

# BioFirst Sustainability Report

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2024





**BioFirst**  
GROUP

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Personal solutions,  
trusted advice  
— That's  
BioFirst



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Joaquin Flores, coordinating a planting project in Mexico

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## GENERAL

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# General

Vespiformis-system



# Message from our CEO

***Sustainability has been part of our DNA and our core values since we were founded in 1987. In our business, the complexity of biological ecosystems and adapting to an everchanging environment, are ingrained in our way of thinking. This adaptivity is a skill we have used to our advantage over the past few years. And, one we will surely need in a fast-changing world in the near future.***

“While pursuing our mission — to contribute to the sustainable production of crops by providing biological alternatives for pollination, crop protection and for crop & soil health — we have set big changes in motion.” Over the last few years, we have grown into the largest company in biological crop protection. Within the next ten years, we have set ourselves the goal to be among the top ten global crop protection companies. This growth ambition brings major challenges, like changes in governance and in managing our ESG targets. It also adds new ones, such as maintaining our corporate culture, managing processes at a global level, selecting the most important opportunities, adopting new ways of working, while safeguarding our high quality.

On the other hand, our growth has brought numerous benefits. These include increased job and training opportunities; improved awareness of environmentally friendly agriculture, diversification options, the ability to attract top talent and, of course, opportunities to apply our products and innovations to new markets. Ultimately increasing the share of biological control.

“To navigate these changing times, we are more focused on our core values than ever before: putting our customers first in everything we do.” This means delivering the best possible solution for growers: increasing the value of their crop health and yields today, while improving soil health and business continuity for the longer term. I am extremely proud to say we play a role in healthier global food production and are improving people’s lives.

Delivering added value for our customers is a clear first, seconded by our shared passion for sustainability. Putting our passion to action is more important than ever before. The negative effects of industrialization on our climate are now being felt around the [world](#):

We’ve seen floodings in Valencia in October, New York state in August, Germany and central Europe in June as well as West and Central Africa and Rio Sul Brazil, and even in the perceived arid Persian Gulf in

April. We also witnessed several severe hurricanes in the South of the United States, Caribbean and Central America. Compared to previous decades, the intensity of hurricanes over the Atlantic ocean has increased significantly, especially over the past few years. Additionally, alongside hurricanes and floods, extreme dry periods have been recorded, leading to wildfires around the world, as seen recently in California.

Agricultural lands have been affected, permanently in some cases, leaving areas unsuitable for food production. On top of this direct damage, the agricultural sector is being challenged by gradual changes in climate, pesticide resistance, retailer requirements and residue management. These factors impact growth conditions, pest types and pressure, as well as plant health in general. Meanwhile, regulations are pushing to ban certain traditional crop control products, and it can take years to bring new products to market. This means customers will rely on the trusted advice of our technical experts more than ever, to help them analyze their current situation and optimize yields. We must keep offering the best-in-class advice to fit their needs: efficient, clear and transparent.

The last years have been filled with sharp contrasts. On the one hand, the growing success of our business with increased global sales; the opening of our new state-of-the-art production facilities; progress in optimizing operational efficiency; the added ‘sustainability value’ of our products; and winning several awards. However, this is set against a backdrop of international political unrest; high inflation; price pressures; natural disasters across the globe; and rapidly changing business megatrends. It is safe



to say that the last few years have presented many challenges for us all, but overall they have delivered clear, positive growth for the BioFirst Group.

This is why I would like to take the opportunity to thank you all for your passion and commitment, and ask you to take a minute to reflect on what we achieved in 2024. I am proud to be a part of the BioFirst family and all that we have achieved so far: we are not only

facing these challenges, we are helping to shape the future of agriculture together for our business and for BioFirst Group.

People with passion, can indeed change the world for the better.

Jean-Marc Vandoorne-Feys 



BioFirst wins the national Trends Impact Award 2024 for having sustainable business impact



| SPECIALTY CROPS  |  | OPEN-FIELD CROPS  |  |
|--|--|---|--|
|  <p>Leader in pollination, biological crop protection and expert horticultural advice</p> |  <p>Expert in biopesticides and biostimulants for horticulture and open-field specialty crops</p> |  <p>Supporting specialty horticulture growers with crop-input solutions and industry-leading advice</p> |  <p>Leader in biopesticides, biostimulants, biofertilisers and inoculants in open-field farming</p> |

New BioFirst structure 2024





**Proud to have the BIOTROP team join us in 2024**



Commemorative tree planted for the 2024/25  
Wool of the Year contest. 2024/25  
By: Peter & Sarah-Jane  
2024/25

# Sustainability is our core buzziness

## From pioneers in pollination and biological crop protection, to BioFirst Group

**In 1987 Roland de Jonghe, a veterinarian from Westerlo passionate about insects, developed a novel way to pollinate tomato crops using local bumblebees. By commercializing this highly effective and biological means to pollinate crops, Biobest was founded.**

Thanks to labor savings for tomato growers and a giant leap in the yield and quality of bumblebee pollinated tomatoes, the market grew rapidly. The use of bumblebees for natural pollination quickly expanded to other crops and international markets. More importantly, with the use of bumblebees as valued guests in crops, growers soon became more aware of the adverse effects of using chemical pesticides in greenhouses.

As a result, the presence of our bumblebees quickly became a key factor driving the demand for biological and more natural ways of crop protection. This was exactly the cue Biobest was waiting for, to use our existing knowledge and passion for insects and mites to develop novel and effective ways for modern growers to battle pests biologically.

Over the years, our portfolio of biological crop protection solutions has grown rapidly and continues to expand under our new name, BioFirst Group. With a large part of our business invested in R&D and business development, we continue to develop innovative ways to battle pests, fungi and plant diseases. In recent years, we have also added a new range of products to optimize plant health and improve natural water and nutrient uptake by the plant. We currently operate in 26 countries on all major continents, delivering a wide array of biological solutions to optimize yields for our growers.

Our product range has expanded significantly with the addition of other natural pollinators, dozens of beneficial insects and mite species for pest control, beneficial nematodes, biopesticides, biofungicides, plant vaccines, biostimulants, biofertilizers, inoculants, scouting tools, lures and trapping products, application tools and hi-tech monitoring solutions.

All of our products are provided with best-in-class personal advice, to find the best tailor made solution for any growers' needs.

BioFirst is customer oriented and offers solutions designed for ease of application and with effectiveness in mind. We start from the basics, working on improving plant health and offer solutions to any pest or plant disease where needed, driving significant improvements in crop health and yields. Our custom-tailored best-in-class advice, coupled with an extensive portfolio of sustainable agricultural products, positions BioFirst as a trusted partner for farmers and growers aiming for efficiency, profitability, and ecological harmony.



The tree BioFirst planted together with BIOTROP, symbolizing our joint commitment to a sustainable future, has grown considerably in 2024



