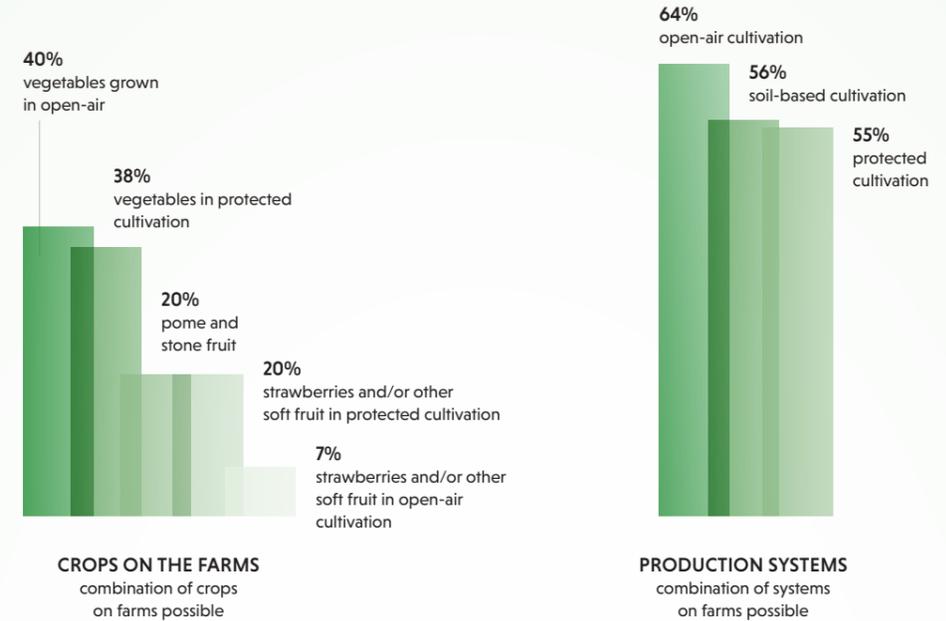
The logo is inspired by the globe, which is our base for the production of fruit and vegetables and the place that the sector takes care of at all times. Various colours of the rainbow symbolise the concept of sustainability: a balanced way to unite seemingly contradictory terms: people, planet and profit. The letter G stands for global, green and good neighbours, as well as for groovy. The leaf in the core of the G symbolises greenery and flourishing and again refers to fruit and vegetables.

THE WORDS

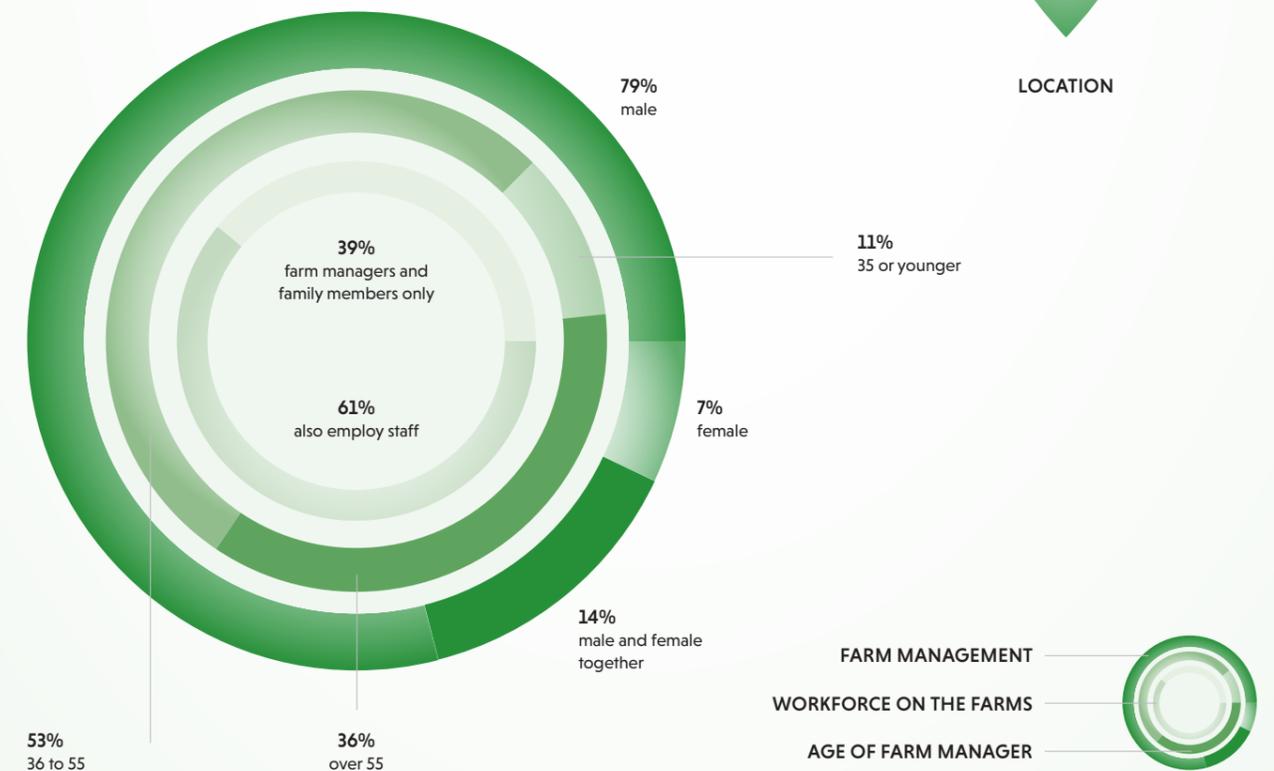
Fresh refers to fresh produce, fruit and vegetables. Responsibly – being both responsible and accountable – indicates corporate social responsibility and social engagement. Goodness by nature states that fruit and vegetables come from nature and are naturally healthy.

1.3 PARTICIPANTS

Responsibly Fresh Goodness by nature is an initiative by the Verbond van Belgische Tuinbouwcoöperaties (Association of Belgian Horticultural Cooperatives – VBT), the sector organisation of the Belgian producers' cooperatives for fruit and vegetables. The five VBT member producers' organisations, which together with their more than 3,400 member producers, were participants in Responsibly Fresh and continue their participation in Responsibly Fresh Goodness by nature:



The participating producers and their farms | collectively 2,099 producers





## 1.4 CONDITIONS FOR PARTICIPATION

Being part of the collective Responsibly Fresh Goodness by nature sustainability project requires the member producers' organisations (POs) and the producers to meet the following conditions:



### CONDITIONS FOR MEMBERS-POs

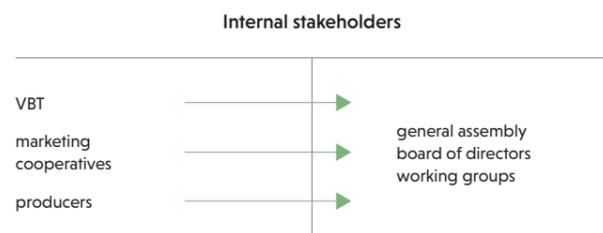
- » Participate at least every two years in the Charter *Duurzaam Ondernemen* (Sustainable Enterprise Charter – VCDO), as offered and monitored by the provincial units of the Flanders' Chambres of Commerce and Industry (Voka).
- » Supplement certification for the QS quality system with an assessment on the *Freiwillige QS Inspektion Arbeits- und Sozialbedingungen* (FIAS) social module.
- » Provide data at regular intervals for a joint overview of a number of key elements relating to sustainable development.

### CONDITIONS FOR THE PRODUCERS WHO ARE MEMBERS OF THE POs:

- » Must have a valid certificate for a quality system, either the Vegaplan Standard for Primary Crop Production or the GLOBALG.A.P. Integrated Farm Assurance (IFA) standard.
- » Answer a questionnaire at regular intervals for preparing a collective dossier about their efforts to support sustainable development. •

## 1.5 STAKEHOLDERS

Consultation with stakeholders is essential as part of the Responsibly Fresh Goodness by nature sustainability project. The aim is to include the points for attention of the various stakeholder groups (see p. 21) in the project.



## 1.6 REPORTING

### POs – VCDO

Building further on their participation in the Responsibly Fresh collective project, the five producers' organisations (POs) also took part in 2018, 2019 and/or 2020 in the Voka *Charter Duurzaam Ondernemen* (Sustainable Enterprise Charter – VCDO). The POs drew up an annual action plan accordingly, in line with the five pillars of sustainable management – people, planet, partnerships, peace and prosperity – and with the 17 Sustainable Development Goals (SDGs) of the United Nations (UN).

As part of the process, they conducted at least ten actions. A favourable external assessment resulted in the VCDO certificate. The five POs have also been awarded the international certificate from the UN and Cifal Flanders/UNITAR: SDG Pioneer. Because they received a VCDO certificate three times within a five-year period, ten actions were positively evaluated in at least four of the five pillars, and actions were carried out within each of the 17 SDGs. For the POs, these recognitions are not an end point in the process, but rather a motivation to evolve further and become even more sustainable.

In the meantime, the POs have confirmed their participation in the VCDO in 2021 or are considering it for 2022. Details about the charter and the practical actions of the POs are available on their website and/or in their individual sustainability reports.

### POs – FIAS

Since 2017, the member producers of the POs have been assessed on the GLOBALG.A.P. social module, GRASP (GLOBALG.A.P. Risk Assessment on Social Practice). As a next step, the POs are evaluated on the social module FIAS (*Freiwillige QS Inspektion Arbeits- und Sozialbedingungen*) of QS.

### POs – KEY ELEMENTS

In consultation with the POs, VBT has adjusted the questionnaire for POs. The modified questionnaire was completed at the beginning of 2021 for the period 2018-2020. The joint results of the five POs, processed by VBT, are shown in this report.

### PRODUCERS – QUALITY SYSTEM

As is customary, the member producers have a valid certificate for the Vegaplan Standard for Primary Crop Production and/of the GLOBALG.A.P. Integrated Farm Assurance (IFA) standard. This is a condition of the POs to have access to market.