# Our core activities





Bug-Scan® sticky traps and rolls



Crop Scanner™



Pollination



PATS-C



Nematodes

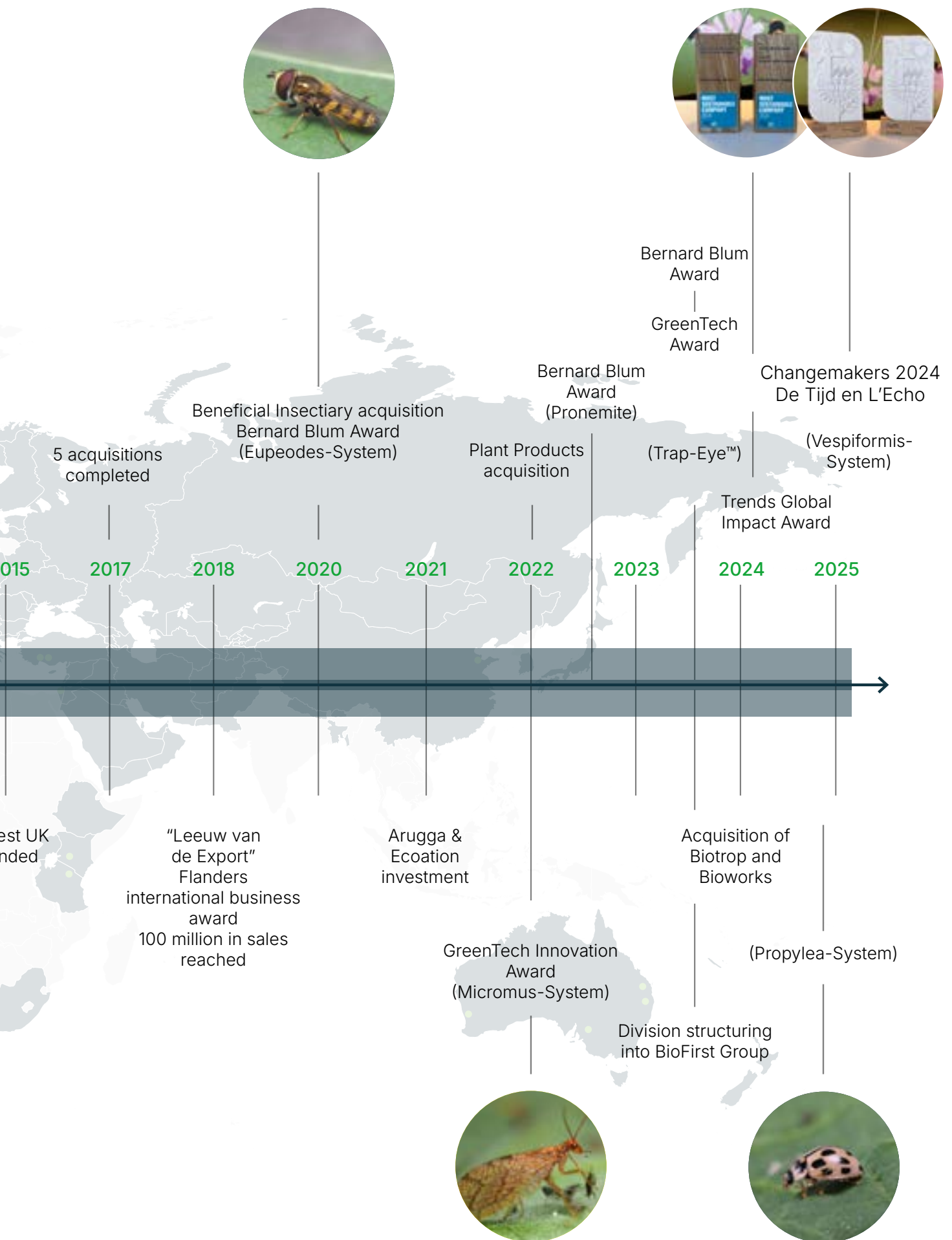


Biostimulants



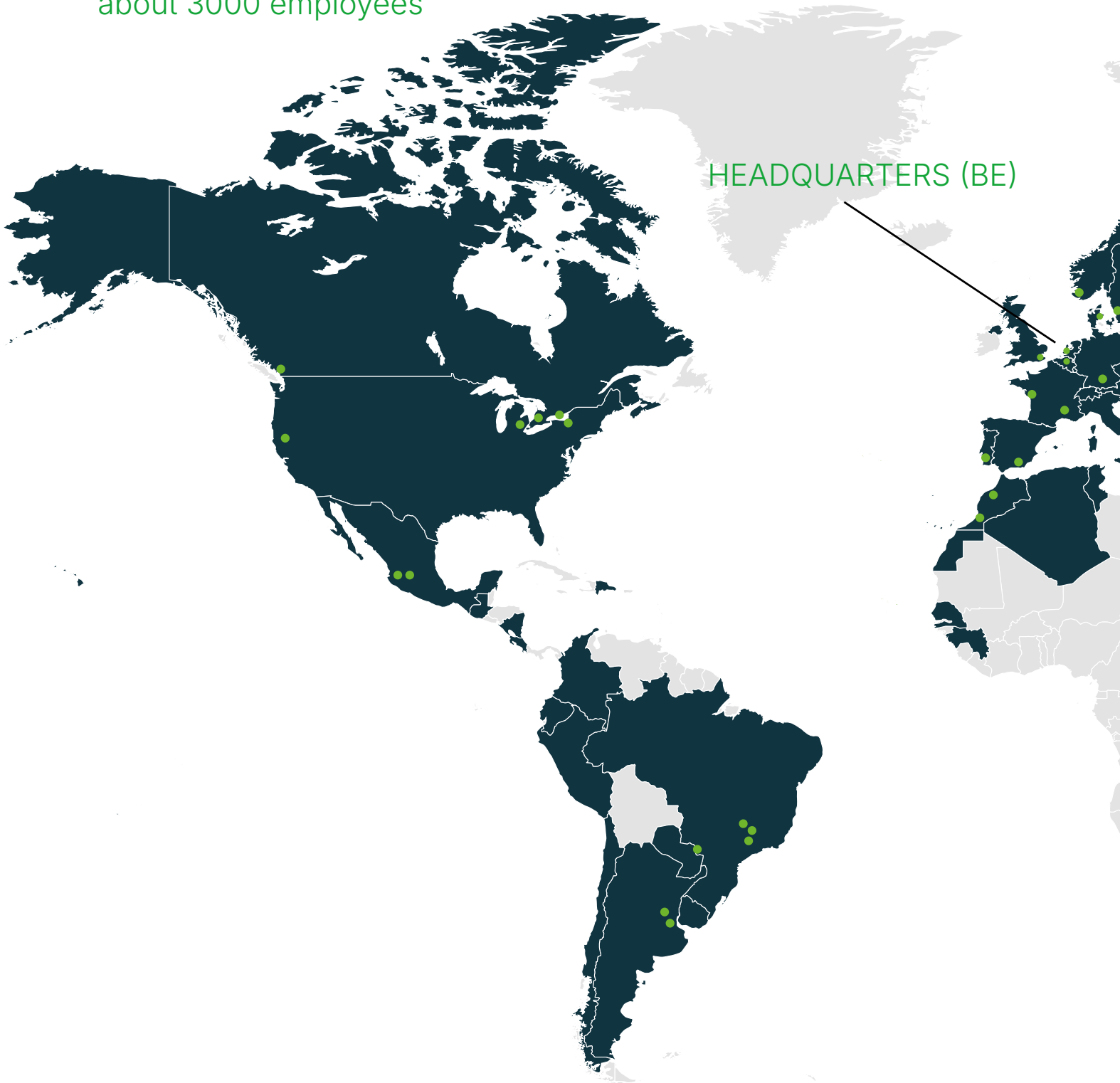
Seeds

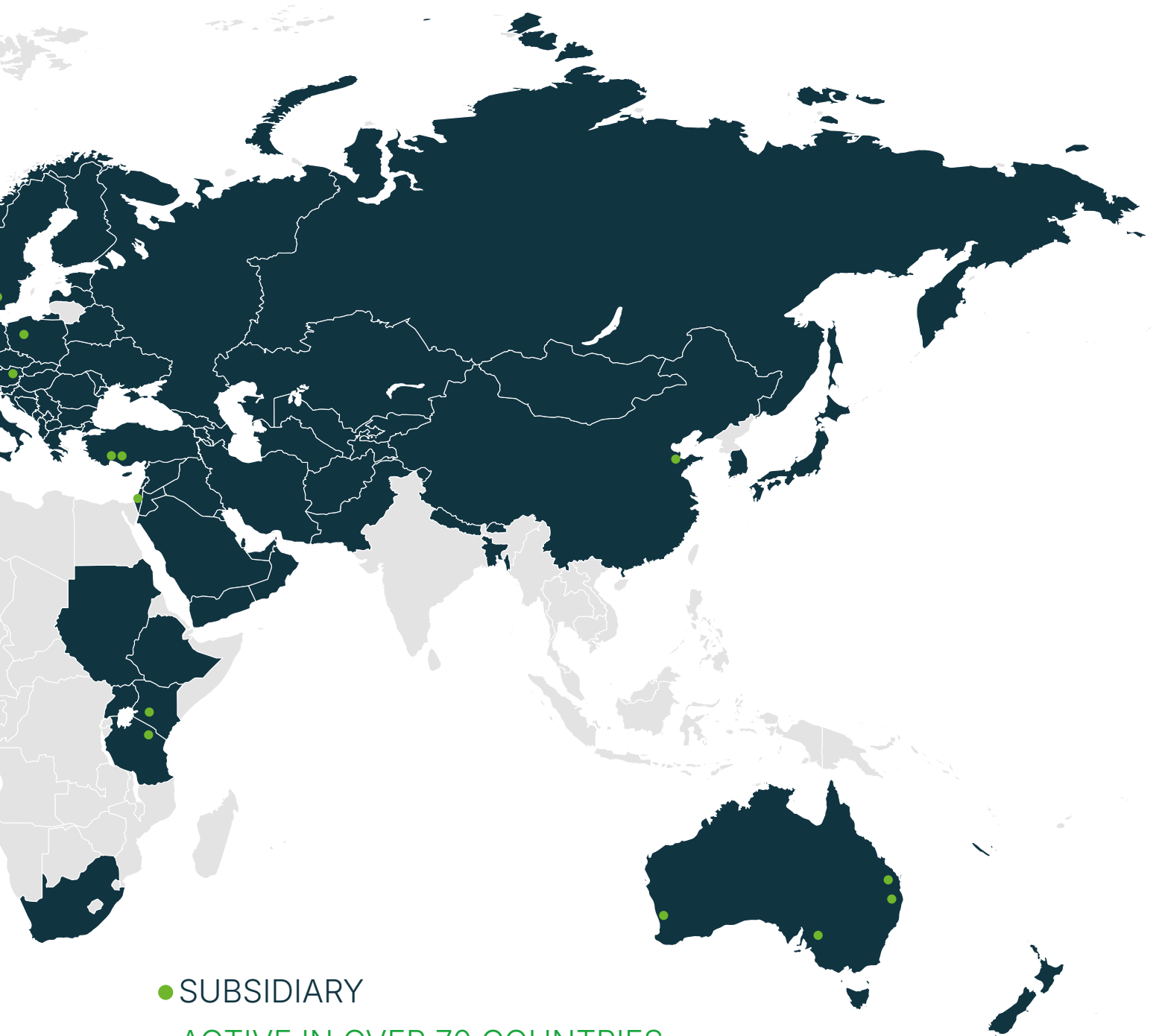




# Strong global presence & local expertise

Active on 6 continents with over 40 subsidiaries and about 3000 employees





● SUBSIDIARY

ACTIVE IN OVER 70 COUNTRIES

>250 distribution partners



# Governance

Group management review in Durbuy, Belgium, 2024





# BioFirst Core values



## At BioFirst, customers come first

- Delivering top-notch pollination and sustainable crop health & crop protection solutions, on time in full, is our commitment.
- Understanding and meeting customer needs guide our choices.
- Every decision we make is grounded in the goal of serving our customers better.



## Passion for sustainability

- Passionate about sustainable agriculture, we aim to change the world for the better.
- Our focus is on enabling safe, sustainable production while prioritizing human health and the environment.
- We pursue innovative solutions to reshape agricultural practices, committed to the highest ethical standards in dealings with employees, customers, and suppliers.



## Collaboration

- We consistently consider the whole process, avoiding the pitfalls of focusing solely on optimizing our individual contributions.
- As team players, we enjoy helping and sharing, recognizing that shared information and knowledge empower us.
- We find joy in our work, celebrate successes, and create a positive atmosphere. "Speak in such a way that others love to listen to you. Listen in such a way that others love to speak to you."



## Wellbeing

- We focus on the physical and mental wellbeing of our employees, cultivating a positive and inclusive environment where everyone can flourish and succeed.
- Our commitment extends to the health, happiness, and overall welfare of our workforce, creating a supportive work environment that prioritizes wellbeing and ensures safe working conditions for all.



## Execution

- We operate with speed, embodying a solution-orientated mindset that places accountability at the forefront of our work.
- Striving for continuous improvement, we optimize processes and deliver exceptional outcomes.
- These principles cultivate a proactive mindset driving us consistently towards maintaining and exceeding higher standards.



Taking time for exercise and mindfulness at Biobest on Mental Health Day

# Sustainability strategy and focus

**Our strategy for being the most reliable partner in sustainable crop protection, and having a varied team of passionate people, has led BioFirst Group to become actively involved in a broad range of sustainability projects. Our link to nature and biodiversity is evident. Since we came from, and work for, many family-owned businesses, we also have strong links to the communities where we operate.**

We value the resourcefulness and passion of our staff and aim to nourish it. To move our sustainability strategy forward, we set out to:

- transparently communicate our initiatives externally, in a recognizable and comparable way;
- organize and continuously improve our sustainability efforts by evaluating our current achievements, understanding our impact, defining clear priorities and focus, and setting targets towards a more sustainable future.

## Shared commitment towards a more sustainable world

We have chosen to adopt a reporting structure in line

with the United Nations Sustainable Development Goals (SDGs). The SDGs intuitively link our efforts to broader global goals for customers, suppliers, investors and other parties, such as readers of this report. With this widely recognized global standard, the UN and many participating countries set out clear priorities for a more sustainable world by 2030.

We are committed to doing our part in achieving these SDGs. In the following chapters, we aim to be as transparent as possible about our efforts and achievements. And, where this is not directly clarified, our assumptions and calculations are further explained in the chapter ["About this report" \(pages 106 to 108\)](#). We are in the process of aligning all our ESG reporting with the EU Corporate Sustainability Reporting Directive (CSRD).

We do not want to exaggerate our impact or claim to be solving the SDG as a company. To do so will take a global effort. The aim of this report is to set out and explain our vision and sustainability strategy. If you have any additional questions, or recommendations, we urge to contact us via [sustainability@biofirstgroup.com](mailto:sustainability@biofirstgroup.com).



*"At BioFirst I get to combine my knowledge and passions: working together with driven people on our sustainability strategy for biological control. Together we strive to make our products and the world a little bit better every day, having a positive impact on people's lives through healthy food and a healthy environment. I aim to contribute to a future-proof group, by adding value for people and the planet to our overall strategy. A strategy pushing beyond the mandatory sustainability targets and adding value for our customers."*

### Peter van Leent Sustainability manager

Born with a love for nature and trained as a biologist, Peter feels right at home working on sustainability in biological control for the ever-growing and changing BioFirst Group. He loves working in a team of colleagues that are passionate about sustainability: being in biological control alone is not enough and the BioFirst team pushes to improve their impact



# SUSTAINABLE DEVELOPMENT GOALS



every day. With hands-on experience in the field during his research, combined with experience in construction and agriculture, Peter recognizes the value of being pragmatic, gaining insight and focus quickly, and translating strategy into concrete actions that make an actual change in the world. His favorite example of such change in 2024 is the investment in production of *Bombus ephippiatus* in Mexico: a highly efficient native species of bumblebee, adapted to local conditions in South America and produced locally.

### The CSRD, a blessing and a curse

In 2024, we again made a real progress towards our sustainability goals. "I am very proud of all the examples shared in this report and advances that our colleagues achieved worldwide. Every year I am amazed by the huge variation in the sustainable initiatives accomplished by our global team and our partners. The CSRD provides us with a platform to showcase the success of our strategy, our positive impact and how our sustainability initiatives fit with our business model. In years to come, the CSRD will help to

create a level playing field that will allow us to report on this added value in a comparable way."

Today, the CSRD also adds additional processes, requirements and reporting criteria. These additional costs, and workload, are not necessarily linked to our core business or added customer value. "However, I personally welcome more insight into ESG performance and documented processes, as insight usually drives performance. We should be very careful though, as a company already intrinsically motivated to deliver the most sustainable products, to drive relevant initiatives and data collection that will lead to improvement of our products, services and transparency. All additional data collection will drive costs, but not all additional data is equally relevant to an improvement of our value to customers. However, we firmly believe change is an opportunity and use our pragmatism to capitalize on the opportunities presented. We can be proud of what we accomplished this year and, rest assured, we will once again roll up our sleeves to further 'up our game' - because I know that we can!"



Impact on our business



Stakeholder importance



At the start of 2022, we undertook a stakeholder analysis to determine the relevance of the different sustainability topics to our employees, customers, shareholders

and investors. In parallel we ascertained which topics are most relevant to our business plans. This was a great start for our first CSRD double materiality assessment in 2024.



# From stakeholder analysis to double materiality assessment

Creating customer value is at the core of our strategy. We started our stakeholder materiality analysis in 2022 with our largest customers. Our technical sales representatives discussed the relevance of the different sustainability topics with these customers and a desk study was undertaken on the topics these growers reported. The relevance of these topics to our employees, shareholders and investors was also investigated. In parallel, we ascertained which topics are most relevant to our business. The impact of the different topics was assessed by our executive committee.

With the CSRD starting to apply for BioFirst in 2025, we performed our first double materiality analysis according to the new EU legislation in 2024. The topics that were found to be material are shown in the table below.

## Topics found to be material for BioFirst group during the 2024 double materiality assessment.

| Standard | Topic                       | Sub-topic   |
|----------|-----------------------------|---|
| E1       | Climate change              | All sub-topics  |
| E4       | Biodiversity and ecosystems | Direct impacts on biodiversity, ecosystem health & ecosystem services |
| S1       | Own workforce               | Health & Safety   |
| G1       | Business conduct            | Corporate culture & lobbying activities                               |

It is important to note, most sub-topics found to be material, result from positive impacts and business opportunities. For example, the positive impacts our business has on climate change (E1), biodiversity & ecosystem health (E4) and the benefits we may experience through lobbying activities (G1).

BioFirst's innovations are inspired by, and contribute to, positive impacts and dependencies on ecosystem services. Although we prioritize a customer-first strategy and our sustainability report covers benefits to local communities and end-users, particularly in terms of consumer health (S3 and S4), we believe that consumer health, along with ecosystem services and dependencies, is positively impacted as part of an integrated system. Therefore, you will note that these most significant direct impacts, risks and opportunities fall under Biodiversity and Ecosystems (E4). In fact, BioFirst's scientific innovation in agricultural practices, relating to crop protection and pollination, are pioneering solutions that directly mitigate destruction incurred from conventional methods used in the agriculture and horticulture.

The topic of Health and safety (S1) was not found to be material, but was pushed as a material topic for BioFirst Group, as the safety and wellbeing of our colleagues is highly valued by us.

Material negative impacts and risks were only identified in relation to the topic of Climate change (E1), due to the impact our production has, like any production process on increasing global emissions. Particularly indirectly, by impacting growth conditions for our customers. The other relevant topic is our business conduct (G1), with an emphasis on preserving our corporate culture and identity during a period of rapid growth and launching our innovations to market.



## Greenwashing / SDG-washing

Greenwashing has become a buzzword for companies that positions themselves as sustainable, but usually lack the content, scientific proof, or actions to back up these claims. BioFirst strives for complete transparency in all its efforts and takes pride in the steps it is taking. We are confident that exaggerating our sustainability efforts is unnecessary, and we acknowledge that greenwashing undermines public trust in sustainability initiatives. By maintaining high transparency and taking a conservative approach in our calculations and CSRD disclosures, we aim to create a compelling and engaging report that is enjoyable to read. We are open to any questions or suggestions and steer clear of:

- Green labelling > misleading commercial statement for a product
- Green-lighting > highlighting one positive aspect to draw attention away from other activities
- Green-hushing > underreporting to steer clear of efforts and public scrutiny
- Green-shifting > shifting responsibility to consumers / society / others
- Green-crowding > hiding behind the field or benchmarks to avoid more serious efforts
- Green-rinsing > regularly changing the ESG targets before they are achieved

Should you have any questions, or suggestions, to explain more clearly our exact impact on specific topics (whether included in the report or not), we greatly appreciate you sharing them with us. You may contact us via [sustainability@biofirstgroup.com](mailto:sustainability@biofirstgroup.com).

Thank you in advance!

# Our sustainability goals for 2026

We are pleased to see that the topics where we have traditionally been most active globally, align closely with those most relevant to our external stakeholders. There is a natural fit. As of 2023, we have increased our efforts to promote supply chain cooperation with suppliers. And with the formation of the BioFirst Group we were pushed again to have a critical look at our group strategy. We came back to our customer centric focus, which is an integral part of our sustainability strategy, once again doubling our efforts to add practical sustainable value for our customers in everything we do.

In subsequent chapters, we are proud to showcase our sustainability strategy, targets and practical achievements for all the SDGs: starting with and focusing on the most material ones. We are delighted to share our progress with you in this report and will continue to strive to further improve our efforts.



**Achieve carbon neutrality for our own activities (scope 1 & 2)**



**Exceed 75% waste separation & increase our use of reused, recycled & biobased materials**



**Improve our safety awareness & communication  
Decrease the IF rate year by year**



**Each subsidiary implements at least 1 relevant initiative on (local) nature**



**Each subsidiary launches at least 1 initiative with & for the local community**

\*We are currently developing our short- and long-term strategy after 2026. In our 2025 report, you can find our usual progress update towards our 2026 goals, as well as an introduction to the BioFirst goals for the years to come.



# TIJD L'Echo



We are changing



makers!

BioFirst won both prestigious 2024 Changemakers Awards. Chosen by the professional jury in the 'Established company' category and selected by the audience as most sustainable company affecting a global change.