## PRODUCERS – COLLECTIVE DOSSIER

VBT also modified the **questionnaire for producers** in consultation with the POs. The POs distributed them to their member producers in the autumn of 2020. Taking part in the survey was mandatory for producers with annual sales of 25,000 euro or more.

Between October 2020 and January 2021, 2,099 producers completed the questionnaire. The survey contained 70 questions, including **61 sustainability criteria and nine socio-demographic identification questions**. The extent to which the sustainability criteria apply could be answered as follows:

*Yes, and I am considering expanding them*  
*Yes, but no expansion is planned*  
*No, but I am considering the application*  
*No and there is no application planned*

The results of the collective dossier from the member producers are included in this report. Certain criteria are only relevant for certain crops or production methods, which are only reported for the group of producers in question.

As a result of the modification of the questionnaire compared with the ones in 2013, 2015 and 2017, it is not possible to compare all of the results. Taking into account the renewed sustainability project, the 2020 survey is considered to be a new baseline measurement. In the coming years, this will be built on further to monitor developments in the application of the sustainability criteria with the producers.

## PRODUCERS – TYPICAL FARMS

In conjunction with the POs, VBT has drawn up an **inventory of the practical sustainability efforts** made by a number of typical horticultural farms. This relates to investments and adjustments made to farm operations that the managers were already making in a fairly standard way. It also includes developments and innovations that may find further acceptance in the sector in the future. It looks at workers, energy, fertiliser, water, crop protection and biodiversity. It is broken down into **seven typical farms**:

- » **pome fruit** – pear orchards (12 hectares) and apple orchards (8 hectares)
- » **soft fruit** – strawberries, with a combination of soil, tunnel and protected cultivation, plus other berries (8 hectares)
- » **vegetables open-air cultivation** – leeks (8 hectares) and brassicas (6 hectares), both cauliflower and head cabbage
- » **vegetables protected cultivation** – tomatoes as a crop with higher energy needs (4 hectares)
- » **vegetables protected cultivation** – lettuce as a crop with lower energy requirements (2 hectares)
- » **endives** – starting from endive root cultivation (50 hectares)
- » **organic production** – pome fruit – both apples and pears – and various vegetables (12 hectares)

Here are typical examples of the efforts made and some of the key challenges. •

In conjunction with the POs, VBT has drawn up an inventory of the practical sustainability efforts made by a number of typical horticultural farms.



POME FRUIT

### **Blossom in the orchard, essential for producers and pleasant to see for tourists**

In spring, the blossom in the apple and pear orchards attracts many tourists to fruit-growing regions. The blossom forms the basis for fruit production and hence is of crucial value for the producers. Beekeepers are worked with closely to ensure pollination of the blossom by bees. **The work done by the bees** requires additional attention when it comes to crop protection: plant protection products cannot be used while the blossom is in flower.

Growers of pome fruit contribute to **biodiversity** by encouraging organisms that are of value for the crop. For example, in addition to bee hotels, they also invest in straw bags and bamboo sticks for earwigs and in perches and poles for birds of prey. This is a natural way of helping to keep harmful organisms under control. For the day-to-day monitoring of orchards, drones may well provide an additional solution over time.

### **Challenges**

To ensure that apples and pears, as well as other types of fruit and vegetables, are available over a longer period of time for consumers, good **storage** is essential. For storage, recovery and reuse of the heat released from cold stores is a point to be examined. After storage, fruit – especially pears – are sorted using a wet process. The **residual water** from the sorting units can be usefully redirected, for example to irrigate orchards and fields.



Responsibly Fresh Goodness by nature

## SOFT FRUIT

### **Strawberries as a tradition, plus various other berries, offer consumers a healthy variety of snacks**

Producers are able to offer quality strawberries all year round thanks to a **combination of cropping systems**. This may be achieved by using heated or unheated and illuminated greenhouses, covered rack cultivation and soil cultivation that is either covered or in the open air. In addition, the supply of other soft fruit for consumers is booming, with products such as redcurrants and blueberries, raspberries and blackberries. The **combination of cropping systems** may offer producers economic sustainability.

Because soft fruit is fragile, particular attention is paid to its **packaging**. Recycled plastic or cardboard has recently replaced the traditional plastic used for punnets.

With the substrate cultivation of strawberries, **the way the plants are raised** is crucial. This starts by taking cuttings of strawberry plants and growing those cuttings in tray fields. The pots are kept in these closed areas from July to November. Growing strawberry plants requires a significant amount of water, which currently is usually used only once.

#### **Challenges**

When growing fruit and vegetables, the availability of water is a constant concern. If there is insufficient rainwater, open-air crops are dependent on irrigation. With protected crops, **rainwater** can be captured and recirculated in closed systems. The reuse of water from the tray fields can make a contribution towards the water efficiency of growing strawberries.



When growing fruit and vegetables, the availability of water is a constant concern.

## VEGETABLES OPEN-AIR CULTIVATION

### **Cooperation on various points**

Leeks and cabbages grow in the open air. There is not always sufficient rainfall for the crops, in which case **extra water** has to be brought in. This is already being done from collective buffers of sand extraction in Limburg and from provincial basins in West Flanders.

Collaboration with other links in the chain also offers possibilities. For instance, a vegetable processing company supplies irrigation water to fields in West Flanders via an **underground pipe system**.

After they have been harvested, leeks can be stored for a limited number of weeks. They are kept in cold stores, either at the producers themselves or with their colleagues. **Good timing with storage** ensures that the cold stores of the producers of pome fruit and endives and the collective stores at the producers' organisations are used efficiently.



#### **Challenges**

**GPS-guided field operations** can improve the efficiency of outdoor production. The GPS-guided planting of leeks in rows or strips allows self-driving tractors to be used at harvesting afterwards. And the GPS-guided planting of brassicas also makes mechanical weed control possible by hoeing.

Commitment to the **efficient use of water** in the fields is recommended. Spraying booms instead of reels for irrigation result in less evaporation and the better, more even distribution of water over the crop. Drip irrigation using T-tape pipes in or on the ground presents technical challenges, but can also contribute to water-savings.

## VEGETABLES PROTECTED CULTIVATION: TOMATOES

### **Integrated Pest Management (IPM) and energy as a focus**

With the cultivation of tomatoes and other fruiting vegetables, as well as with the production of fruit and vegetables in general, the focus has traditionally been on **IPM or integrated pest management**. This is based on three principles:

1. preventative measures for preventing the introduction of diseases and pests,
2. monitoring or observing crops for the early detection of diseases and pests,
3. intervening in or treating crops if and where (economically) necessary.

Useful organisms are used particularly as a preventative measure in the cultivation of tomatoes. Tomato growers also take **adequate hygiene measures** during cultivation and crop rotation. They apply **climate control** and choose resistant varieties. **Monitoring** takes place with the help of traps and by scouters, who are workers trained to recognise diseases and pests early. When a specific threshold value is exceeded, plant protection products are deployed. Or biological or chemical products are applied in line with the official authorisations.

Also indispensable is the presence of a combined **heat and power unit (CHP)** at the farms. Using the CHP, fuel – particularly natural gas, but also biofuels – is converted into heat and CO<sub>2</sub> for the greenhouse and also into electricity. The electricity is used on the farm and/or sold to the public grid.

More innovative is the **illumination** of the tomato crop. Special lamps are used above the tomato plants to stimulate growth. The switch to LED lighting provides more efficient energy usage and allows the colour spectrum and light frequency to be controlled. In addition, various screens fitted to the sides and top of the greenhouse also generate energy savings.

#### **Challenges**

Despite the traditional application and experience with IPM, this approach continues to trigger. Fewer and fewer active substances are now recognised for use in crop protection in Europe. This limits possible interventions, requiring even more **attention to be paid to prevention and monitoring**.



## VEGETABLES PROTECTED CULTIVATION: LETTUCE

### **Production of the classic lettuce head and alternative lettuce varieties – such as a multicolour with root – via MGS (mobile gutter system)**

In addition to the traditional cultivation of lettuce heads in the soil, the **mobile gutter system** has been gaining in popularity in recent years. This is an important innovation that enables greater production in a smaller surface area, with fewer production resources needed, such as water and crop protection. MGS allows for harvesting at hip height and in a shed – which is cooler than a greenhouse – a dual ergonomic benefit for workers.

A **combined heat and power system** provides optimum electricity, heat and CO<sub>2</sub>, which are necessary for the plants to grow. Additional artificial lighting also generates extra photosynthesis. Various protective screens close off the greenhouse environment from the influence of the weather outside.

### **Challenges**

Post-harvest activities require the availability of **water of drinking quality**. In this instance, the producers can reuse the water, after disinfection to avoid food safety issues. With the cultivation of lettuce in the MGS, the water not taken up by the plants is reused as part of a sealed water circuit.



Within endive production, young farm managers take the lead in terms of innovation aimed at automation.

## ENDIVES

### **Temperature and water: the main production factors with endives Innovation in terms of automation expected**

After the endive roots have been harvested on arable fields, storage under appropriate low temperatures and relatively high humidity is important for maintaining quality. The centralised storage of endive roots at specialised cold store companies can increase efficiency with relatively lower energy consumption. Decentralised storage at the endive producers' farms can benefit the producers' flexibility and planning.

After storage, it's time to put the roots on the table. For this labour-intensive activity, it is mainly the young producers who take the lead in terms of innovations aimed at automation. During the forcing process, water is constantly recycled, both within a forcing unit and between successive units. The heat is also reused, either on the farm itself or in the immediate environment.

At harvest time, the forcing boxes are removed from the forcing units. This is followed by another labour-intensive phase: harvesting the heads, removing the outer leaves, sorting and packing. Here once again, the – mainly young – producers are introducing innovations focused on automation.

### **Challenges**

Just like other crops grown in the open air, endive root production requires a fairly moist soil at the time of and after sowing. The dry weather of recent years during May when the crops are sown has faced producers with the challenge of making water available on the land.



## ORGANIC FRUIT AND VEGETABLE CULTIVATION

### **Rotation and biodiversity on the farm Focus on the soil**

The fruit and vegetable sector jointly ensures biodiversity in the landscape through the rotation of crops and cropping techniques. Organic producers create individually **biodiversity** within their farms. Due to the necessary crop rotation, the number of crops is often greater than with conventional producers, who apply integrated production.

The number of **cropping techniques** is varied with organic production, including open air and protected crops. However, cultivation in the soil is an important official condition for organic production. And as a crucial production factor, the soil is also given every attention. Organic growers use slow-acting organic fertilisers to maintain soil fertility. They also work on achieving optimum soil quality by applying crop rotation, intermediate set-aside, using green fertilisers and sowing ground cover and non-inversion tillage.

As a result of the attention they pay to biodiversity – including with the use of flower strips and host plants for beneficial and harmful organisms – organic growers are a source of **inspiration** for conventional producers.

### **Challenges**

Fruit and vegetable producers work with and in nature and are dependent on various natural and biological influences. In organic production, this is relatively harder, leading to lower production on average. Controlling these influences sufficiently well is a challenge for all producers and for organic producers in particular. Hydroponic production could provide here a relevant solution to organic producers.

0.2

Towards a

# SUSTAINABLE

food system



2.1

## EU FARM TO FORK STRATEGY

At the end of 2019, the European Commission (EC) introduced the Green Deal: a roadmap for the route towards a sustainable European economy. By applying this new growth strategy, the EC aims to counter climate change and the degradation of the environment. This will be done by making the European Union (EU) a modern, resource-efficient and competitive economy that: will reduce net emissions of greenhouse gases to zero by 2050, will deliver economic growth without exhausting resources, will not leave any people or region to their fate. The EU intends to address climate-related and environmental problems in all areas of policy as an opportunity to enable the transition for everyone as fairly and inclusively as possible.

In line with the aims of the Green Deal, in March 2020 the EC presented an action plan for a circular economy. Here, the focus is on:

- » waste prevention and management,
- » stimulating growth and competitiveness,
- » the EU's worldwide leadership in this area.

The EU's Farm to Fork Strategy followed in May 2020. These are guidelines relating to the food chain, as part of the Green Deal. At the same time, the Biodiversity Strategy was put forward, which aims to help biodiversity in the EU on the road to recovery by 2030. Through the European Common Agricultural Policy, the EU is committed to achieving sustainable agriculture and rural areas.

The basic premise of the Farm to Fork Strategy is that European food must be safe, nutritious and of high quality.

And it must also be produced with as little impact as possible on nature. The **five objectives** are as follows:

- » healthy, affordable and sustainable food,
- » tackling climate change,
- » environmental protection,
- » maintaining biodiversity,
- » more organic farming.

The Farm to Fork Strategy focuses strongly on having a healthy diet in which fruit and vegetables play a leading role. This opens up particular opportunities to the sector. The strategy's other objectives pose a number of challenges, such as reducing the risks and use of chemical pesticides and nutrient loss by 50% between now and 2030. Plus reducing the use of fertilizers by 20%. The European Green Deal, including the Farm to Fork Strategy, forms the framework within which the sector can and should develop further. •



## 2.2 UN SUSTAINABLE DEVELOPMENT GOALS

With the Green Deal, the EC aims to contribute towards achieving the 17 Sustainable Development Goals of the United Nations, also called Agenda 2030.

The sector is making an active contribution to this with Responsibly Fresh Goodness by nature. This specifically involves the following SDGs:



The central pillars of Responsibly Fresh Goodness by nature fit in with the UN's SDGs and the EU's Farm to Fork Strategy. This is expressed in a number of specific themes. •

### FARM TO FORK STRATEGY

Ensuring healthy, affordable and sustainable food for Europeans	Fair economic return across the whole of the food chain	Tackling climate change	Protecting the environment and biodiversity
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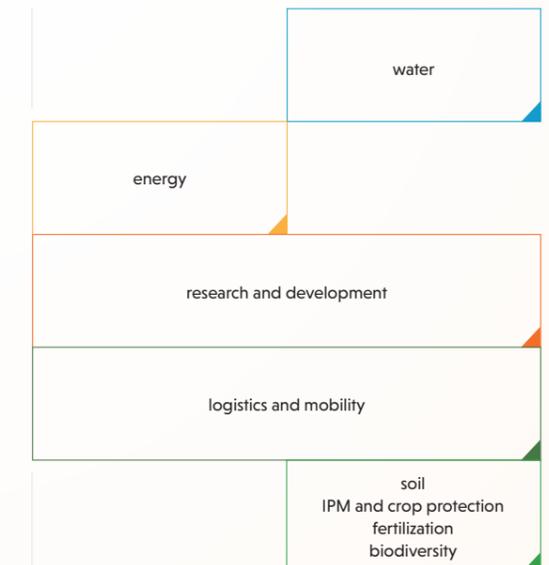
#### PILLAR 1 RESPONSIBLY FRESH GOODNESS BY NATURE: COOPERATIVE ENTREPRENEURSHIP



#### PILLAR 2 RESPONSIBLY FRESH GOODNESS BY NATURE: HEALTHILY CONSUMED



#### PILLAR 3 RESPONSIBLY FRESH GOODNESS BY NATURE: RESPECT FOR ELEMENTS OF NATURE





Towards a sustainable food system

2.3

## EXTERNAL ENGAGEMENT – PARALLEL WAY

Even more than during the first collective sustainability project, a parallel way has also been taken within Responsibly Fresh Goodness by nature. In addition to the internal approach and development of the project, this secondary path means that VBT – in consultation with and in the presence of representatives of the producers' organisations – will follow and help actively to develop external sustainability initiatives.

### CIRCULAR ECONOMY

In conjunction with the POs, VBT is involved in the work agenda for the circular economy of the Flemish Department of Agriculture and Fisheries (DLV). A linear economic system converts raw materials into products that will be destroyed at the end of their useful life. However, the system of the circular economy focuses on the maximum reusability of products and raw materials and ensures there is minimal loss of value.

The Flemish Government sets up the circular economy as one of the seven transition priorities and designated the Flemish Public Waste Company (OVAM) as the initiator of Flanders Circular. Flanders Circular, a pool of miscellaneous providers, people and resources, is the hub and inspiration for the circular economy in Flanders. Government departments, companies, civil society and the world of knowledge all committed, one by one, to taking concrete action.

### GOLD IN FSA FOR THE VEGAPLAN STANDARD FRUIT AND VEGETABLES FOR THE FRESH MARKET

In 2019, Vegaplan was awarded a gold score for the fruit and vegetables for the fresh market product group for the Farm Sustainability Assessment (FSA). The FSA tool evaluates the sustainability of an agricultural or horticultural business by applying 112 checkpoints. The tool has been designed by the Sustainable Agriculture Initiative (SAI) Platform. This organisation was established in 2002 by a number of major food companies and has a hundred or so members worldwide from the food and beverage industry.

In 2017, Vegaplan won gold for the scope of arable crops.

In the context of the revamped sustainability project, VBT also issued a recommendation to carry out a benchmarking exercise for the scope of fruit and vegetables for the fresh market. In this instance, the Vegaplan standard meets 100% of the essential and basic requirements and 76% of advanced requirements. Scoring gold confirms that the standard also meets the international principles for sustainable farming in full for this scope.

### SILVER IN FSA FOR GLOBALG.A.P. IFA AND BELGIAN LEGISLATION

Working in conjunction with SAI Platform, GLOBALG.A.P. has developed a specific GGfSA (GLOBALG.A.P. Farm Sustainability Assessment) sustainability module. An assessment on this module is equivalent to an FSA assessment. In the context of the revamped sustainability project, VBT began developing a Belgian interpretation in the GGfSA module in 2019. However, it soon became clear that in itself, GLOBALG.A.P. IFA certification, supplemented by Belgian legislation, would result in a silver score in the FSA for the producers involved.



### REDUCING FOOD LOSS THROUGH FOOD THRIFT

VBT is actively involved in the Food loss and biomass (residual) flows circular 2021-2025. This action plan from OVAM forms a clear operating framework for the government and the various sectors to work together in tackling food loss and biomass (residual) flows in a circular manner in Flanders in the years to come.

### DEVELOPING QUALITY SYSTEMS WITH SUSTAINABILITY REQUIREMENTS

With regard to quality systems for producers, VBT is actively involved in GLOBALG.A.P., QS and Vegaplan.

GLOBALG.A.P. is working on the preparation of version 6 of the IFA standard, which is planned to be launched in the spring of 2022. In drafting the standard, considerable attention has been paid to requirements relating to ecological sustainability.

A Sustainability working group has been active since 2016 within the technical advisory board of QS Obst-Gemüse-Kartoffeln. Based on an external scientific study, various hotspots have been identified for the sustainable development of the chain, plus the extent to which the current QS standards need to be adjusted accordingly. At the beginning of 2021, QS was asked to further develop the concept for adjusting the standards

for all links in the chain. Expected: testing this in the years ahead as part of a pilot project.

In 2020, Vegaplan conducted a survey among its members, with one of the aims to better gauge expectations about sustainability. The Vegaplan standards are being expanded further to include sustainability criteria and/or the introduction of a separate sustainability monitor.

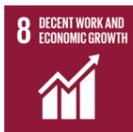
By being involved and taking part in the quality systems, VBT aims to contribute to awareness about the sustainability criteria in these standards and to strive to achieve a realistic and feasible approach for the producers. •

**VBT aims to contribute to awareness about sustainability criteria in quality systems.**

0.3

# COOPERATIVE

## entrepreneurship is sustainable entrepreneurship



Strategic relevance and challenges	Main performance and achievements
<p>cooperation = working together convincing internal and external stakeholders in the long term of the (economic) (added) value of cooperation/cooperatives</p>	<p>the POs occupy an important place in the value chain their goal: to improve the income of 3,400 cooperative producers the POs provide employment (1,142 FTE), turnover (in excess of 1 billion euro) and exports</p>
<p>working together across national borders willingness to deploy people and resources, within the external possibilities</p>	<p>further preparation of activities in the South, to be resumed after the COVID-19 pandemic</p>

3.1 ICA principles

Cooperative entrepreneurship is a common factor of the marketing cooperatives – producers’ organisations (POs) taking part in Responsibly Fresh Goodness by nature. The producers are the owners of the POs and control them democratically. The aim of the POs is to improve the income of the members by enabling them to obtain a larger share of the added value in the chain.