# Governance structure



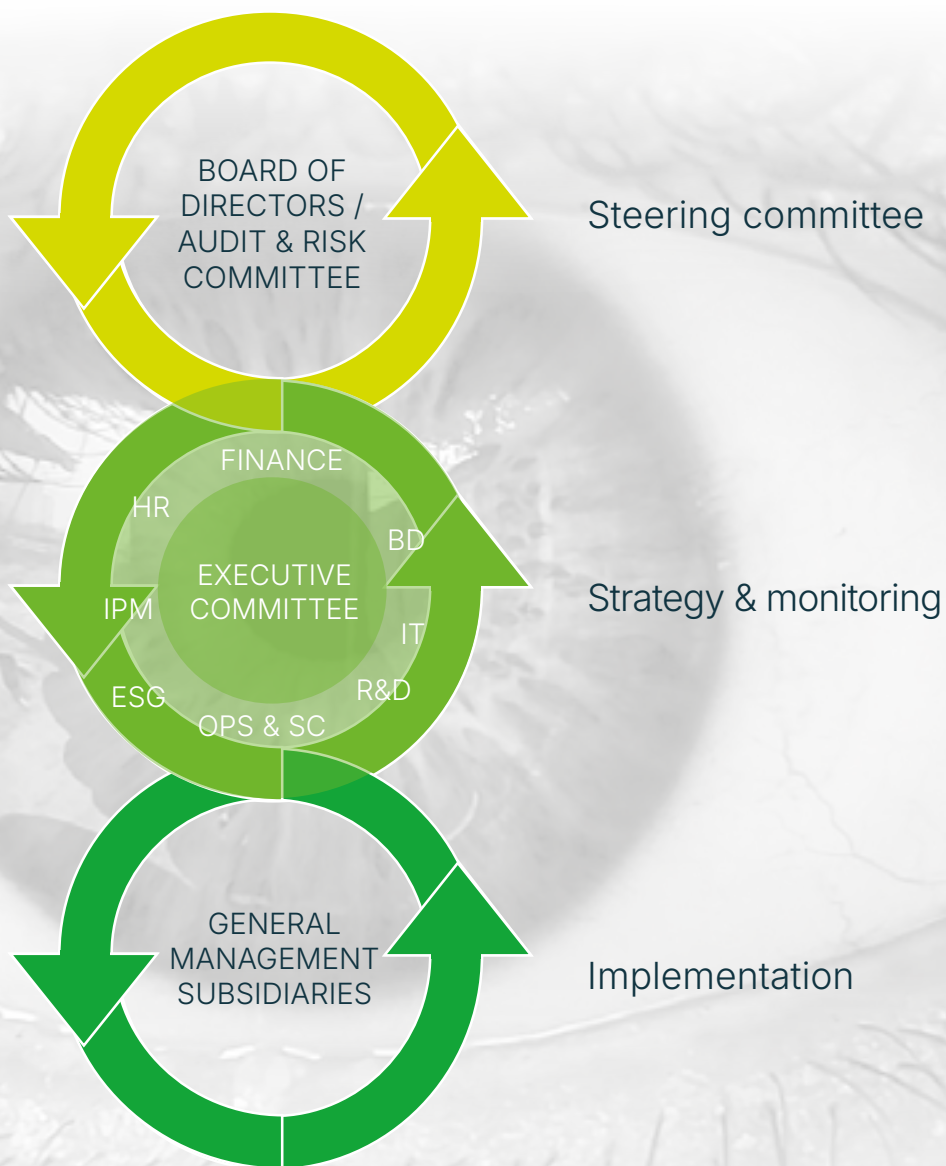
*BioFirst Group has a clear 'Customer First' mission statement, seconded by our Core values. Within the Group, we maintain close contact with each subsidiary through different channels. Since we operate a matrix structure, there are different central group functions and departments in contact with their local counterparts. Information is shared centrally, through different cross-departmental meetings such as the executive committee, department meetings, steering committees and project meetings on specific topics, stage gate meetings, etc. Since the rebranding to BioFirst Group in 2024, we also meet and consolidate results at divisional level.*

This matrix structure leads to a good level of understanding of the affairs of different subsidiaries and global goals, while ensuring relevant strategic or practical information is shared within the group. With limited formal procedures, we reach a satisfactory level of internal controls, without losing operational speed or efficiency.

We ensure that local objectives are aligned with group objectives. We can focus the information shared on our goals and aspirations, as well as our risks and how to mitigate them. Goals are cascaded through the organization with so-called OGAMs (Objectives Goals Actions and Measures), a system where high-level goals are operationalized as concrete actions and measures fitting the function of the employee in question. Progress is monitored by the employee and direct manager. Our remuneration system is linked to the most important objectives in the OGAM. As sustainability is one of our core values, it is a fixed element of our OGAM, which is in turn linked to the remuneration scheme.

Other ruling principles within the group are the 4-eyes principle and the grandfather principle: clearly stated in an authorization matrix, and well-known within the BioFirst Group.







Jean-Marc Vandoorne

BioFirst Group

CEO

- First experience in audit & consulting at Arthur Andersen
- COO then president of Laundry Systems Group (acquired by U.S. based alliance in 2006)
- Graduated from Solvay Business School



Karel Bolckmans

BioFirst Group

CSTO

- Started at Biobest in product & business development
- Spent 16 years at our competitors, growing from R&D manager to director of production and R&D
- Rejoined Biobest in 2016
- Board member for multiple agritech companies



Erik Vanderhaegen

BioFirst Group

CFO

- First experience in audit & consulting at Arthur Andersen
- Specialised in M&A at Bekaert and Univeg, then joined Jensen as CFO where he is currently chairman of the ARC"
- Country managing director for NIBC
- Honed experience in management, M&A and company integration





Kristof Truyens

BioFirst Group

CHRO

- Started as HR consultant and joined deSter (Duni Group) as HR Executive Europe
- Former Vice President HR EMEA and Commercial Area Lead Benelux and MENAA at Monsanto
- HR Director Benelux for Alfa Laval
- Serves as judge at the Labour Court of Appeal



Gerry Huygens

Biobest

President

- Started as financial controller at Mars, responsible for supply chain before becoming sales director
- Joined AB Inbev, then Arvesta as logistics director
- Experienced in complex operations & supply chain



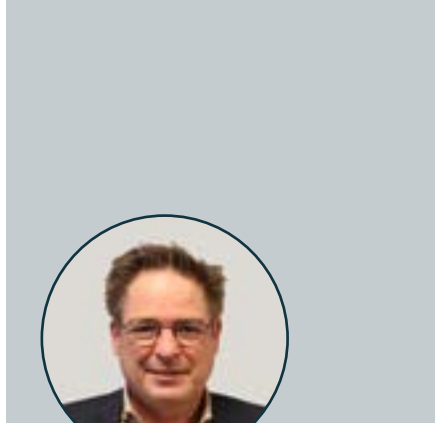
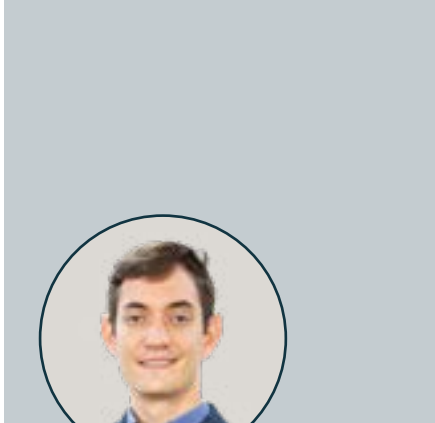
Marc Mertens

Biobest

Senior Vice-President

- Started at Biobest in the sales team
- Founded many Biobest businesses around the world in becoming sales director of EMEA
- Became Chief Sales Officer in 2018





Jonas Hipolito

BIOTROP

President

- Agronomist with specialisation in sustainable crop management
- Master in marketing (Cornell) and finance (Harvard)
- Former member of Auqa Capital investment team
- Co-founder of BIOTROP in 2018

Lara Ramaekers

BioWorks

Vice-President

- PhD in microbial inoculants and plant genetics, executive MBA
- Started as field development manager at Agriphar. Specialised in towards biofungicides as Global Marketing manager for Arysta
- Global Portfolio lead Biocontrol & Alliances for NPP (UPL) from 2021
- Was Chairman of the Global Natural Substances Professional Group for IBMA

Bart Sosef

Plant Products

President

- MBA in Food & Finance
- Started in horticulture in the family business in 1993 to become the CEO
- Board member of many associations for advocacy & improvement of quality and knowledge in horticulture, several general business associations and one for social return
- Started in 2014 as general manager for Biobest Netherlands



## Board of Directors:

Gaëtan Waucquez, Chairman\*  
Jean-Marc Vandoorne-Feys\*  
Thibaut Hofman\*  
Christian Van Osselaer\*

Herman Wielfaert\*  
Alexi Gantelme  
Thierry Chignon\*

Noelline Thiercelin\*  
Niranjan Sirdeshpande  
Carlos Antonio Zem\*\*

*\*permanent representative of a legal entity director*

*\*\*will be appointed as permanent representative of a legal entity director shortly*

# Implementation

**The sustainability strategy and resulting targets were determined by the CEO and executive committee, with input from our subsidiaries. The strategy was fixed with the guidance of our Board of Directors representing our shareholders.**

Our company strategy is customer focused: everything we do is aimed at adding value for growers and consumers. Our technical sales representatives and IPM specialists in the field are a valuable source of information and feedback.

The strategy is implemented at each location by the general manager, drafting their own roadmap with measures to reach the required targets by 2026. Global focus is on the locations that make the

largest contribution to the different sustainability topics.

Quarterly reporting is performed on target KPIs to keep track of progress. Progress on the roadmap and practical measures are reviewed quarterly by division management and general managers. Adjustments to plans or measures are made as necessary: when measures turn out to have less than the planned effect, or targets may be updated when they turn out to have a larger effect. Overall progress with respect to the targets and budget is reported back to subsidiaries on at least a quarterly basis.

The sustainability roadmaps are linked to finance in two important ways. Firstly, all roadmap measures are incorporated into the subsidiary

budgets through operational expenditure (OPEX) forecasts and capital investments (CAPEX). For large CAPEX investments, a separate plan to reduce the carbon footprint is requested. Sustainability is also a fixed part of the management objectives, cascaded down from the CEO to all general managers. These objectives are linked to the remuneration of general management. Apart from quarterly progress meetings, they are regularly consulted to identify potential improvements for the strategy and to share best practices in measures for implementation.



Driving a shift towards sustainable, healthy and effective agriculture



BIOTROP opened two new state of the art production facilities in 2024



## The EU taxonomy & CAPEX investments

Unfortunately, our business activities were not included in the 2023 update of the EU Taxonomy for sustainable activities under the EU Green Deal. Though our main NACE code was officially included in 2023, we are still operating in a niche market and our core activities are not recognized as eligible under EU taxonomy - as they are not part of the existing delegated regulations. As a result, we had no eligible turnover to report under EU taxonomy or related CAPEX or OPEX.

In 2024, we performed our first reporting exercise for EU taxonomy and found a small part of our CAPEX and OPEX, related to transport and buildings, was eligible. For the 2025 report, we plan to perform a full report on our EU taxonomy eligibility and alignment.

As the company awaits potential updates, to include activities related to biological control, BioFirst anticipates key performance indicators for taxonomy-eligible economic activities may increase significantly in future reporting. BioFirst remains committed to monitoring future regulatory developments, to ensure our reporting obligations align with evolving standards. Our ongoing efforts focus on adapting our reporting systems to seamlessly accommodate such

changes, thereby maintaining transparency and compliance in our financial disclosures.

### Does that mean BioFirst is not a sustainable company to invest in?

On the contrary, most of [our investors](#) selected BioFirst as a sustainable investment. A big part of the 2024 capital increase was ensured via a regenerative agriculture fund. Moreover, many of our products can serve as measures for agricultural companies to reach alignment with the EU taxonomy. For example, by being more adaptive to climate change, by having an impact on crop water use, and especially by lowering the amount of pollutant and nutrient run-off due to preventing the use of traditional pesticides and fertilizers.

Our combination of ambitious sustainability strategy, linked to successful growth in biological crop protection has not gone unnoticed in Belgium, where the BioFirst Group headquarters are located. In 2024, BioFirst Group won the ['Changemakers Award'](#) for companies shaping the future with sustainable solutions, both: being selected by the expert jury in the 'Established companies' category, and winning the 'Audience award' by popular vote. Later in the year, BioFirst Group won as well at the ['Trends Impact Award 2024'](#) for

companies with an outstanding positive and sustainable impact on society: winning the 'Impact Award for Ecology' and the overall 'Trends Impact Award 2024'.

The most notable investments in 2024 included our new state-of-the-art mite production facility in Belgium. The cutting-edge predatory mite production facility was opened in April by David Clarinval, Deputy Prime Minister, and Jo Brouns, Flemish Minister of Economy, Innovation, Work, Social Economy and Agriculture. The new facility will produce millions of mites for biological control each year, utilizing the latest technologies and innovations to run entirely on renewable energy. Other notable investments include two new production facilities in Brazil, which have tripled our local production capabilities.

*"In terms of production, BIOTROP has tripled its capacity contributing to the company's continued growth, strengthening our position in the market and enabling revenue gains." Eduardo Pesarini, operations and supply chain director BIOTROP.*

In 2024, we continued our investments in generating our own solar power and in the further electrification of our car fleet.

## Code of conduct & whistleblowing

In 2024 we globally introduced, and published, our [Code of conduct](#) adhering to our core values. The code outlines the ethical standards and behavior we expect from our employees, to live up to our core values. The ethical standards have been integrated into the performance management cycle (OGAM) and adherence to the code is now discussed with all employees annually. The code also deals with the necessary legal aspects for compliance, the correct use of personal and company data and fair business conduct. Where necessary, it refers to more specific local legislation.

All rules and company policies are explained within the code. As for all cultural aspects, we expect

employees to maintain an open dialogue about adhering to the code. We promote open communication on our values and Code of conduct. If in doubt, we ask employees to discuss it with their manager or, alternatively, they can opt to speak to one of several confidants within the company about any personal or business-related issue.

With the Code of conduct now implemented within the Group, we are developing practical training to highlight the most important and relevant 'do's and don'ts', based on an employee's function. The first round of practical trainings is planned for 2025.

We have also introduced a whistleblowing line for reporting any

suspicious, illegal or un-ethical business conduct. This online contact gives so-called whistleblowers the opportunity to report issues anonymously, when they do not feel safe discussing issues with their supervisor. Issuing a report is open to anyone, at any time. Reports can be filed via [this page](#). The BIOTROP division also has a dedicated whistleblowing line.

In 2024 we received 57 whistleblowing reports. All cases were handled confidentially and investigated. Four led to more exhaustive, external investigations or legislative action. None led to a conviction, fine or penalty for BioFirst Group.

Opening our new state-of-the-art mite production facility in Belgium ▼



A black and white photograph of a person wearing a wide-brimmed hat, holding a small plant seedling in a field. The person's hands are visible, one holding the stem of the plant and the other holding a clump of soil. The background is a dense field of similar plants, slightly out of focus. The overall tone is monochromatic and naturalistic.

# Environm

Biobest Mexico colleagues putting their hands together to plant new seedlings

ental



# Climate related risks & opportunities

Enhancing resilience and driving impact through nature-positive strategies



Although climate change will affect everyone in the near future, in some regions it is already having a profound effect on our sector. Climate related risks and opportunities were a relevant part of the BioFirst double materiality assessment for the CSRD. In this chapter, we outline the most relevant ones for our business, and sector.

Local temperatures and rainfall patterns are changing. Causing some arid environments to become even drier, by lowering ground water levels, these changes are leading to floodings in other areas: in some cases, leaving the land unsuitable for agriculture. This may in turn impact a large range of environmental, social and financial issues regionally.

Climate change may therefore have profound regional effects on our customers and our business. Some changes might impact us directly, such as reduced water availability at certain production sites, changing temperature, direct sunlight levels impacting production, or the amount of cooling needed in our facilities.

Indirectly, it may even influence labor availability, due to people moving away from impacted areas. But the most profound effects are likely to be felt via our customers, as they are even more dependent on environmental conditions for growing their crops. Growers are heavily impacted by water scarcity in certain regions, and by changes in temperature and climate in others. Increased costs of heating and cooling may put more pressure on greenhouse growers locally. The global impact may be severe, with the risk of synchronized low yields by multiple large growers. For BioFirst this is a risk, as productivity may fall, or price pressure may increase regionally.

However, climate change may also provide major opportunities to better serve our customers to deal with water stress and new, or increasing, pest pressure. At the same time, global population growth and rising food demand continue to shape the agricultural landscape. While there is great value in our products that contribute to crop productivity, climate change opens the door to further innovation, allowing us to

develop and offer new solutions with just a fraction of carbon footprint compared to traditional products.

Even though our own production facilities are controlled and relatively well-protected against environmental changes, we foresee regional risks to our customers, who are generally more fixed to a certain region. We plan to remain flexible, fast to deliver and innovative: ready to rapidly help our customers adapt to changing conditions and pest pressures.

As the agricultural sector is coming under pressure from a changing global climate and increases in energy prices, we have linked our mission towards net zero to using local renewable energy. We will focus our efforts on our own energy consumption, and work to become net zero for scopes 1 and 2. We feel the urgency of slowing climate change and therefore aim to achieve carbon neutrality by 2026 — well ahead of the 2050 EU target.



## Our carbon reduction strategy in practice

Most importantly, becoming carbon neutral means a reduction in our energy usage. The first step is to build and maintain well-insulated, low-maintenance production units. We are investing in cleaner and more efficient machinery and climate facilities to reduce our emissions. In our strategy we focus on the most relevant sources of emissions. This step is part of the BioFirst continuous improvement process, which will continue, even after the next steps are completed.

The second step is, where possible, to invest in renewable energy sources. Approximately 50% of our emissions in 2019 were attributed to electricity use. In 2024, despite the rapid growth of our Group, our global

share of renewable electricity is still 17.2% (21% in 2023). This is the share of 100% renewable energy we generate and purchase (market based), and excludes the renewable energy already present in the general energy mix for each county (location based). In the coming years, we will gradually move to the use of 100% renewable electricity. We have a clear preference to generate renewable energy ourselves, on site. At our smaller sites, or where this generation is not possible, we are investing in renewable energy through third parties. For example, by joining the free market for electricity in Turkey and Brazil to purchase I-Rec certification for fully renewable electricity. By negotiating directly with energy suppliers, BIOTROP achieves

more competitive pricing and flexible contract terms, resulting in lower electricity costs. This combination provides greater control over energy costs, helps to reduce the carbon footprint, and demonstrates the company's commitment to sustainability, promoting competitive advantages and contributing to the green economy.



Where possible, we will substitute fossil fuel heating with more sustainable alternatives. We currently have two sites reliant on fossil fuel and are working on alternatives. In Belgium, we have reduced our fossil fuel usage by approximately 50% with the opening of our new state-of-the-art mite building. Utilizing the latest technologies and innovations, the new production facility is run entirely on green energy. It

features a heat pump system, air handling units and a high-end heat exchanger to maximize energy recovery. The renewable electricity is currently contracted, but in the near future we plan to add a solar installation to generate up to 4 MWh per year. At our new distribution center in Mexico, and on the BioOracle experimental farm unit and Site 2 in Curitiba Brazil, Imex and BIOTROP have installed solar panels on the

buildings and parking lots. In 2024, a total of 86,053 kWh of renewable energy was generated at BIOTROP through the use of photovoltaic panels at the BioOracle unit. This is providing both economic and environmental benefits, such as reducing annual electricity costs, lowering our carbon footprint and shading our vehicles in very warm conditions.





At the same time, we are focusing on reducing the emissions of our car fleet. In 2022, our main office in Belgium adopted a car policy only permitting the purchase of electric vehicles. The percentage of electric vehicles is steadily increasing and the fleet is expected to be fully electric by 2028. We are also encouraging the workforce to use alternatives and have introduced a bike leasing program and built a new bike shed that also facilitates e-bike charging. In other countries, such as Brazil, the U.S. and Canada, we are promoting the use of bio-ethanol in cars. While bio-ethanol is playing a significant role reducing our emissions. Regionally there is a major link back to our business, with producers using our products in the sustainable production of bio-ethanol. For example, the bio-ethanol we use in Brazil is a renewable fuel derived from biomass, such as sugarcane or corn. A cleaner alternative to fossil fuels, the carbon burnt was captured by the plants. This means no additional carbon is

released into the atmosphere, that was previously stored in the earth's crust. By transitioning to bio-ethanol, we aim to support the circular economy, utilizing agricultural byproducts while promoting energy independence on a national level through reduced dependence on fossil fuels.

In 2024, BIOTROP launched a campaign to increase awareness of ethanol among company fleet drivers, to encourage the use of ethanol as fuel for the vehicles. Monthly bulletins provided information on the ideal fuel option for each state. By promoting its economic and sustainability credentials, the ethanol use increased fivefold compared to the same period in 2023 - leading to a 29% reduction in emissions for our vehicles used in Brazil.

While we strive to have a global low-carbon fleet by 2026, in some countries we are struggling to switch to feasible alternatives within this timeframe. Affordable and suitable electric vehicles, and

charging or alternative fueling stations, are not yet readily available in all regions where we operate. In these locations. As our business grows organically we are faced with an absolute increase in emissions. Although not negatively impacting our emissions intensity, it is nonetheless an absolute increase and one we expect to compensate for at least the first few years, starting in 2026.

And that brings us to the third and final step: only when the bulk of our emissions (65 to 90%) are reduced, we plan to compensate for our remaining emissions by carbon offsetting. Once all of our emissions are fully offset in 2026, we will continue our efforts to reduce our own energy consumption and scope 1 and 2 emissions. We are currently working on our strategy after 2026 and our practical plans for compensation. More detailed information on both topics will be shared in our 2025 sustainability report.

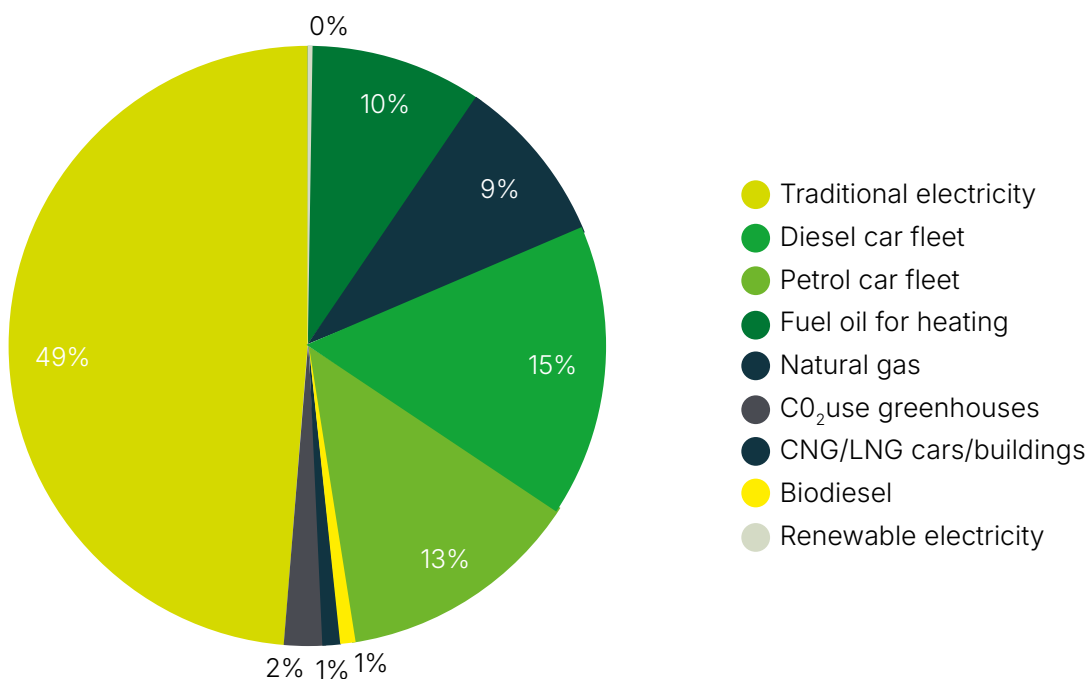


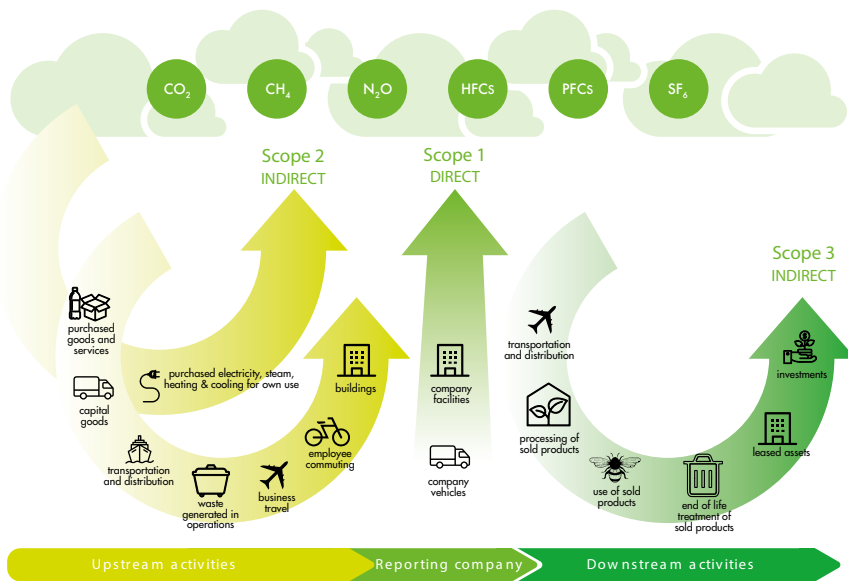
# Towards net-zero carbon emissions in 2026



| SCOPE 1 GHG emissions  |         |
|--|---------|
| Gross Scope 1 GHG emissions (tCO <sub>2</sub> e)                                 | 12,671  |
| Percentage of Scope 1 GHG emissions from regulated emissions trading schemes (%) | 0%      |
| SCOPE 2 GHG emissions  |         |
| Gross location-based Scope 2 GHG emissions (tCO <sub>2</sub> e)                  | 11,723  |
| Gross market-based Scope 2 GHG emissions (tCO <sub>2</sub> e)                    | 12,879  |
| SCOPE 3 GHG emissions  |         |
| Total gross indirect (Scope 3) GHG emissions (tCO <sub>2</sub> e)                | 277,193 |

## BioFirst carbon footprint 2024: scopes 1 & 2





The Greenhouse Gas Protocol distinguishes 3 types of emissions as depicted on the left.

**Scope 1:** direct emissions from burning (fossil) fuels in our operations. Examples: using natural gas or biomass to heat our buildings, diesel used in our vehicles.

**Scope 2:** indirect emissions from the use of energy in our operations. Examples: using electricity generated from coal, or from biomass elsewhere, by using a district heating system.

**Scope 3:** indirect emissions by other parties involved in our supply chain. Examples: to deliver by air freight, to produce our packaging, or by recycling and waste processing.

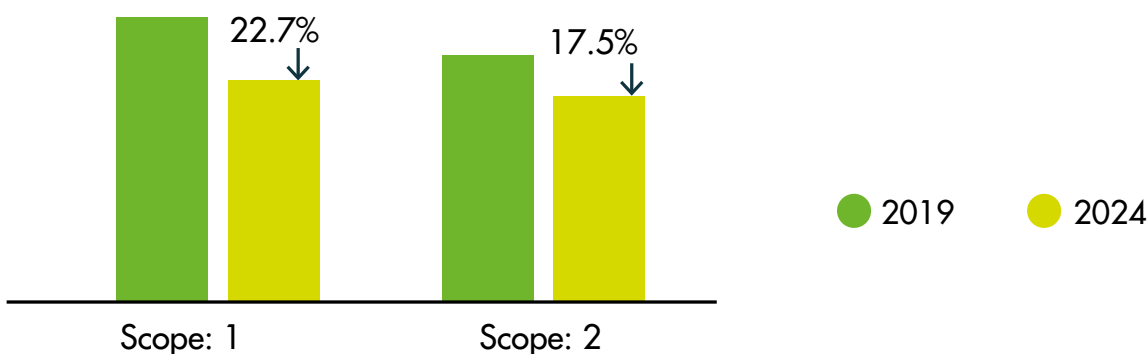
In 2024, BioFirst Group emitted a total of 24 kilotons of CO<sub>2</sub> globally (own emissions in scopes 1 and 2). For comparison, this is the level of emissions of a small village in Western Europe with about [2,700 households](#). With an average of 3 tons of CO<sub>2</sub> equivalents per hectare, this would equate to emissions from [8,000 hectares](#) of agricultural land used in a traditional way. To put that into perspective, our products serve several million hectares of agricultural land and greenhouses annually. With average agricultural emissions of [40 Gigatons](#), this equates to approximately 0.00006%.

While our direct emissions may represent a smaller portion of our overall footprint, they are the ones we influence the most. That's why we're on a clear mission: not just to improve, but to go much further. Our goal is to reach net zero emissions for Scopes 1 and 2 by 2026: a meaningful step in our broader sustainability

journey. We will get back to our mission and strategy later.

First, let us take a look at our 2024 direct emissions. The majority of these emissions continued to originate from our production facilities, primarily due to electricity consumption (48%) and fuel used for heating (17%). Most of this energy goes towards creating optimal climate conditions for production of our insects, mites and other biologicals. Natural gas is used for heating several smaller office buildings, and for air humidification in our production facilities. Another significant source of emissions (28%) is from fuel usage of our car fleet, with our extensive team of (technical) sales representatives visiting many remote areas worldwide. For more technical background on our carbon emissions, please refer to the chapter "About this report" on pages 106 to 108.