Also part of the mission: maintaining the POs in the long term in order to provide stability to the producers. Any profits from the operations of the POs will be distributed as a cooperative return to the partners/ owners/producers, or added to the capital of the POs. The accumulation of sufficient capital makes it possible to invest and meet the challenges, both in the short term and the long term.

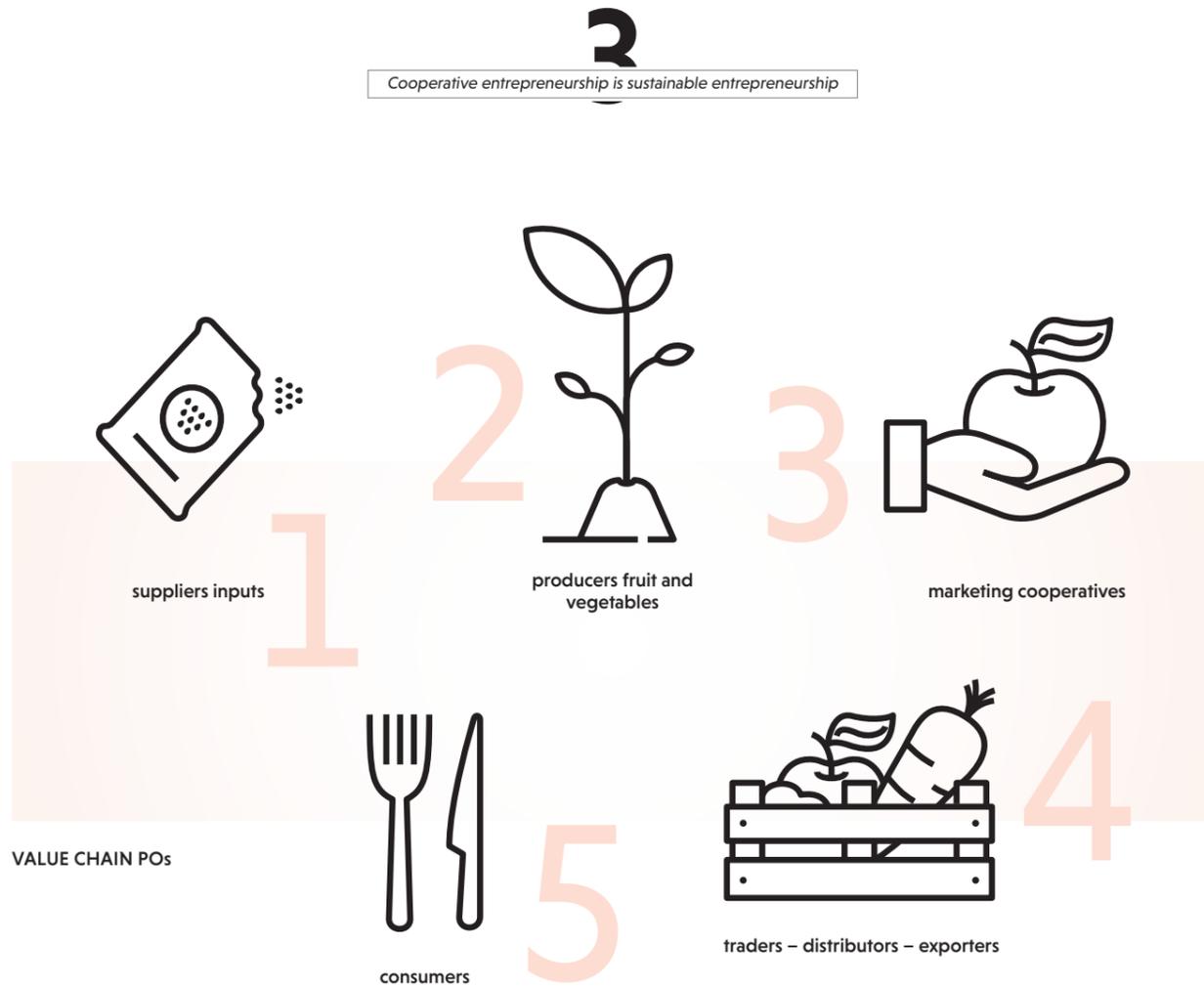
The cooperative operation follows the seven principle of the International Cooperative Alliance (ICA principles).

The participants in Responsibly Fresh Goodness by nature apply the ICA principles in their daily operations. The principles contain implicitly defined aspects of sustainability and contribute to the autonomous and transparent operation of the POs. Economic participation and democratic control by the partners mean that thinking is in the long term and that investments are being made in a sustainable enterprise.

Education and training are also important. Producers and workers are given information regularly about sustainability topics. The cooperation and engagement within and between the POs makes it possible to consider aspects of sustainability and to undertake action collectively. The POs have strong local roots, which means that attention to the community and the environment is always on the agenda. •

ICA PRINCIPLES

- » voluntary and open membership
- » democratic control by the members
- » economic participation by the members
- » autonomy and independence
- » provision of education, training and information
- » collaboration between cooperatives
- » care for the community



## 3.2 PRODUCERS' ORGANISATIONS

### POs – VALUE CHAIN

The marketing cooperatives or fruit and vegetable producers' organisations (POs) – better known as the auctions – have a unique place in the value chain. The ideal combination on selling systems makes for the transparent marketing of the products supplied by the member producers. The POs are reliable trading partners for customers. The one-stop shopping option makes the chain short and efficient.

The POs advise and guide the member producers in a number of aspects of their operations. They provide support with the implementation of quality systems and provide quality control during production and at harvest time. They give advice for production planning and make packaging available to producers that pack produce on their own farm.

When products are supplied, the POs provide residue monitoring in the context of food safety and quality control. Once this is done, the products can be offered in uniform quality blocks. The products are stored while awaiting sale. That storage ranges from a few hours for produce such as lettuce, tomatoes and raspberries, to a number of months for crops such as apples, pears and celeriac.

Sorting and packing can also take place at the POs. After they are sold, the products are made available immediately to the loading docks of the buyers. The POs develop commercial activities to be able to offer products to customers and consumers as best they can. Distinguishing top quality through quality marks and actively seeking markets are important strategies in this regard.

The POs aim to trade the entire product range on the fresh market, from asparagus to zucchini.

### POs – SALES AND EXPORT

The collective marketing of the products from member producers translates into the product sales of the POs. These sales are achieved with an extensive assortment of fruit and vegetables – from asparagus to zucchini. The POs aim to trade the entire range on the fresh market.

In 2020, the five Responsibly Fresh Goodness by nature POs generated total product sales in excess of 1 billion euro. The ratio of vegetables (64%) to fruit (36%) remains pretty constant. Total sales have risen continuously in recent years, including during the coronavirus year of 2020. And consumers clearly found their way to healthy fruit and vegetables. However, the POs found that the COVID-19 measures went hand in hand with lower working efficiency and higher costs.

Of the total product sales of the five POs – in excess of 1 billion euro in 2020 – a good 80% was generated by 10 products.

Exporting is a must for the economic sustainability of the cooperative fruit and vegetable sector in Belgium – particularly in Flanders. Whereas exporting to other member states of the European Union is a tradition, there still remains the challenge of gaining access to third countries. This is still something VBT and the POs need to consider. VBT provides a sector-based approach, along with representation in various initiatives that create access to new markets.

In 2020, the total export value (including re-exports) for fresh vegetables was 825.1 million euro and 671.6 million euro for fresh fruit. In so doing, exports continued to rise in 2019. The main export destinations remain the neighbouring countries – Germany, France, the Netherlands and the United Kingdom. Exports were also shipped to many other EU member states and third countries.

PRODUCT SALES POs, 2018-2020

	1,000 euro	Vegetables	Fruit	Total
2018		616,575	316,887	933,462
2019		658,588	325,656	984,244
2020		684,934	393,522	1,078,456

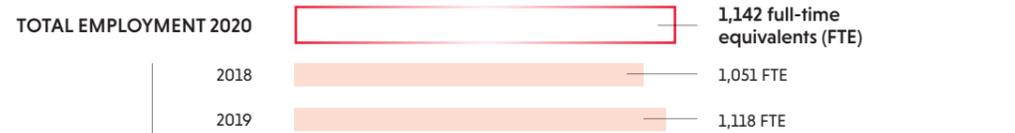
TOP 10 PRODUCT SALES FOR POs AND CULTIVATED AREA AT PRODUCERS

	2020 product sales POs (1,000 euro)	cultivated land area - producers (hectares)
tomatoes	299,564	423
strawberries	192,473	1,368
pears	108,352	6,549
endives	59,298	2,387 (root production)
sweet peppers	58,190	80
cucumbers	51,723	245
apples	50,403	3,152
lettuce and lettuce types	43,295	830
leeks	33,131	2,098
brassicas	17,650	1,254

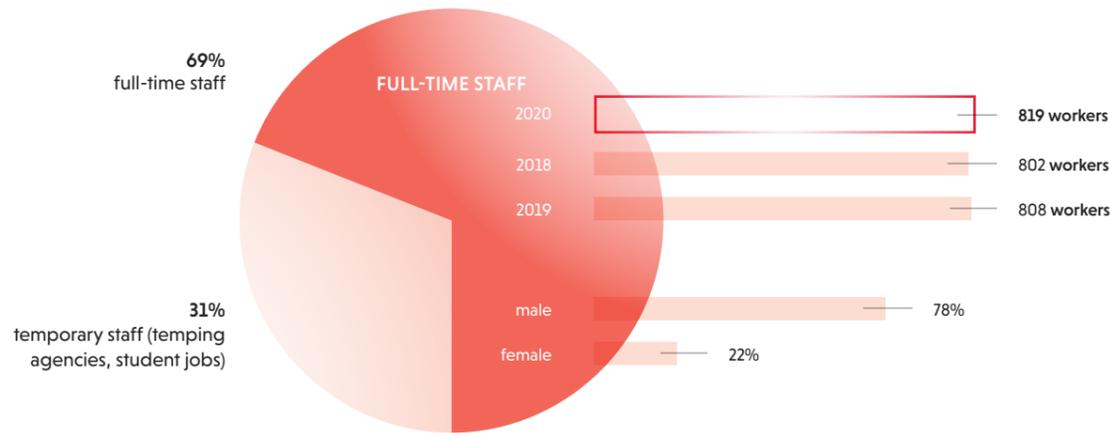


Cooperative entrepreneurship is sustainable entrepreneurship

**THE FIVE PARTICIPATING PRODUCERS' ORGANISATIONS (POs):**



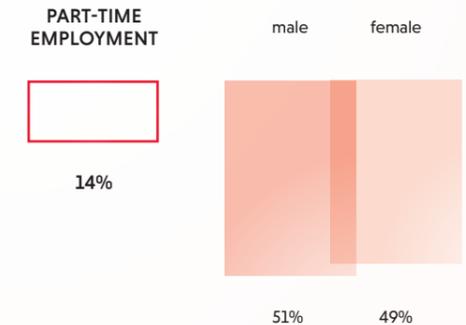
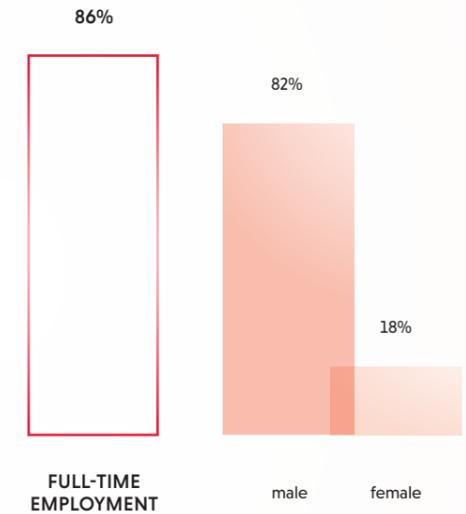
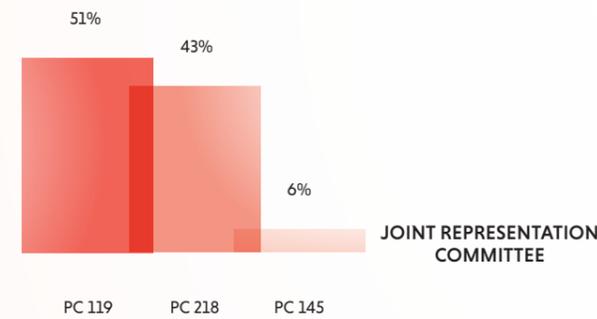
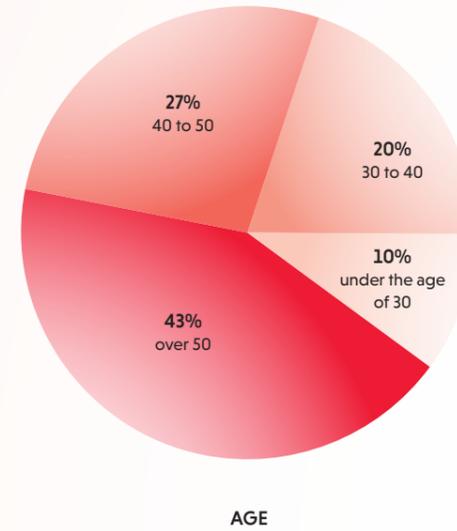
	2018	2019	2020
Absence through illness	11%	10%	10%
Accidents at work	21	29	14



**POs – EMPLOYMENT**

In 2020, the POs employed a total of 1,142 full-time equivalents (FTE). One striking factor is the growing number of older workers, which suggests a long working career with the POs and satisfaction among staff members.

In 2020, the POs provided a total of 4,290 hours of training for their staff, and 48 training sessions for producers with 940 participants. These figures are appreciably lower than in previous years, partly due to the coronavirus measures in place. In 2019, the POs provided 5,643 hours of training for their staff and 72 training sessions for producers with 2,047 participants. •



One-stop-shopping results into a short and efficient supply chain.



Cooperative entrepreneurship is sustainable entrepreneurship

## POs AND PRODUCERS – EXTERNAL SOCIAL INSPECTIONS

It is not just the various official social inspection services that check the application of employment and social legislation at POs and the producers. Since 2017, the member producers of the POs have also been assessed on the GLOBALG.A.P. social module GRASP (GLOBALG.A.P. Risk Assessment on Social Practice). Despite the strict employment and social legislation in Belgium and the official inspections into those aspects, customer-retailers continue to ask for the social assessment of their suppliers.

Specifically for producers, VBT in conjunction with the POs, submitted a proposal for this to GLOBALG.A.P. The Belgian interpretation of the GRASP module has been approved. A pilot project was run from 2017 to 2020 to assess the producers. GLOBALG.A.P. and VBT are discussing how the GRASP assessment of member producers can be continued.

In association with the assessment of the producers, POs decided to have them assessed on the FIAS (*Freiwillige QS Inspektion Arbeits- und Sozialbedingungen*) social module of QS. Here again, VBT came up with an interpretation for Belgium, approved by QS. This resulted in a pilot project. At the end of 2020, one PO was inspected externally for FIAS, with favourable results. The other POs will be assessed on their application of the FIAS requirements, combined with the external audit of the QS standard for wholesalers. These external audits will be resumed as soon as the COVID-19 measures allow.



3.3

## PRODUCERS

### EMPLOYMENT

61% of the farms employ staff. With 24% of these producers – whether or not through a care farm – this involves employing workers with limited opportunities on the labour market, including poorly educated workers and persons with a disability. 9% of the other producers plan to employ this group of workers in the years ahead.

57% of farms take internal initiatives to enable workers to gain the necessary skills. 7% are considering doing this in the years to come. 61% of all farms take measures to comply with ergonomics and to improve working conditions. 59% of producers offer workers social and leisure activities. 5% of producers are considering beginning to do so in the short term.

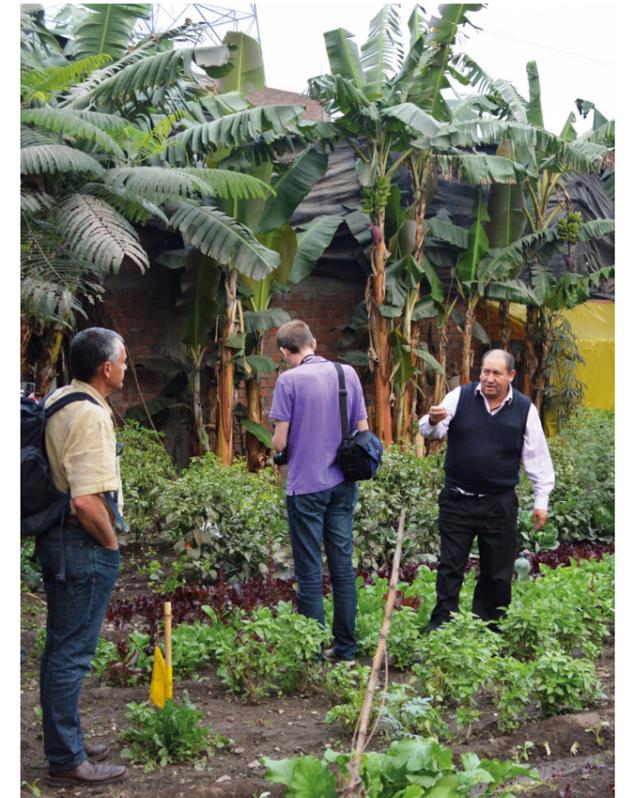
## PRODUCERS – EXTERNAL ENGAGEMENT

The majority of all producers (84%) take part in external initiatives that focus on horticultural entrepreneurship, such as trade shows, information meetings and training courses.

34% of producers establish a link with the external environment through educational initiatives. 45% of producers are involved in initiatives with local stakeholders: taking part in community life, opening up the farm for groups or on open days, consulting with the local authorities.

27% of producers also inform the public about their farm via social media. 9% aim to do so in the coming years.

90% take account of external advice in their operating policy. By participating in economic business monitoring and comparisons, or via a bookkeeper or technical crop adviser. •



3.4

## ACTIVITIES IN THE SOUTH

Based on the cooperative concept and a broad view of sustainable development, the POs and their producers engage in projects with the South. In doing so, they share their knowledge and experience with the cooperative form of doing business and the logistics and collective operations of cooperatives. Growers in the South often have to work in difficult conditions. Cooperatives as a form of organisation are an effective means for strengthening their position in the food chain.

As part of the first collective sustainability project, Responsibly Fresh, the POs and producers – via VBT in collaboration with Trias – acted as sponsor for a member organisation of growers in Peru. The project demonstrated that the cooperative approach can also be a valuable way in the South of producing crops sustainably and as a means of countering difficult production and market conditions.

Reason enough to go looking for similar projects. VBT has also decided, in addition to the POs' and producers' own initiatives, to further develop collective activities. VBT aims in particular to support producers' cooperatives in the South. In past years, it has consulted with the *Ondernemers voor Ondernemers* (Entrepreneurs for Entrepreneurs) organisation and Trias. Unfortunately, the COVID-19 pandemic has meant that no practical programmes have yet been set up.