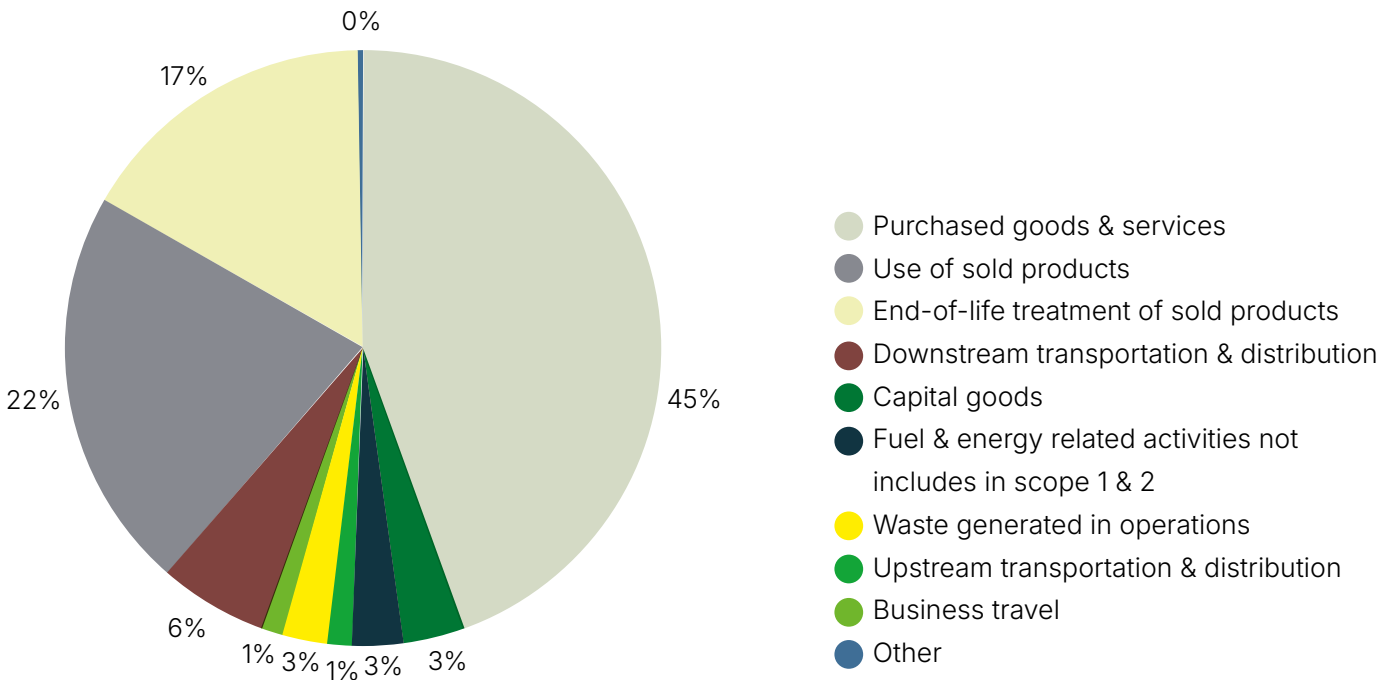
## Carbon intensity per revenue



\* Scope 3 not included as 2024 is the base year, no 2019 data available



## BioFirst carbon footprint 2024: scope 3



### BioFirst scope 3 emission inventory

For our supply chain (scope 3) emissions, we regularly measure our water usage, waste and transport of personnel, which includes flights, commuting, business travel with personal car and public transport. As in the previous three years, our emission intensity from flights, commuting and business travel have decreased, compared to 2019.

As of 2024, we are proud to include all our scope 3 emissions in our report. Business travel and commuting are areas where we can exert some influence as a Group, which is important to affect cultural change. However, these are certainly not the most material part of our scope 3 emissions. To gain initial insight into our scope 3, we chose a financial approach, including the major part of our OPEX and CAPEX in goods and services. General conversion factors were used to calculate emissions from our expenditures. In addition, further down the supply chain, we monitored the effect of traditional fertilizers used by our customers. For our first analysis, we used data from

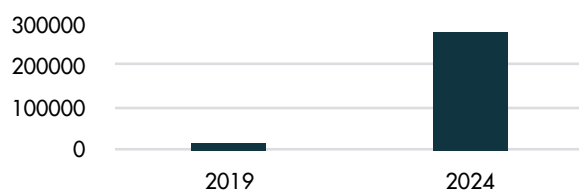
our largest entities, those with the most material impact, accounting for approximately 90% of our global turnover. For the remaining 10% emissions were considered as well, but hypothesized from the data collected. (More on our scope 3 methodology may be found in the chapter "About this report" on pages 106 to 108). In the future, we aim to transition towards more exact supplier data: obtaining data from all subsidiaries, ultimately replacing financial data with quantitative data on our materials used; and replacing calculations for material types with supplier specific data where relevant. This

means that changes in our scope 3 emissions in the coming years may in large part be due to an improvements in data quality or calculation methodology: where relevant, we will explain these changes and their impact on the reported emission totals."

Large part of our assumptions from the 2023 report was confirmed, the most material emissions in scope 3 have proven to be:

1. Purchased goods / resources;
2. Use of sold products;
3. End-of-life treatment of sold products;
4. Transport and distribution.

### Scope 3 emissions (tCO<sub>2</sub>e)



As of 2024, we are proud to add a full estimate of our scope 3 emissions. In 2019 only business travel and commuting was included. Emissions from travel actually decreased, so the sharp increase is actually due to an improvement in data.

|  |         |
|--|---------|
| <b>Total Scope 3 emissions tCO<sub>2</sub>e</b>              | 277,193 |
| <b>Scope 3 Emissions: Upstream</b>                           | 154,314 |
| Purchased Goods & Services                                   | 123,524 |
| Capital Goods  | 9,151   |
| Fuel & Energy Related Activities not Included in Scope 1 & 2 | 7,624   |
| Upstream Transportation & Distribution                       | 3,551   |
| Waste Generated in Operations                                | 6,753   |
| Business Travel  | 3,249   |
| Employee Commuting   | 463     |
| Upstream Leased Assets                                       | -       |
| <b>Scope 3 Emissions: Downstream</b>                         | 122,879 |
| Downstream Transportation & Distribution                     | 16,324  |
| Processing of Sold Products                                  | -       |
| Use of Sold Products   | 60,535  |
| End-of-life Treatment of Sold Products                       | 45,680  |
| Downstream Lease Assets                                      | 339     |
| Franchises   | -       |
| Investments  | -       |



# Our path toward low-carbon operations

The year 2024 was marked by strong growth in the Group's sales, the number of hectares under management and the number of customers served. Even though energy consumption rose as a result of this increase in activity, it increased less rapidly than the increase in sales over the same period. In particular, thanks to our continued investment in new and more efficient facilities, processes and in generating our own renewable energy on site.

## Decarbonizing of direct emissions (scopes 1 & 2)

Between 2019 and 2024, our emissions intensity has decreased approximately 20%, on average, for scopes 1 and 2. We have continued to invest in new and more efficient facilities and processes, as well as in generating renewable energy on-site. Additionally, we've started partnering with third parties to invest in renewable energy in locations where on-site generation isn't feasible due to space limitations or other constraints. With the largest share of our emissions originating from electricity use at our production facilities, accounting for 50% of our direct emissions (Scopes 1 and 2), these investments are playing a key role in reducing our global footprint. In the future, where possible we aim to electrify and further increase this share of renewable energy. Where electricity generation is limited, for example in Australian and Moroccan markets, we are looking for alternatives to supply 100% renewable electricity in the

future. We are also grateful for external progress, by companies and governments, improving renewables usage — helping us achieve our global goals. The battery array being installed on the Western Australia power grid, and the Danish government's investment in electric ferry operation are just two examples of the progress made world-wide.

As a Group, where possible we are electrifying our heating and humidification processes. We are implementing several pilot projects at our insect and mite production units to explore its efficiency. The humidification process is quite complex, as it takes significant amount of energy to heat water to create the high concentration of water vapor required in production. While gas is well-suited to generate a large burst of heat, we are investigating fully renewable, safe and affordable alternatives for the future. In Morocco, we experienced a major set-back to our heating plans following the cancellation of a significant biomass project in 2024. With substantial reliance on fossil fuel at this site, we are already looking into possible alternatives.

## Decarbonizing of the value chain emissions (scope 3)

Scope 3 emissions represent the largest share of our carbon footprint. We have recently identified the main sources within our value chain and are working to better understand their impact.

Building on this knowledge, we will develop a comprehensive decarbonization plan that includes engaging suppliers on emissions reduction strategies, integrating sustainability criteria into procurement processes, and encouraging low-carbon innovations across our value chain.

Encouragingly, from a business perspective, we have already been working on our most material impacts, and have several initiatives in place covering these topics. Our core focus is customer oriented: we develop products that optimize customer yields and sustainability and are easy to use. And in our operations, we continuously work on optimizing rearing methods; finding alternative resources to use, identifying new uses for our waste products, maximizing products per shipment; and developing sustainable packaging alternatives.

Please note that our scope 3 emissions are not part of our target for carbon neutrality. As the next steps for our scope 3 strategy, we will formalize a Group target, backed by practical and feasible actions, for further reductions in these categories. Actions that we may take as a Group, together with our value chain. And of course, actions that add value to our company, customers and suppliers.



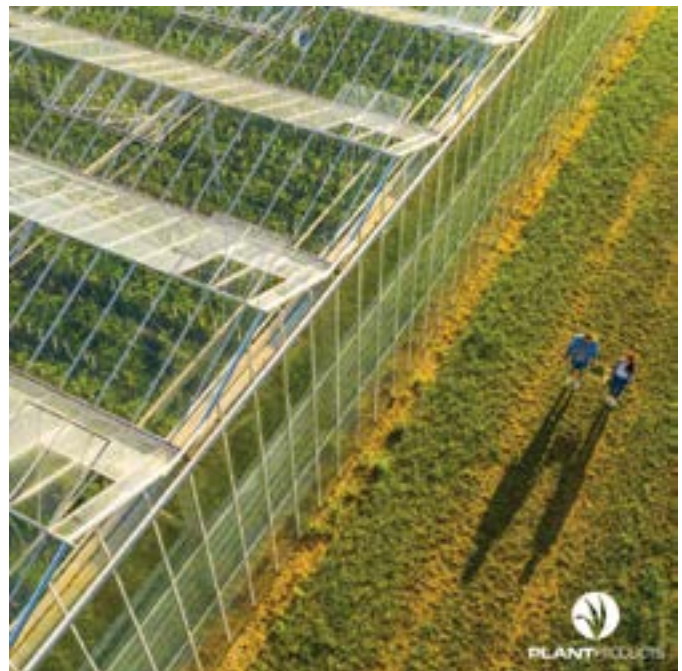
## Integrating new subsidiaries into our decarbonization strategy

BioFirst Group has continued to acquire new subsidiaries with relatively low carbon intensity (low emissions compared to their total turnover). All new subsidiaries are subject to our ambitious group targets. Taking into account our current growth and focus on actual carbon reduction, we are putting forward a transitional plan for new entities, allowing them time to transition to our approach towards carbon neutral. Firstly, through long-term measures for energy usage reduction and switching to renewable sources (insetting), and secondly, by requiring them

to compensate for their current emissions on the short term (offsetting).

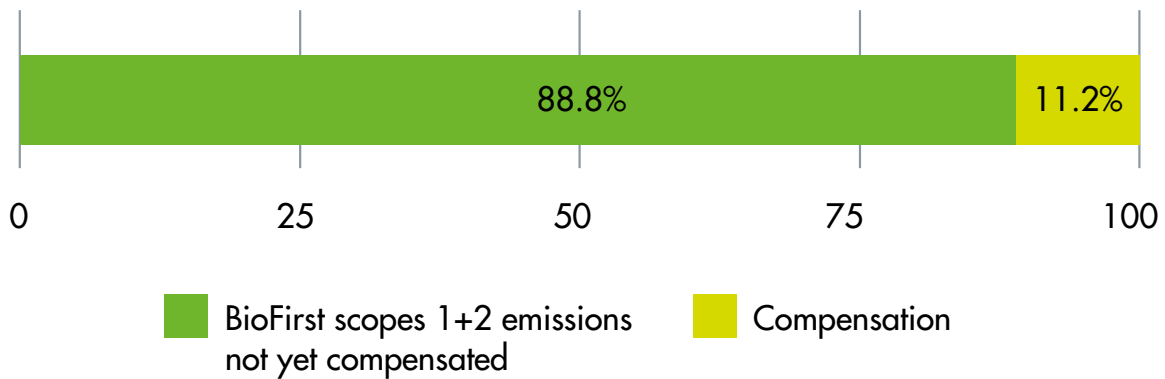
Both our 2024 additions, BioWorks and BIOTROP, are among our production companies with the lowest emission intensity. BIOTROP has been carbon neutral for the past two years by offsetting its remaining emissions. For 2022 and 2023, emissions of over 4,000 tons of CO<sub>2</sub> were compensated in local clean energy projects and in close cooperation with 'Carbon Free Brasil'. "Reducing our carbon footprint is a crucial step in our journey toward a more sustainable future. The emissions were offset through the Renewable Energy Project, underscoring our support for clean energy sources.

We are proud to be part of this environmental movement and to work toward a more sustainable world.", explains Aramis Passos Camargo, ESG manager for BIOTROP. "In February, the BIOTROP ESG-team had the opportunity to participate in a tree-planting event organized by Carbon Free, and we proudly highlight that we hold the Carbon Neutral company seal." As a result of offsetting emissions from scopes 1, 2, and 3 during 2022, BIOTROP received an environmental cashback, which was invested in planting over 386 trees in a reforestation area in the municipality of Teodoro Sampaio, located in the western region of São Paulo state.



## Decarbonization efforts of BIOTROP

The implementation of our emissions reduction strategy, that we apply first, is followed by carbon offsetting. The scope 1 and 2 emissions for BIOTROP are included in our carbon footprint. The graph below shows the share of our 2024 footprint that will be offset by carbon credits.



Apart from being best in class by being carbon neutral as of 2022, the BIOTROP carbon reporting and management was also awarded. For the second consecutive year, BIOTROP received

the gold medal from Ecovadis. This result places it among the top 5% of most sustainable companies assessed by Ecovadis worldwide for Environmental, Social & Governance.



This year, BIOTROP also submitted its greenhouse gas emissions for scopes 1, 2, and 3 to the Brazilian GHG Protocol program. Providing a comprehensive package of standards, guidelines, tools, and training, the program helps companies and governments measure and manage anthropogenic emissions responsible for global warming. "It is a program with global impact." Aramis Passos Camargo clarifies. "Since 2019, we have been reporting our emissions for all three scopes to the GHG Protocol on a semi-annual basis. Over time, we refined our metrics to build the robustness needed to publish and certify our Greenhouse Gas Emissions Inventory. In May 2024, we underwent a rigorous operational and documentation audit, and the results

could not have been better! The Brazilian GHG Protocol program encourages third-party verification of inventories. This independent process ensures the disclosed information aligns with international standards, providing transparency and credibility to the reported results." The third-party verification serves as a seal of quality, ensuring companies' commitment to data accuracy. BIOTROP earned the program's Gold Seal, which certifies the corporate inventory at the highest level of qualification. BIOTROP also received the Parana state climate seal for submitting its carbon footprint. Parana has started a great initiative, collecting all carbon footprint information of local companies on one interactive website and BIOTROP is proud to be included.

## The “do good” business: scope 4 positive impact

In ESG reporting and legislation, we tend to focus on risk mitigation, what we could avoid and how we can do a little bit less damage. Fortunately, at BioFirst we can also focus on growing our business to positively contribute! Though scope 4 reporting is not yet included in the GHG protocol and does not have internationally recognized standards, we do feel the urgency to share our impact on this topic as well. Why? Our most impactful positive contribution lies in replacing conventional products and practices, including pesticides, fungicides, and fertilizers. To better understand and measure this impact, we initiated an effort to quantify this positive impact in 2024.

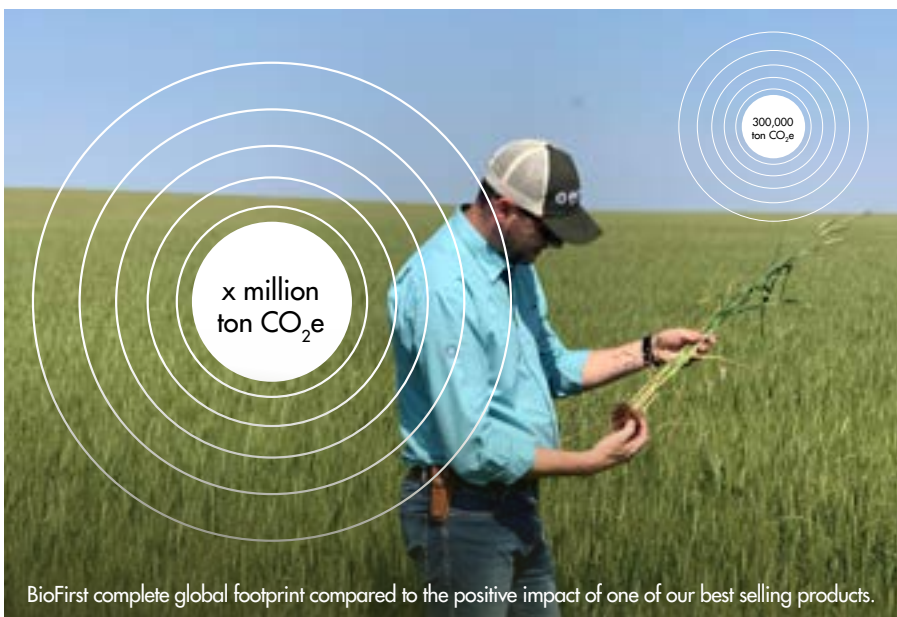
In the claims we make, we are comfortable in sharing any assumptions, estimates and calculations. To be sure of our claims, many assumptions, estimates and calculations are needed to estimate the impact of our products in the field.

All calculations will be based on an average predictions of natural processes. In biological research,

we are used to employing 95% reliability intervals and accepting the fact that this is as close to predicting the natural behavior of organisms as we will ever get. Any plant will respond slightly different to our biostimulants, any beneficial insect will behave differently in a crop. However, by replicating an experiment numerous times and comparing the results, a very clear trend and average truth can emerge. Apart from natural difference between each plant, insect, mite and other organisms in the crop, there is huge variation in the regions where we are active. Open field agriculture in Brazil will yield completely different temperatures, humidity and other conditions compared to the US, while open field agriculture in Arizona will have entirely different conditions compared to the Rockies, or a greenhouse in upstate New York. This is without adding seasonality and local climate changes to the mix. All of these conditions have a major impact on the use and effectiveness of our products. This impact will be different for bumblebees, than for mites or biopesticides. It will also

be hugely variable depending on the crop, for example corn, tomatoes, blueberries or grapes. Every grower will have their own preferences regarding application and, for every specific situation, multiple biological products will probably replace a mix of multiple traditional products.

These examples above demonstrate that calculating the positive impact of one biological products is complex, and usually not a one-on-one exercise. Clear assumptions, of both the starting situation and the treatment replacing it, are needed to generate meaningful results. We have now started to map the scenarios for several core crops and larger markets, and to make the first calculations. As we believe this added value is substantial. However the question remains: how big is the actual impact? We want to have this determined in a verified external study before we publish any final numbers. However, internal calculations show that for one of our top selling products, this is at least an order of magnitude larger than our Groups' global footprint.



Steering clear of greenwashing, we want to be very clear on:

- our impact on global warming;
- what we are doing to further reduce this impact;
- what we aim to achieve;
- how we want to achieve it;
- what we believe we should, and should not, influence as a business.



# Circular economy

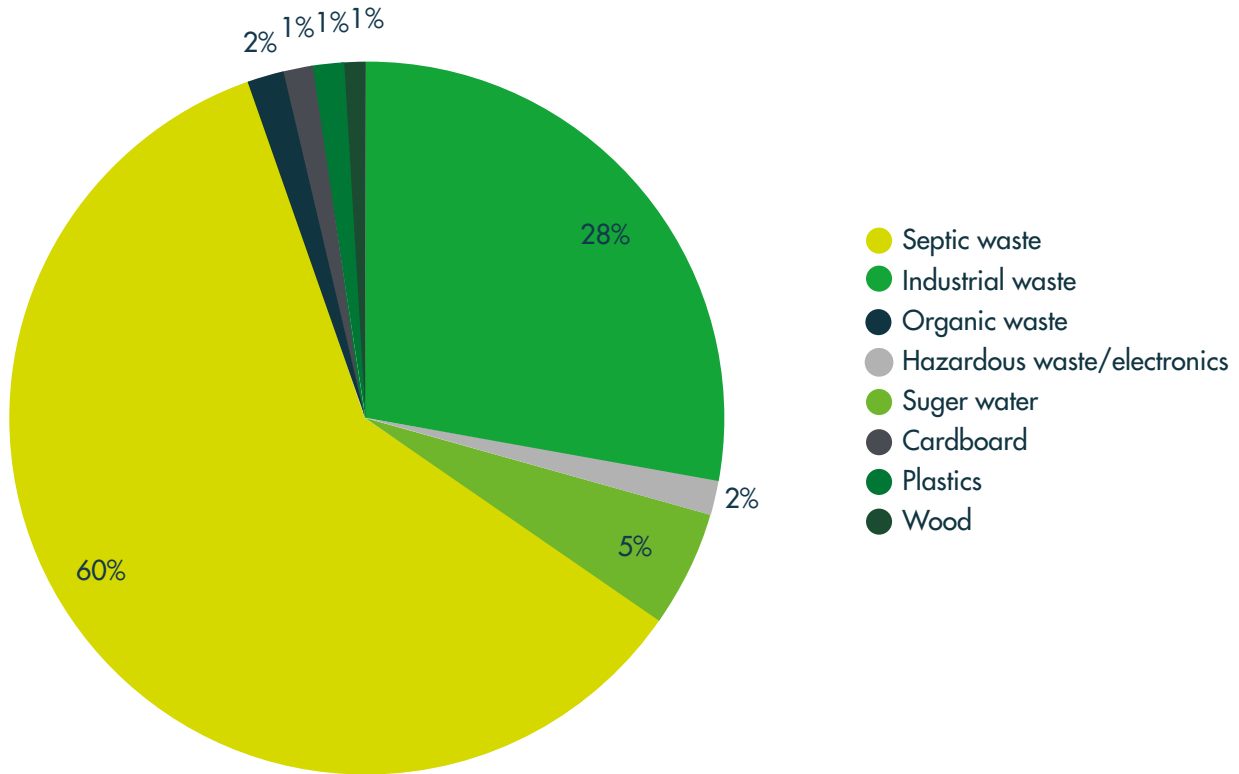






# Towards a circular economy

Turning waste into a resource



As part of our strategy towards a circular economy, we are also working hard to reuse, and reduce, our waste products. In general, working on the better use, and reuse, of all our resources.

*“We met our target in 2023 and aim to further increase our waste separation rate year on year”*

We are working towards an optimal product to deliver to our customers. Continuously increasing the percentage of reuse and recycling in our products while, more importantly,

decreasing customers’ amount of waste, waste costs and workload for waste separation.

As an internal target to reduce the waste impact from our production, we focus on the waste separation percentage: the amount of waste separated at our production facilities. We see this as an essential first step towards a fully circular organization, as these waste flows may be readily reused or recycled: in our own production process, or by professional waste companies. In addition, we are seeking opportunities to adapt our processes to reduce the amount of waste. Similar to our carbon

reduction measures, we are focusing on the sites, and waste flows, with the largest potential impact.

As a Group, we already use a lot of organic and biobased materials and are performing well. Today we separate 76% of our waste at source. Our original target for 2026 was to increase our waste separation from 59% to 75%: a target we already achieved in 2023. We aim to gradually improve this separation rate year on year and fully exclude fossil packaging (oil-based plastics and Styrofoam) from our product range by 2030.

# Our packaging is our business card

Each year we ship tens of thousands of packages, containing billions of beneficial insects and mites: from our main office alone to over 70 countries worldwide. Every day we aim to deliver the best quality products in the best quality packaging. This means providing our insects and mites with optimal temperature, air quality and nutrients to satisfy their needs. Many of our products have a highly limited shelf life, which is why we often rely on air freight. To keep environmental and shipping costs

low, we aim to minimize weight and volume. Additionally, linked to our customer-first strategy, we look to use packaging that is easily recycled, or reused, by our customers and preferably made from a renewable or biobased material. In our packaging strategy, we aim to help our customers reduce their environmental impact and costs, while simplifying their working processes. By 2030 we aim to rid ourselves of all fossil-based packaging, such as Styrofoam and plastics.

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*"By 2030 we aim to be rid of all fossil-based packaging, such as Styrofoam and plastics"*

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It is a complex exercise fitting packaging to delicate product needs. It necessitates a combined effort, involving our packaging and logistics experts, business development team, sales representatives in the field, quality control and R&D experts, to come up with the best tailor-made solutions. BioFirst is greatly invested in coming up with innovative packaging solutions which have a major impact on our total use of resources. Showcasing our efforts for sustainability, our packaging is the first and last thing customers see: it is our business card.

In 2024, we not only added several leading companies to our Group, but also a whole new range of products and packaging. One of those companies, BioWorks North America, introduced a new way of packaging its biological fungicide MilStop® in 2024.

## Buckets to bags

BioWorks has taken significant strides to reduce plastic usage by replacing large plastic buckets with plastic-foil hybrid bags. The buckets, produced from hard plastics like polyethylene terephthalate (PET) or poly carbonate (PC), are commonly used for their durability and rigidity. However, these materials are non-



The BioWorks North America team isolating their packages with fully biodegradable corn-based foam.



biodegradable and can persist in the environment for hundreds of years. Over time, hard plastics break into smaller pieces, 'micro plastics', that can contaminate the environment, limit biodiversity and pose significant health risks to humans and wildlife.

The new bags require 21 times less plastic to pack the same amount of product. As a more environmentally friendly alternative, they have the added benefit of being more compact, easier to ship and simpler for growers to handle. The previous MilStop® buckets weighed in at 1.38 kg each. With 48 buckets per pallet, that equated to 66 kg of plastic packaging per pallet. Selling 1,000 of the new MilStop® packages results in a reduction of over 1,300 kg of plastics. While BioWorks has not reached full zero plastic packaging

yet, we feel a 95% reduction deserves special mention.

### From Styrofoam to corn-based coolers

BioWorks did not stop there, it almost seems it was preparing to align to the BioFirst targets for years. Aside from reducing plastic packaging, the team has found an alternative to Styrofoam boxes: used for shipping NemaShield beneficial nematodes products, which need to be frozen during shipment. BioWorks no longer wanted to use polystyrene foam, a petroleum-based material that is harmful to the health of both humans and animals, that is non-biodegradable and can quickly spread to the environment:

breaking down into light-weight pieces, easily carried away by wind and water. The BioWorks solution is recyclable cardboard boxes, lined with a 100% biodegradable corn-based foam. Tests showed the box has excellent insulation properties, keeping NemaShield sufficiently cool during shipping. Now, while delivering the same results, BioWorks ships the products in easy to recycle cardboard, insulated by a corn-based foam that takes just 30 seconds to dissolve when exposed to water.



We create value and contribute to the community by collecting aluminum can pull tabs and PET bottle caps. These are donated to institutions that sell these materials, generating funds to meet various needs, such as purchasing wheelchairs, buying pet food, and funding the spaying and neutering of street animals.

# BIOTROP reverse logistics & zero waste certification

BIOTROP has its own way of fighting excess packaging waste. For every piece of packaging sold, we invest in an equal amount of packaging being recycled. Since 2022, the partnership with EuReciclo was created, a company operating a reverse logistics program. By tracking the amount of packaging we introduced on the market, the program enables to compensate 100% of the packaging generated during the products sale. In 2023, through financial support to local recycling cooperatives, BIOTROP mitigated the environmental impact of 422 tons of waste, generated by the customers. Certificates are provided for the amount of packaging (paper, plastic, glass and metal) collected and processed in recycling externally. By doing so, the incorrect disposal of post-consumer packaging is mitigated and increase in recycling rates in Brazil is encouraged. The total amounts for 2024 are still pending.



For the agricultural biopesticide packaging sold by BIOTROP, an affiliation with InpEV is in place. This company carries out a specialized reverse

logistics program to correctly deal with many different types of (bio)pesticides. InpEV has 421 collection points that receive used packaging from the customers.



In November 2024, BIOTROP was certified as a Zero Waste company at its Site 2 and fungi factory units. ESG manager, Aramis Passos Camargo, explains: "The principles for Zero Waste include using the Precautionary Principle: to avoid generating waste, by decreasing the generation of your waste destined for landfills and incineration, depositing only 10% or less in these final destinations. Another important principle is pollution prevention and waste reduction, where production and distribution systems are redesigned to avoid excessive use of natural resources. Supplier and consumer markets are investigated, to recover the greatest possible value from discarded products and packaging materials. BIOTROP seeks to eliminate the use of toxic materials in production and marketing processes, opting for safer products that are technically viable for recycling. We undergo external auditing for the zero waste certification, to demonstrating

the company's commitment to environmental sustainability and adequate waste management."

In a smaller impact initiative, BIOTROP brings recycling closer to their own employees.

Food waste from the cafeteria is sent to the company Composta+ and transformed into organic fertilizer, a much more sustainable alternative to landfills, which pollute the soil, water and air. Producing organic fertilizer is a great fit to our business and sector. At the end of every month, Composta+ provides the fertilizer in return, together with fruit and vegetable seedlings, to distribute to the employees, encouraging environmental education.



## Plastic bottle usage

As you may have read in our previous reports, the Biobest division is working hard to replace all Styrofoam and plastics from its product packaging. One example being our cardboard cup for beneficial insects, which became a platform technology for our packaging. One of the latest additions to adopt the cardboard packaging is our highly effective ladybug Propylea product. In addition, we are replacing Styrofoam coolers with

full cardboard alternatives and aim to eliminate all fossil fuel based packaging before 2030. The graph below shows the progress of Biobest division replacing plastic bottles for beneficials.

In 2024 the use of eco-friendly alternatives modestly increased by another 2%, but absolute sales of plastic bottles also increased, due to a 35% boost in sales.