However, smaller-scale initiatives continue to take place. The POs regularly host delegations from other parts of the world to which they explain how cooperatives, relations with producers and sustainable development initiatives work. These interesting topics are invariably appreciated by the visitors and provide them with important insights. •

0.4

Sustainably produced, healthily consumed

# CONSUMED

Strategic relevance and challenges	Main performance and achievements
<p>fruit and vegetables are naturally healthy the recommended consumption of fruit and vegetables is still not being achieved</p>	<p>the POs actively encourage the consumption of fruit and vegetables – 4 million euro of promotional resources in VLAM</p> <p>the POs attach great importance to food safety and product quality – 100% validated self-inspection systems at POs and producers</p>
<p>fruit and vegetables are perishable products from a biological production process enhance product flows as much as possible limit food loss</p>	<p>the POs focus on the value retention chain for 1 million tons of fruit and vegetables</p> <p>accurate packaging protects the products and contributes to food thrift – 73 kg of packaging material per ton of product</p>



4.1

## ENCOURAGING THE CONSUMPTION OF FRUIT AND VEGETABLES

In terms of Flanders, VBT is actively involved with Flanders' Agricultural Marketing Board (VLAM). Agreements about generic promotions for the fruit and vegetables sector are made in the VLAM Sector Group for Fruit and Vegetables. In addition to representatives of the POs (VBT), this sector group also include farmers' unions (Algemeen Boerensyndicaat and Boerenbond), trade (UNIZO) and exporters (Fresh Trade Belgium). Specific export-focused themes are dealt with in the Export group. VBT also represents the fruit and vegetables sector in the VLAM Board of Directors that helps to set out the guidelines for generic promotion and other overarching projects.

Overall, the VLAM Sector Group for Fruit and Vegetables has almost four million euros a year to conduct its promotional policy. A large proportion of these funds comes from the European Commission as part of the policy to promote agriculture.

Approximately 75% of this budget is spent on promotions in other countries and about 25% on generic promotion in Belgium. For its programme to promote fruit and vegetables, VLAM will continue to focus primarily on activities abroad to promote exports to new and existing markets. Domestically, a variety of programmes is put in place: media campaigns on radio and TV, online campaigns on websites, Facebook and Instagram, advertisements in trade publications, ambassadors and cooking demonstrations in retail outlets, collaboration with influencers, testimonials, consumer competitions. VBT also provides product sponsorship at events in consultation with VLAM.

The Food and Agriculture Organisation (FAO) of the United Nations (UN) proclaimed 2021 International Year of Fruit and Vegetables. A year with extra attention paid worldwide to the importance of a healthy, sustainable diet for everyone. Through the programme, the FAO aims:

- » to increase social awareness and political attention for the health effects produced by eating fruit and vegetables,
- » to promote a varied and balanced diet via fruit and vegetables,
- » indicate good practices that guarantee the sustainable production of fruit and vegetables and which optimise the storage, transport and processing of these products,
- » strengthen the power of countries to adopt innovative techniques for combating food loss and food waste.

The UN refers to the fact that fruit and vegetables are a good dietary source of fibre, vitamins and minerals. In this way, they are able to contribute towards a healthy diet that significantly reduces obesity, as well as heart and vascular diseases.



4  
Sustainably produced, healthily consumed

4.2  
**FOOD SAFETY AND QUALITY**

In 2018, **Freshfel Europe**, of which VBT is a member, led a thematic network: Stimulating fresh fruit and vegetable consumption for healthier European consumers. This was part of the EU Health Policy Platform coordinated by the Directorate General for Health and Food Safety (DG Sante) of the European Commission (EC). The aim of this thematic network: to develop a joint declaration that consolidates good practices and calling for action for continued and improved programmes to encourage the consumption of fresh fruit and vegetables across the whole of Europe. And in so doing to prevent the occurrence of non-transferable diseases. VBT is one of the stakeholders signing up to this joint declaration.

Through the Follow me to be healthy with Europe promotional campaign, Freshfel Europe is making a significant budget available to further encourage the consumption of fresh fruit and vegetables. The EC is co-financing the campaign for the period 2019-2021. The campaign itself focuses mainly on 18 to 30-year-old European consumers in Belgium, Germany, France, Italy and Poland. The aim is twofold:

- 1 To promote awareness of the importance of the varied consumption of fruit and vegetables.
- 2 To boost the consumption of fruit and vegetables to the recommended minimum of 400 grams per day. • (400gchallenge.eu)

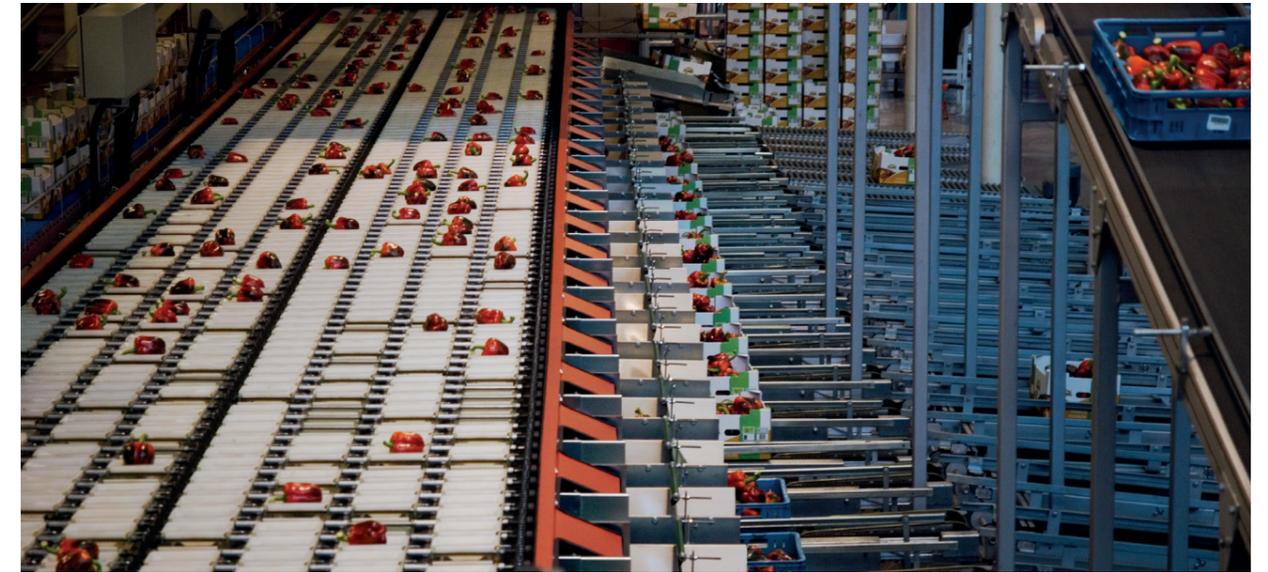


In order to supply safe, high-quality fresh fruit and vegetables that are in line with market demand, all of the POs and all of the member producers traditionally work in accordance with one or more quality systems. Compliance with the legal provisions for self-inspection is paramount. This can be seen from the externally controlled implementation of the guides, Guide 014 (Self-Inspection Guide: potatoes-vegetables-fruit processing industry and trade) for the POs and Guide 040 (Sector guide for primary production) for the producers. A valid self-inspection certificate offers guarantees for food safety.

The POs and producers also work in line with one or more private quality systems. For the POs, this involves the private quality standards of the British Retail Consortium (BRC), International Food Standard (IFS) and Qualität und Sicherheit (QS), quality assurances via Hazard Analysis Critical Control Points (HACCP), International Organisation for Standardisation (ISO) standards and Food Safety System Certification (FSSC 22000), as well as cooperative-specific quality systems. For the producers, it is the standards of GLOBALG.A.P. and Vegaplan. •



**Thematic Network 2018**  
Stimulating fresh fruit and vegetable consumption for healthier European consumers



4.3  
**VALUE RETENTION CHAIN**

During the period 2018-2020, more than a million tons of fruit and vegetables were supplied to the POs each year. The POs did everything they could to make the best possible use of this produce and were able to sell virtually everything supplied to them (98%). The vast majority (94%) went to the fresh market, with far less (5%) going to the processing industry and the social economy (<1%). Any produce unable to be sold commercially was put to good use by being distributed free of charge – mainly to foodbanks – or was used for animal feed or for composting or biogas plants.

6% of producers process part of their harvest themselves on-site, creating a variety of fruit and vegetable products: jam, fruit juice, vegetable puree.

At 96% of the farms, crop cultivation waste is disposed of separately. Of the companies using substrate cultivation, 41% participate in recycling programmes for substrate. 17% say that this type of programme is not available to them. The use of biodegradable propagation material is still limited to only 27% of farms. An additional 10% indicates that they will consider it in the years ahead.

82% of the farms with soil-bound production spread the plant residues of their crops on the land to improve the soil quality. Naturally, the risk of transmitting weeds, pests and diseases is avoided. 33% of producers compost residual organic waste on their own farm or externally. 6% of farms send residual organic waste to a biogas plant, usually off-site. 3% of producers indicate that their residual organic waste is used as industrial raw materials. •



## 4.4 PACKAGING

Packaging is a priority point for attention for the POs in their operations in general and in the context of sustainable development in particular.

Traditionally, VBT is responsible for drawing up the mandatory three-yearly sector waste prevention plan at the request of the Interregional Packaging Commission (IRPC – IVC). This plan involves in-depth consultation with the POs about internal needs and external expectations regarding packaging and the opportunities for limiting packaging waste. The 2019-2022 sector prevention plan was approved by the IVC with this assessment: 'the IVC is of the opinion that your prevention plan is of good quality and appreciates that you have thought carefully about the prevention of

### PACKAGING WASTE PREVENTION PLAN 2019-2022

**In the plan, VBT explains:**

The nature of the products, the demand from customers and the requirements of the legislation are all decisive factors in the practical use of packaging by VBT participants. As is the case with other products, the packaging used for fresh fruit and vegetables has a number of purposes. In functional terms, the packaging enables smooth logistics and the necessary traceability. The packaging also allows hygienic working and acts as a guarantee of the quality of fresh produce being maintained in the distribution channel, as well as to limit food losses. Packaging also enables the products to be presented in optimum fashion and to give the user appropriate information. It must always comply with national and international legal requirements. Of course, there are costs associated with packaging. The participating POs are at their limits when it comes to saving on packaging and reducing the tonnage used. In this regard, they are strongly dependent on demand from the market and retailers. The focus is shifting from reducing the tonnage of specific packaging to a more sustainable policy on packaging.