Therefore, although we continued replacing more packaging

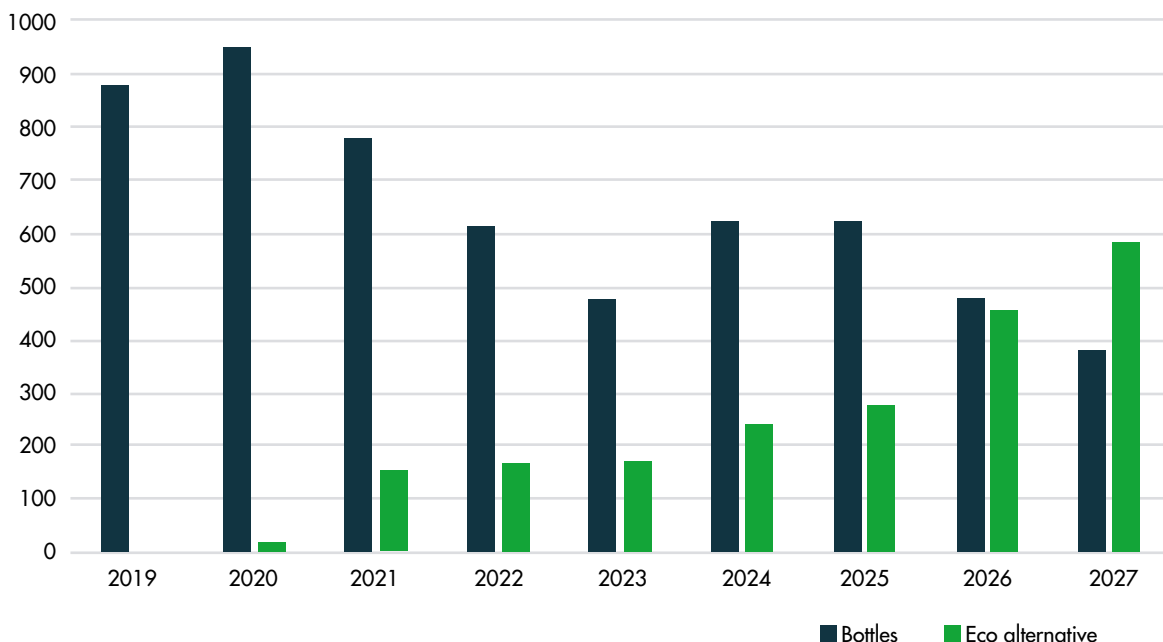
lines with home-compostable alternatives, our absolute sales of plastic bottles momentarily increased in 2024. We anticipate a similar trend in 2025, as growing sales may still outpace our plastic reduction efforts. However, from 2026 onward, we expect to see a decline in the absolute number of plastic bottles sold, even as total sales continue to rise.



Since 2019 we have reduced the amount of plastic bottles used by over 45%.

The graph shows all centrally ordered plastic bottles from 2019 to 2023, together with our forecast for 2024 to 2026.

The number of sales of these products are increasing, while the share of plastic bottles is decreasing.



# Designing for circularity

All our waste and packaging strategies form part of our efforts to work towards a circular economy. Circular products, coming up with suitable alternatives for traditional pest control, have been in our DNA for years. Our colleagues in business development, and supporting departments, continuously strive to improve our products and processes. To help us move towards more circular production, we have adopted the R-ladder methodology: a Dutch methodology (adopted by the European Union) for more efficient use of resources summarized here in 3 steps:

1. Avoiding, or using less, materials when designing new products. Finding multiple or alternative uses for our products.
2. Extending the lifetime of the products, or reusing their parts.
3. Recovering materials and/or energy, after use and increasing use of recycled materials.

Some resources are becoming scarcer and more expensive, while others significantly impact the emissions, pollution and land use in our supply chain. By making better use of our resources, we can offer a more sustainable products at an equal, or more competitive price.

In addition to the added value incorporated into product design, we apply the smart use of resources in our improvement processes to reduce waste. At several of our sites, for example in Mexico, we have been able to install a biodigester to significantly reduce the amount of waste water.

The use of bio-ethanol to fuel our cars in Brazil is a great link between reducing our emissions, and working on the circular economy. The fuel is derived from biomass, such as sugarcane or corn. As the plants fix CO<sub>2</sub> during growth, using them does not add any additional carbon into the atmosphere. It also supports the circular economy by utilizing agricultural byproducts, as opposed to mining more fossil resources. In addition, it is satisfying to contribute to the sustainable growth of these crops, with our products. Our core business is sustainable by nature, offering alternatives to traditional fertilizers, pesticides, fungicides and improving plant performance and stress resistance with biostimulants. We are always on the lookout to find new applications and to rethink our own approach and product range.

Designing for circularity is a key component of our continuous effort to remain the most reliable and innovative partner in biological crop protection.



BIOTROP colleagues after a successful planting project. With passion for nature, we are creating a thriving future that lasts.



# Expressing our passion for nature & biodiversity

People with passion can change the world for the better! And most BioFirst employees are passionate about nature and biodiversity.

Many of our employees come to work for BioFirst because of the business we are in, and the positive impact we have. Over 30% of our 2024 sustainable initiatives worldwide focused on nature and biodiversity.

In 2023, we conducted a study into our biodiversity impact. While our negative impact on local biodiversity was minimal for most topics, these studies have given us insight and concrete actions.

## Because we love to act, we:

- are taking measures at our offices to improve local biodiversity;
- aim to build only on existing non-agricultural land and not convert any terrain;
- have devised a list with general measures for (re)construction;
- share our knowledge on species and local biodiversity with growers and local communities;
- use a site-specific approach for those emitting NOx;
- focus on water usage from other sources in dry areas.

Biodiversity is a material topic in our CSRD double materiality assessment (E4: Biodiversity and ecosystems) due to our products' positive impacts: by preventing eutrophication and reducing environmental pollutants by replacing traditional fertilizers and pesticides. As a [recent study](#) shows, considerable research has been carried out into the effects of traditional pesticides and fertilizers used in the aggluculture on biodiversity. It is also why

we have focused our targets on maximizing our positive impact and on environmental projects with local relevance.

We have a large global team rearing different types of mites and insects; teams producing and selling biostimulants, biopesticides, biofungicides and inoculants to replace traditional fertilizers; a large global team of trained professionals offering local advice in biological control;

and a substantial research & development team — conducting commercial and fundamental research in biology every day. But the best way to demonstrate our drive for nature is by highlighting a few of the projects our teams have supported worldwide.

Many of our sites are situated within 50 kilometers of Key Biodiversity Areas as found on [www.keybiodiversityareas.org](http://www.keybiodiversityareas.org) (contact

information is summarized at page 110). We did not find any material negative impacts we have caused to these areas. Downstream there may be negative impacts to these sites from agriculture, however our products may aid in mitigating this. We do not work with any species on the IUCN red list. We are still finding new species during identification projects, for beneficial mites, as described in our 2023 Sustainability Report,

and for microorganisms in our Nimbles project, (explained in more detail later in this chapter). We did not consult any community or NGO stakeholder for mitigating measures, as the impact is positive and no actions were necessary. We welcome any feedback on potential blind spots in our materiality assessment. Please share your suggestions at [sustainability@biofirstgroup.com](mailto:sustainability@biofirstgroup.com).

## Tree planting activities

Planting local tree species is an important, and recurring, event at many of our sites. In September 2024, BIOTROP employees took time to celebrate World Tree Day. The ESG team brought together representatives from all our teams at the Curitiba manufacturing plant for a symbolic and sustainable act: planting native trees at the entrance of one of our facilities. The initiative reflects our commitment to the environment and reinforces the importance of preserving local biodiversity. We extend our gratitude to everyone who came

together to make this event not just symbolic, but truly impactful. The trees are a living legacy we leave for future generations!

Our colleagues in Biobest Mexico continue to work with the local community, municipality and local NGO's to plant more trees. In 2024, they embarked on a new project, planting over 500 trees, of three native species endemic to the area. The trees were planted at four schools in the San Isidro Mazatepec community, creating additional awareness. Many

people participated from Biobest families, as well as students and their parents and other enthusiasts from the local community.

Apart from boosting local nature and biodiversity, in time the trees will provide natural shade and a cool environment for the students, while improving local air quality. Similarly to the 100 trees previously planted at roadsides, these newly planted trees will help create suitable conditions for other plants and animals in the region.



Colleagues from BIOTROP Brazil planting native species





Youngsters working together with the colleagues in of Biobest Mexico to plant indigenous trees

## Improving local biodiversity with research

In 2024, we once again saw several global biodiversity initiatives launched by our central R&D departments, with great added value in regard to: research, species identification, applied science for improving IPM programs, application of our knowledge outside our business, or boosting local biodiversity. We have chosen to highlight the Nimbles project in this report.

Nimbles project started as a pioneering BIOTROP project several years ago. The main goal was to collect and isolate microorganisms from nature and store the genetic information and functionality, both physically by cryopreservation and via a database. The Nimbles samples are collected from very different

environments and analyzed to identify their potential for effectively battling plant diseases, or improving soil health and plant productivity for agriculture. The name 'Nimbles' stands for agility and precision, reflecting the project's direct and efficient approach to improving agricultural sustainability and competitiveness.

In 2024 a team of agronomists, ecologists and microbiologists set out in search of new bacteria and fungi in many different regions and ecosystems: from Amazônia to Mata Atlântica (forests on the Atlantic coast). Each expedition can collect a million microorganisms within a week. Collection is focused on quantity, obtaining a wide spread of new organisms for the database. These

are then selected based on quality, with an AI tool used to screen the microorganisms for many selection criteria, to determine if they might have the positive characteristic to serve as biological innovations. In 2024, the Nimbles project resulted in the initiation of 12 new registration processes for new microorganisms it had isolated, showing our belief in their potential to improve nutritional efficiency and biocontrol in agriculture.

In conclusion, the Nimbles project is proving quite effective in finding new biological alternatives for sustainable agriculture, and in building a storage of biological material and information in the process.

## Preventing the introduction of invasive species

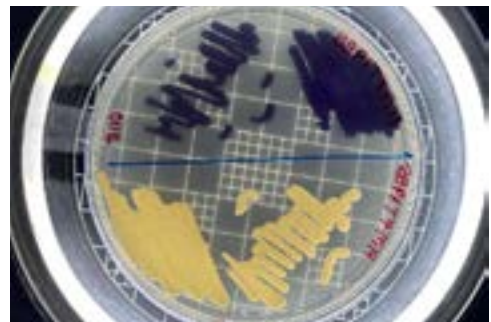
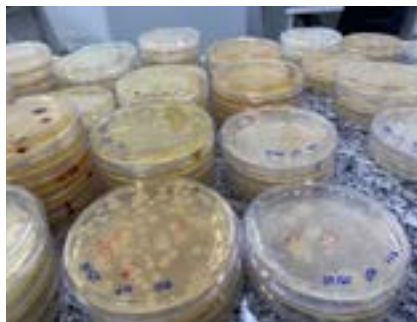
**Preventing new species becoming invasive is a top priority for BioFirst Group and our sector.**

In the past, significant damage has been done to local flora and fauna by introducing invasive species. In the 20th century, globalization and a huge increase in global trade, rapidly increased the spreading of organisms. As a result, many parts of the world have unfortunately encountered one or more issues with species becoming invasive. This has led to an increase in attention from the public and NGO's and an increase in local legislation. Currently a lot of legislation is in place aimed at preventing the

introduction of possibly invasive species. And, with three decades of experience in the field, BioFirst fully supports these measures. The introduction of new species to an area should not proceed without proper thought, research and measures. We take every possible precaution, have a large department specifically for registration and compliance for the use of beneficial organisms and adhere to strict protocols complementary to legislation. We take extreme care to protect customers from the introduction of unwanted species. To reduce any possible negative impacts from logistics, to both biodiversity and emissions, we produce locally wherever possible.



The Nimbles project: collecting micro-organisms for the benefit of sustainable agriculture



# Creating awareness & political lobby

Integral pest management and biological control have proven to be highly effective and, in many cases, advantageous: as demonstrated by numerous examples in this report. Yet, they are not the go-to global solution today. Why? Is biological control undervalued, or simply not well known? In our experience, the latter is often the case. Biological control often requires adopting 'new' working methods — 'new' meaning different from those used by previous generations. These methods diverge from the pesticide-driven approaches that became standard in modern agriculture, despite biological control being a practice as old as civilization itself. One of the earliest recorded examples dates back to ancient Egypt around 2000BC when domesticated cats were used for rodent control.

Yet, to our generation, IPM is perceived as an innovation. And, as for every innovation, adoption takes time as users familiarize themselves with new products and methodologies. Even if the effects are advantageous, it often requires a bit of a push to invest in new methods, like sharing knowledge and showcasing examples and studies proving the positive effects. We therefore actively support our customers to increase effectivity and crop yields, both with trusted personal advice and by turning complex solutions into easy-to-use products. In addition, we also actively share our knowledge to increase the adoption of biological solutions in general.

Aside from sharing knowledge directly with customers, we are involved in education programs, public events and lobbying

activities as well. As experts in our field, we believe it is our responsibility to contribute our knowledge, and insights, to public organizations and politicians involved in drafting new public policies and regulations helping them to take well-informed decisions. We aim to correctly, and ethically, inform these institutions of our insights and vantage points on current developments, and inform them about our interests in these processes. As a company, we do not have a political standpoint or make any political contributions, either financial or in-kind.

Our Biobest division has historically invested a lot of time and effort to prevent the possible spread of invasive species. Adhering to local legislation and stricter internal protocols, we have a separate department to monitor production



Bug-Scan Green



**As such, we are part of several sector organizations and in close collaboration with our competitors:**

- **IBMA** (International Biocontrol Manufacturers Association. No. EU Transparency Register 06818218065-85)  
*Membership & presidency: Karel Bolckmans, BioFirst, CSTO*  
*(Previous president: Herman van Melleart, also BioFirst, up to 2024)*
- **AENDA** (Associação Nacional das Empresas de Produtos Fitosanitarios)  
*Membership & board member: Fabio Pevide, BIOTROP, Director of regulatory affairs*
- **ABBI** (Associação Brasileira de Bioinovação, bio inputs and innovations)  
*Membership & board member: Jonas Hipolito, President BIOTROP division*
- **ABISOLO** (Associação Brasileira das Industrias de Tecnologia em Nutrição Vegetal)  
*Membership*

*We have reported on our lobbying activities, as promoting the use of biocontrol products in general is a major business opportunity for BioFirst Group.*

processes and organize the necessary permits for our global shipments. We aim to maintain a high level of safety and keep policy makers informed of effective processes and procedures.

In our rapidly growing sector, an area gaining a lot more importance is the ability to get new biocontrol innovations to market soon: especially biopesticides and biostimulants. These products can contribute to lowering pesticide usage, an important area, for example, for aligning agricultural revenue with EU taxonomy or to bring healthier food to market in line with the EU Farm to Fork strategy. We strongly believe it is very important to share our latest research and advancements to add to an informed decision making process.

At the opening of our new mitehall in

2024, CEO Jean-Marc Vandoorne shared with the Federal and Flemish ministers of agriculture present: "While delighted to unveil our new state-of-the-art predatory mite production facility today, we continue to urge EU policymakers to shorten the lengthy registration processes for biopesticides where we are currently putting our European growers and farmers at a serious disadvantage in accessing solutions to counter increasing pest resistance to conventional pesticides. Registration of biopesticides currently takes between 6 to 10 years in Europe, while everywhere else in the world it takes only 1 to 3 years."

Later in the year, CSTO Karel Bolckmans presented the advantages and disadvantages of lengthy registration times to the EU ministry of agriculture and

participated in debates on the registration of biopesticides at ABIM in Basel.