All VBT participants are constantly monitoring the issue of packaging, weighing up considerations between the requirements of product, market and legislation with the possibilities of preventing waste and having packaging that places less of a burden on the environment. A large proportion of the fresh fruit and vegetables from VBT participants intended for the Belgian market is packed in multiple-use packaging. Membership of the EPS crate pool system is a central factor here. An ever-increasing proportion of fruit and vegetables is packed in small, single-use packaging. Again, demand from the market and from retailers is key. Developments in packaging materials are monitored by all POs. Environmentally friendly packaging – if available – is being tested by the POs. If it meets the requirements of the product and the market, new types of packaging will be included in the range used by the POs. Packaging scans will also be assessed and carried out if possible.



packaging waste'.

In 2020, the POs used 81,681 tons of commercial packaging. The use of re-usable packaging was 68 kg per ton of product. The figure for single-use packaging was 4.2 kg per ton of product. The POs use an open pool system of crates to a large extent. It was recently decided to switch from rigid (blue) boxes to (green) folding crates. This represents an appreciable saving, particularly in terms of transport.

In 2020, the POs used over 51 million pieces of (single-use) household packaging, representing 736 tons of packaging material. In this instance, approximately 700 grams of packaging material was used per ton of product. The weight of household packaging increased in relative terms in 2020 as a result of the replacement of plastic by paper and cardboard. The ratio of paper and cardboard to plastic household packaging rose from 16% and 83% in 2018 to 40% and 58% in 2020. •

### HOUSEHOLD PACKAGING BROUGHT TO THE BELGIAN MARKET BY POs, 2018-2020

packaging units	2018	2019	2020
million pieces	53.2	50.7	51.1
tons	589	599	736

### COMMERCIAL PACKAGING BROUGHT TO THE BELGIAN MARKET BY POs, 2018-2020

re-usable packaging	2018	2019	2020
recyclable wood	23,465	24,600	24,989
recyclable plastic	46,649	49,056	51,953
<b>total</b>	<b>70,114</b>	<b>73,657</b>	<b>76,941</b>
single-use packaging	2018	2019	2020
recyclable paper/cardboard	4,364	4,710	4,575
recyclable wood	10	8	13
recyclable plastic	215	146	153
<b>total</b>	<b>4,588</b>	<b>4,863</b>	<b>4,740</b>

0.5

# PROGRESS

with respect for natural elements

Strategic relevance and challenges	Main performance and achievements
 <p>innovation and development are necessary for meeting the challenges of sustainable development</p>	<p>the POs are constantly investing, collectively and individually, in research and development – 20 or so VLAIO LA-trajecten (research programmes) receive sector finance</p>
 <p>climate change has made itself felt in recent years, including with periods of drought fruit and vegetables cannot be produced without water</p>	<p>both the POs and the producers are committed to water-saving measures – 10 million m<sup>3</sup> collecting capacity for rainwater</p>
 <p>energy consumption is strongly crop-related various activities by the POs and producers require energy renewable sources of energy are required</p>	<p>use of own electricity production – more than 200 companies with CHP and 1,000 with solar panels various options are used and researched for limiting energy consumption – at 10% based on energy scans</p>
 <p>all stakeholders must make a contribution to achieving climate objectives the numbers tell the tale</p>	<p>sustainable alternatives are applied for logistics and mobility the POs and producers monitor developments regarding LCA</p>
 <p>Integrated Pest Management (IPM) is a legal requirement soil is needed for the production of certain fruit and vegetables biodiversity is a policy point for attention</p>	<p>integrated crop protection has been the standard for many years producers act responsibly with the soil POs and producers make a collective contribution to maintaining biodiversity</p>

5.1

## Research and development

VBT and the POs are actively involved with research in the sector. In 1997, VBT established Flanders Centre of Postharvest Technology (VCBT) with KU Leuven. VBT, POs and producers are still actively involved.

Together with the POs, VBT is represented in the stakeholder groups of LA-trajecten (agricultural research projects). The research projects are supported by the Agency for Innovation & Entrepreneurship (VLAIO), as well as by sector financing, some of which comes from the POs. On average, there are around twenty current projects underway. These focus on:

- » gathering knowledge and insights about specific weeds, pests and diseases,
- » assessing possible mitigation measures,
- » specific elements before or after the harvest, such as irrigation, fertiliser, storage and product quality.

In the POs' Operational Programmes – as part of the Common Market Organisation (CMO/GMO) Fruit and Vegetables – an average of 3.3% of the CMO budget is spent on research. In 2020, that was 3.3 million euro. The focus in these research project lies on sustainable development and digitisation. Major topics here:

- » new varieties – including technical results and quality,
- » production techniques,
- » monitoring diseases and pests,
- » crop protection,
- » consumer behaviour.

The POs are also represented and actively involved in specialised research institutions and recognized research centres. •

**5**  
Progress with respect for natural elements

5.2  
**WATER**

In 2020, the POs used a total of 256,223 m<sup>3</sup> of water. In 2018, that figure was 236,660 m<sup>3</sup>. Water consumption per ton of product supplied has remained virtually constant. The use of tap water is still essential for food safety reasons, including for the sorting of fruit and the chilling of vegetables.

**WATER SOURCES USED BY POs AND PRODUCERS, 2020**

POs (% usage)	producers (% producers)	
49%	68%	tap water
31%	76%	rainwater
20%	57%	groundwater
	21%	surface water

Rainwater is captured at 85% of horticultural farms. Total capacity is in excess of 10 million m<sup>3</sup> – almost 4,100 Olympic swimming pools – and varies from less than 100 m<sup>3</sup> to more than 100,000 m<sup>3</sup> per farm. The water is collected mainly from the roofs of sheds and greenhouses. The total surface area for collecting rainwater is almost 22 million m<sup>2</sup> – nearly 3,055 football pitches – and varies from less than 100 m<sup>2</sup> to more than 100,000 m<sup>2</sup> per farm.

Alternative water sources are already being introduced on a limited scale to the producers. Over 2% of farms are connected to an irrigation network. A further 2% are considering it for the future. This involves external networks of irrigation pipes connected to a water collection basin belonging to third parties. 12% of farms use water from provincial or municipal buffer basins and watercourses. 3% plan to do so.

The producers take measures to be economical with water. More than 30% determine the water requirements of the crops by taking moisture readings, for example with a soil sensor or tensiometer. Of the farms that use irrigation, 84% of producers take measures to counter water loss during the irrigation process. They do this by:

- » using water-saving systems – T-tape, spraying booms or drip irrigation,
- » restricting irrigation in time,
- » irrigating at ideal times and under optimum conditions.

40% of the farms with protected crops have a recirculation and disinfecting system for the nutrient solution. 25% of producers have a closed system for the re-use of washing and rinse water. 15% of producers purify and reuse waste water, while another 10% are considering doing it in the years ahead. Water purification is also performed using small-scale installations and reed beds. •

The POs use 75% of their solar energy production for their own purposes.

5.3  
**ENERGIE**

In 2020, the POs consumed over 90.2 million kWh of energy. In 2018, it was 88.3 million kWh. This was mainly electricity (92%), but also gas (7%) and oil (1%). The energy consumption per ton of product supplied fell by 6% in the period 2018-2020.

In 2020, the POs consumed nearly 82.9 million kWh of electricity. Two years previously, it was 79.8 million kWh. The electricity consumption per ton of product supplied fell by 4% in the period 2018-2020. Approximately 85% of the electricity consumed comes from external suppliers. 14% of the total is generated by the POs' own solar panels. The POs use 75% of their solar energy production for their own purposes. Two POs have cogeneration or combined heat and power (CHP) systems in place. 99% of all electricity generated by CHP systems goes to the POs themselves. That is equivalent to 0.2% of total electricity usage.

The horticultural farms opt for varied energy. Electricity from the grid is the main source of energy (89% of producers). This is followed by heating oil (35%), natural gas (24%), coal (1%), other fossil fuels (6%) and renewable sources: solar energy (51%), residual heat (10%), biomass (2%), and other renewable sources (plant-based oil, geothermal energy, wind energy) (1%).

Over 10% of farms generate electricity with a CHP system from natural gas and/or heating oil. Approximately 14% of the farms are planning to make investments in the coming years in solar panels, 4% in heat pumps (1), more than 2% in CHP systems and 1% in geothermal energy (2). 3% of farms are connected to a heat network (3), while around ten producers will be investing in one in the short term. Ten farms have their own wind turbine and almost 5% of producers would like to install one in the years ahead. In addition, 2% of producers have signed agreements with third parties to set up a wind turbine on their business land. 4% wish to invest in one.

9% of producers have had an energy scan carried out for their horticultural company. Another 11% plan to do so in the coming three years.

Various measures are used to limit energy consumption at horticultural farms, depending on the crops and cropping systems in place. Automatic light switches with motion sensors are already in place at 39% of farms. 8% will follow in the near future. 53% of producers work with LED lamps to light their operating sites. Another 15% will invest in them in the short term. At farms growing protected crops, 8% use LED lamps as assimilation lighting. Nearly 5% others are considering it. Artificial light is used for assimilation lighting, supplementing sunlight, to encourage plant growth.

35% of farms with protected crops have installed energy screens to limit heat loss, while 20% have facade screens or shading screens.

30% of farms have made changes to their cooling system, installing frequency control on motors and pumps, providing additional insulation in cold stores, installing flaps and replacing coolants. •

1. A heat pump extracts low-grade heat or cold from the environment, raises it to a higher temperature and releases it elsewhere.
2. Geothermal energy is a technique that extracts heat from the subsoil. Energy is then extracted from the difference between the earth's surface and heat reservoirs located deep inside the earth.
3. A heat network is a network of insulated pipes, usually located underground, taking heat from one location to another in the form of hot water or steam.

5  
Progress with respect for natural elements

## 5.4 CLIMATE

The horticultural sector has a major effect on the climate, in both a positive and a negative sense. Here's what affects it:

- » the consumption and production of energy, both by the POs and their member producers,
- » the measures already taken or planned to limit the consumption of energy from fossil fuels (see SDG 7),
- » the way in which the POs and producers deal with packaging (see SDG 12),
- » their actions regarding value retention (see SDG 12),
- » logistics and mobility.

The logistics and the mobility of the POs, reference is made to the VCDO. The producers are already using 61% electric machinery or vehicles for transport: carts for the harvest, transport carts, forklift trucks, cars. Another 4% of producers plan to invest in them. Almost 65% of farms are taking measures to achieve more sustainable transport. A further 5% plan to. Practical measures include the optimisation of journeys and return loads, setting up shared transport and using vehicles that pollute the environment less. All means of transport have to meet the European EURO VI standard aimed at reducing emissions of certain polluting exhaust gases. 44% of producers already use vehicles – tractors, vans, trucks – that meet the EURO VI standard. An additional 15% plan to invest in them in the short term.

Various organisations are currently conducting research in the impact a whole range of products and activities have on the environment. This includes calculating greenhouse gas emissions and CO<sub>2</sub> footprints, along with life cycle analyses (LCA).

In general, the environmental profile of a product or process is seen from the extent to which it contributes to environmental problems by draining scarce raw materials and by emissions that are harmful for the soil, air and water. An environmental profile assesses the contribution that a produce or process makes to one or more impact categories, such as climate change, acidification and water consumption. Depending on the product or process, individual impact categories are of greater or lesser importance.

The best-known method of analysing the environmental profile is the LCA, which determines the total burden placed on the environment. In the case of products, it's the whole life cycle that is taken into consideration: extracting the necessary raw materials, production, transport, usage and waste processing. However, LCA does not necessarily take account of the social and economic aspects of sustainable development.

The EC's Directorate-General for the Environment (ENV) initiated the European Product Environmental Footprint (PEF), which includes strict guidelines per product category for establishing an environmental profile and for reporting the results. The PEF is expected to become a European standard, based in which the green claims for products can be examined objectively. Despite the tools that have become available in the meantime for calculating greenhouse gas emissions and LCAs, VBT and POs are opting to advance with caution. Research on this topic, specifically for fruit and vegetables has begun and is being monitored with the necessary attention. •



## 5.5 THE ENVIRONMENT AND BIODIVERSITY

**All producers are obliged by law to apply Integrated Pest Management (IPM) measures. Checks may be conducted separately or be incorporated into the Vegaplan standard audit.**

More than half of producers (51%) use natural enemies to fight pests and diseases in crops. 8% are considering doing so in the short term. Physical methods to fight diseases and pests – such as traps (with pheromones or glue), insect netting and UV treatment – are used by 52% of companies. 7% intend to apply them in the years ahead.

If necessary, authorised plant protection products are used to suppress weeds, pests and diseases. 20% of farms have a specific system – biofilter, Phytobac or the physical-chemical Sentinel – for collecting and breaking down crop protection residues during the filling and cleaning of the application machines.

45% of producers apply precision farming methods. 8% will follow shortly. Examples of precision farming are: soil scans, crop sensors, crop measurement using drones, field operations – sowing, planting, mechanical weed control – with GPS, automatic section or cap control with GPS, location-specific fertiliser techniques, climate control.

With soil cultivation, and particularly in the open air, the soil is a crucial production tool. 66% of the producers in question take measures against soil compaction. This includes the use of low-pressure tyres and the establishment of driving paths in the field.

Non-inversion tillage – where the ground is not ploughed, but only loosened – is applied by 43% of producers. Organic soil disinfection is used by 15% of farms, with 73% mechanical weed control. An additional 6% are also considering it in the years ahead.

62% of producers protect their open-air crops with a (temporary) cover: rain hoods, hail nets, fleece cloths or game nets. Over 31% have established shelter and nesting places – for example insect and bee hotels – which are provided for beneficial organisms. 14% expect to invest in them in the near future. 50% of farms already provided nesting boxes and/or perches for birds.

To improve pollination and the setting of fruit in crops, 53% of producers currently take measures such as providing flower meadows, using bumblebees or working with beekeepers. 4% would like to follow this example soon.

To make a specific contribution to biodiversity, 58% of farms have planted wooded edges and/or mixed hedges. 33% have planted flower borders or strips of wild vegetation around or on fields and/or farm land. 6% and 13% respectively of producers will also do so in the near future.

While it is not always obvious for producers to focus on biodiversity individually, collective efforts towards preserving and even restoring biodiversity are visible in the landscape. •



About this

# REPORT



This sustainability report is about the collective Responsibly Fresh Goodness by nature sustainability project by the Association of Belgian Horticultural Cooperatives (VBT), whose registered office is situated in Leuven.

The report covers the years 2018-2020. The aim is to publish an update every two years of the collective sustainability efforts made by the participants in the project.

The report has been drawn up in accordance with the internationally recognised standards of the Global Reporting Initiative (GRI), Core level. The table of content, with the GRI standards and GRI performance indicators, including references to the relevant parts in the report, is on page 46.

The participants in the project aim to make a contribution to the **Sustainable Development Goals** (SDGs) of the United Nations (UN). Reference is made throughout this sustainability report to the SDG for which the project believes it has a role to play.

VBT represents and defends the interests of Belgian producers' cooperatives in the fruit and vegetables sector, both nationally and internationally. Where necessary, it works in conjunction with other organisations, federations or stakeholders.

VBT provides its members with a platform for consultation and exchange. VBT also issues sector-relevant information to its members and may act as a service provider in certain well-defined areas.

## GRI STANDARDS AND PERFORMANCE INDICATORS

GRI STANDARDS	DESCRIPTION	EXPLANATION
102-14	a statement from the Board of Directors about the relevance of sustainable development for the organisation and its strategy	foreword
102-2	main brands, products and/or services	see VBT annual report and the annual reports from the POs
102-3	location of the organisation's head office	cover
102-4	the number of countries where the organisation operates (with relevance for sustainability issues)	see VBT annual report
102-5	ownership structure and legal form	VBT: vzw (non-profit organisation) POs: cvba (cooperative company with limited liability) see VBT annual report and the annual reports from the POs
102-6	sales markets	POs – turnover and export
102-7	scope	POs – turnover and export
102-9	description of the supply chain	POs – value chain
102-13	membership of associations in which the organisation exercises functions, makes financial contributions or considers membership as strategic	see VBT annual report
102-45	operational structure, scope of the report	about this report
102-47	listing of material topics	towards a sustainable food system
103-1	delineation of material topics within the organisation	towards a sustainable food system
103-1	delineation of material topics outside the organisation	towards a sustainable food system
102-40	list of relevant groups of stakeholders whom the organisation has involved	stakeholders
102-42	basis for inventory and selection of stakeholders	stakeholders
102-43	approach to stakeholder engagement, including its frequency by type and by group of stakeholders	stakeholders
102-44	main feedback from stakeholders and how the organisation reacted to it	figure p.21
102-50	reporting period to which the information provided relates	2018-2020
102-52	reporting cycle	two-yearly
102-54	GRI reference and GRI contents	about this report
102-56	policy and current practice with regard to providing external assurance of the report	does not apply
102-18	the governance structure of the organisation, including committees that come under the highest governing body	see VBT annual report

## ABBREVIATIONS

<b>BRC</b>	British Retail Consortium	<b>QS</b>	Qualität und Sicherheit
<b>DG Sante</b>	(EU) Directorate-General Health and Food Safety	<b>SAI</b>	Sustainable Agriculture Initiative
<b>DLV</b>	(Flemish) Department of Agriculture and Fisheries	<b>SDG(s)</b>	Sustainable Development Goal(s)
<b>EC</b>	European Commission	<b>UN</b>	United Nations
<b>EU</b>	European Union	<b>VBT</b>	Association of Belgian Horticultural Cooperatives
<b>FAO</b>	Food and Agriculture Organisation	<b>VCBT</b>	Flanders Centre of Postharvest Technology
<b>FIAS</b>	Freiwillige QS Inspektion Arbeits- und Sozialbedingungen (voluntary QS social module)	<b>VCDO</b>	Voka Charter of Corporate Social Responsibility
<b>FSA</b>	Farm Sustainability Assessment	<b>VLAIO</b>	(Flemish) Agency for Innovation & Entrepreneurship
<b>FSSC</b>	Food Safety System Certification	<b>VLAM</b>	Flanders' Agricultural Marketing Board
<b>FTE</b>	Full-Time Equivalent	<b>VOKA</b>	Flanders' Chambres of Commerce and Industry
<b>GGFSA</b>	GLOBALG.A.P. Farm Sustainability Assessment		
<b>GMO/CMO</b>	(EU) Common Market Organisation (Fruit and Vegetables)		
<b>GRASP</b>	GLOBALG.A.P. Risk Assessment on Social Practice		
<b>GRI</b>	Global Reporting Initiative		
<b>HACCP</b>	Hazard Analysis Critical Control Points		
<b>ICA</b>	International Cooperative Alliance		
<b>IFA</b>	Integrated Farm Assurance		
<b>IFS</b>	International Food Standard		
<b>IPM</b>	Integrated Pest Management		
<b>ISO</b>	International Organisation for Standardisation		
<b>IVC</b>	Interregional Packaging Commission (IRPC)		
<b>LCA</b>	Life Cycle Analysis		
<b>MGS</b>	Mobile Gutter System		
<b>OVAM</b>	Flemish Public Waste Company		
<b>PC</b>	Joint Representation Committee		
<b>PEF</b>	Product Environmental Footprint		
<b>PO(s)</b>	Producers' Organisation(s) – Sales Cooperative(s)		



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Hoogstraten

## Sustainably produced, healthily consumed



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