At Biofirst we believe solid and objective research should be the cornerstone of any informed decision. We promote the sharing of knowledge between all stakeholders in the sector to find the correct balance between preventing any unwanted effects of organisms or new products introduced in the environment, while promoting biological control over traditional methods that might also harm the environment. We have a large team of colleagues, and significant research time invested, to gain the necessary knowledge on the effects of our products and are happy to share this with policy makers through several platforms and consultations.



# Our impact on (life below) water



**While most of our work and projects focus on life on land, our business also has a profound positive impact on life below water.** How? The main human impacts on life below water are pollution, overfishing, habitat loss and climate change. Polluting our waterways and oceans is the number one threat.

*Pesticides and fertilizers can make their way into groundwater and larger waterways*

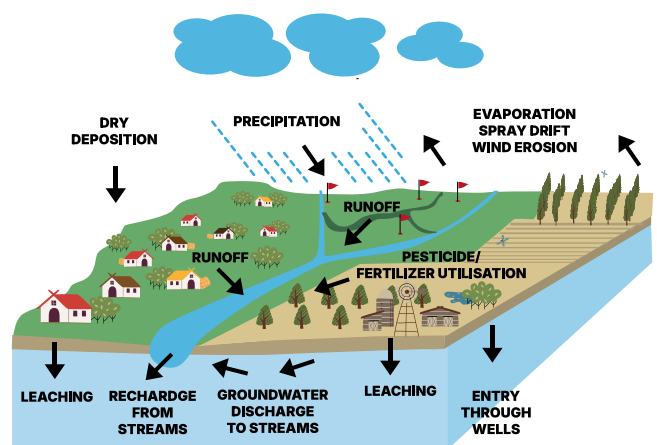
While ocean plastics are very visible and well publicized these days, a major part of river and ocean pollution is due to run-off from land. Mainly from agriculture, a large amount of fertilizers and chemicals end up in oceans. The 1940s saw the rise of che-

mical pesticides. A major step forward in controlling pests and plant diseases, they significantly increased commercial crop yields helping to feed the population. However, these pesticides also had serious negative effects on human health, both directly and through accumulation in our food chain, and also negatively impacted biodiversity, in the areas where they were used. Additionally, they caused indirect effects that were not foreseen at the time, creating resistant pests, or pest that had lost their predators: both leading to unexpected pest outbreaks.

Pesticides can make their way into groundwater and larger waterways, where they can kill off many types of organisms: plankton, crustaceans, aquatic insects and other marine vertebrate and

invertebrate species: such as fish, amphibia, shellfish and waterfowl. Pesticide use has been a leading contributor to the decline of many fish populations and has affected some endangered species. The effects are mostly found where pesticides are used in close proximity to wetlands, lakes, ponds, rivers and streams. Not all pesticide poisonings result in immediate death; small sublethal doses of some pesticides can lead to weight loss, changes in behavior, impaired reproduction, inability to avoid predators and lowered tolerance to extreme temperatures. If this pressure continues, it can lead to serious population decline. Fish in streams flowing through cropland and orchards are most likely to receive repeated low doses of pesticides.

*Pesticides and fertilizers can make their way into groundwater and larger waterways*



Less is known about the damaging effect fertilizers and other nutrients may have on coastal ecosystems.

Tropical coral reefs and other coastal ecosystems are especially threatened. Thriving in a nutrient

poor environment, coral reefs became very efficient at using the nutrients available. Adding nutrients

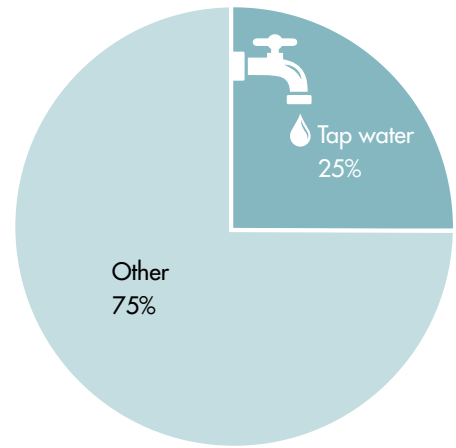
can upset this delicate balance and provide a competitive advantage to other species, such as algae, that may in time push out coral species.

By the nature of our business and our IPM advice, we focus on using other solutions to battle pest and optimize crop yields, helping to eliminate or minimize chemicals, which are only used as a last resort, to save a crop when other options fall short. Offering the best possible IPM advice is a core part of our strategy and truly adds value for our customers and the environment.

While this is the major impact we have on life below water, we also have a more direct impact on water use in our production. Along with growers and the local community, we are impacted by the availability

of fresh water near some of our production sites. For example, at one of our production sites in Morocco, where ground water levels have slowly been lowering over the years, we are making use of water from a nearby desalination plant. Fresh water is vitally important for human livelihoods, both as a source of drinking water and indirectly for food production. Globally around 70% of freshwater use is by agriculture.

Fresh water availability differs greatly per region. This may be a climate related issue in arid regions, like the Sahel, in North Africa. Where low rainfall is unable to keep up with usage, groundwater levels may drop. But even in wetland regions, where water scarcity has never been considered an issue, ground water levels are dwindling,



*“Currently about 25% of the water we use worldwide is purified tap water.”*

Experimental farm BioOracle



and rainfall patterns have become more erratic. BioFirst has not yet adopted a global water use target, as at most sites our water use is relatively low and we already recycle a fair amount of rainwater. Instead, we have pinpointed several locations that deserve specific attention and measures due to (a) higher water use, (b) possible stresses on the local ecosystem and local biodiversity, or (c) risks of water availability for production or the local community.

Several production sites also have crops for production and research, such as our experimental farm BioOracle. At these sites, we utilize roof areas to capture rainwater in small reservoirs, making it cost effective for production and making better use of natural resources, while lowering our purified tap water usage. As it is used for the local production, apart from natural evaporation, most of the rainwater is infiltrated in the soil helping replenish local ground water levels. We try to remediate our production water locally where possible.

At other sites in Brazil, we manufacture hi-tech biological products, such as biopesticides and bio-stimulants. A deep well is in use to ensure high water quality, while not depleting water in the upper soil layers. Water efficiency is key in production. The bulk of the water used becomes our finished product. Targets on the use of water per volume of product help avoid unnecessary usage and reduce the necessary effluent treatment. And, more importantly, one of the products we are producing works very effectively on preventing water stress in crops! Water has become a limiting factor for crop production in Brazil and longer periods of drought pose a serious risk to business. With the product Bioasis, BIOTROP has found a successful biostimulant that improves root growth and boosts tolerance to water stress.

At our production site in Curratiba, it is not possible to simply return our waste water to the local environment. The facility is highly efficient, but at times non-conform

product needs to be discarded, as effluent. However, our local colleagues were convinced this effluent was not harmful and fully organic. Studies conducted in partnership with the local sewage company showed the micro-organisms in the effluent were not only harmless to the environment, but officially registered by Brazilian regulatory agencies as agents capable of promoting the degradation of organic matter: contributing to the natural cleaning of sewage water. As a result, we recently obtained documents of approval to use the local sewer system for these effluents. In conclusion, we can proudly add treating municipal sewage to the list of positive side effects of our business. And the new use will help us prevent the costly, transport-heavy collection of these effluents by truck in the near future.



*A sustentabilidade  
permeia a*

**BIOTROP**



**BIOTROP**

Soluções em Tecnologia Biológica







# Social

Family Day Biobest Belgium



# Promoting good health and wellbeing

By offering alternatives to traditional pesticides and fertilizers, our customers can deliver products to market with few, or no, chemical residues. As expressed before, we are very proud to be in the biocontrol business, helping to reduce the use of chemicals on food crops. This is where we make our greatest positive impact: by promoting health and wellbeing.

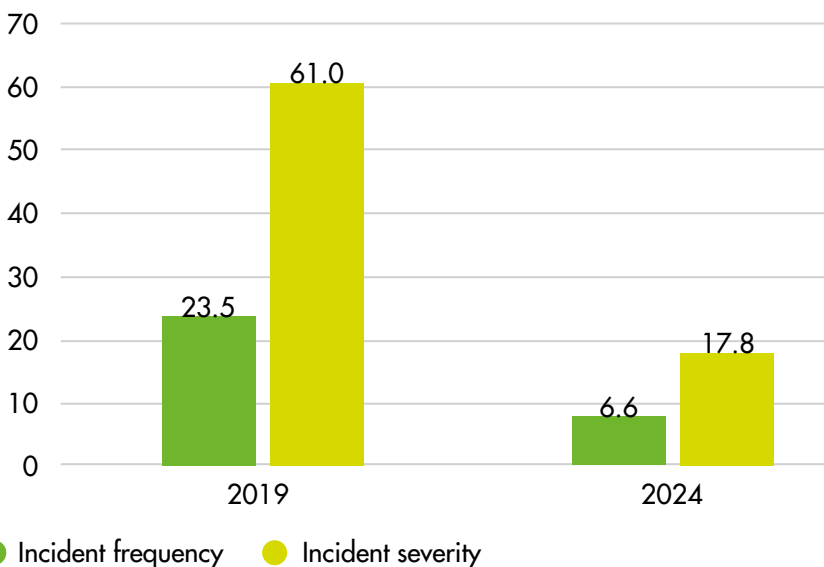
In providing alternatives and best-in-class IPM advice, we are playing our part in helping provide high quality, healthy food to the world. While our business is our greatest asset, in this chapter we will focus on our internal strategy.

## Health and safety strategy

Our commitment to caring for people naturally starts with the colleagues we work with every day. Wellbeing is one of the five pillars of our Core values. Although this commitment is highly important to us, our double materiality assessment showed that S1 was not identified as a relevant topic for CSRD reporting based on the objective criteria. Due to the importance, we pushed it as a material topic. As in the past, we will continue to report on our actions and progress related to health and safety. Apart from the

responsibility we feel towards our colleagues, and the benefits to all of working in a safe and positive environment, we are aware of the benefits to our business of working with an engaged team. We are convinced our customers can only love our brands and services, if our employees do so first. In that sense, our employees are our first, and foremost, customers. We are happy in creating all our products together with our team of experts. Their wellbeing, sense of belonging and ultimately motivation, drive and passion have been invaluable in our success. That is why, within our operations and supply chain, people are at the core of everything we do.

## BioFirst Group IF rate (LTIFR) & incident severity



Our safety strategy focuses on building a strong safety culture. Empowering people in the workplace to act, and speak up if they feel it is unsafe to continue work. We motivate all our colleagues to stop any activity if it endangers, or risks, our people or our planet. And, in case of any doubt, to speak up and discuss the issues with colleagues, supervisors, or consult our safety and prevention advisors. After a hard day's work, we want our people to be able to return home as they arrived: healthy, happy and motivated. To a world that has become even a bit better, than the day before, because of the work they did.

By promoting this safety culture through bottom-up improvements,



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*"Speak in such a way that others love to listen. Listen in such a way, that others love to speak to you"*

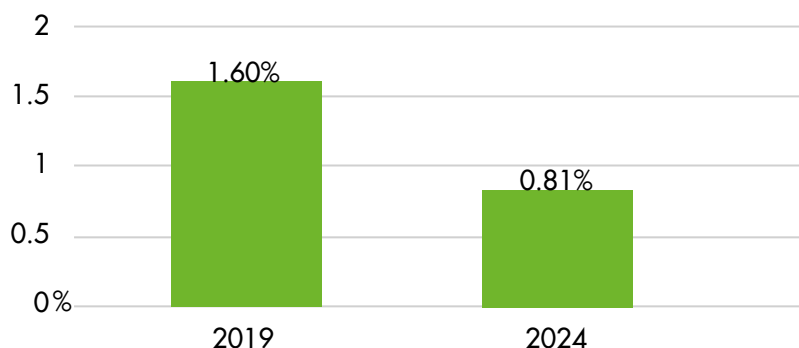
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rather than just reacting to specific incidents or trends, we aim to proactively learn and prevent incidents before they occur. By openly discussing incidents and near misses we can learn from them and we actively promote being respectful in speaking and listening to others.



Practical fire and safety trainings in winter

## BioFirst Group absenteeism



Next to our strategy on culture, we measure several KPIs (key performance indicators) at group level: accident frequency, incident severity and absenteeism. We measure them quarterly, or for our larger sites monthly, to keep track of the main trends. Our safety figures for 2024 are depicted on the left and compared to 2019.

Since 2019, the incident frequency (IF) has decreased by over 60%, a further decrease compared to the IF ratio of 2023 (7.8). Incident severity has dropped even further: by over 70%. Although our efforts have improved significantly over the last five years, we continue to drive safety awareness at all our large operational sites, and the sites where additional attention is needed as a top priority. We provide the relevant (periodical) safety trainings on operational sites.

In Belgium, for example, our colleague and health & safety coordinator Evi was responsible for the launch of our new safety campaign. This is focused around

changing the safety culture: improving safety awareness and communication and ensuring relevant and practical health and safety improvements start with our employees. "It is a true joy to work on safety together, as I continue working with our team of safety champions," Evi says.

The safety campaign fits into several initiatives at the Belgian production site to improve communication and wellbeing. Evi is actively involved in creating a safety culture in line with the 'safety culture ladder' methodology. Safety is an integral part of the monthly town hall meetings, organized by plant manager Davy Luyten, when all employees gather together to receive an update on the latest news and developments. Topics include learning from unsafe situations or incidents, points of attention specific to the work or seasonality, and the monthly safety theme from the Safety Champions. And, more importantly, they remind everyone each month of our safety values, such as addressing each other

and stopping any activity that may not be performed safely. "We work with a stop — think — act approach, prompting people to think about, and take responsibility for their own actions and working conditions." Evi adds.

"What may be of equal importance, is that we also work on an entirely different topic", Evi explains. "It is similar in a way, I still get to work on company culture with a team of enthusiastic colleagues, but with the BeeWell team we focus on improving communication and mental wellbeing." The BeeWell team was formed to transform workplace wellbeing, by simply using the power of communication. A wellbeing questionnaire had highlighted communication as a weak point on site. Understanding how important effective communication is to a healthy work environment, the HR department took proactive steps by forming a team of 14 dedicated volunteers. Their mission is to improve communication practices across the organization. Through this initiative, we aim to cultivate

a workplace culture grounded in transparency, trust, and collaboration.

The Biobest Belgium team is focused and always oriented on getting the job done today, issues to overcome and new improvements for tomorrow. Strong qualities we aim to foster. "In addition, we have tried to find a way for people to catch their breath from time to time, to pause, look back and reflect all the great things we have achieved in the last few weeks. And, if it sometimes proves to be difficult to reflect on our own success," Evi adds with a smile, "we have tried to find ways to share compliments on the achievements of others. Two dozen beautiful cards were printed with examples, to motivate people to share their compliments. And, in a more direct approach, we also introduced the 'team of the month', as nominated by colleagues. Each month the nominations are shared throughout the company and everyone gets to

vote. The team with the most votes is put in the spotlight, in front of the entire company, and receives a large round of applause from their colleagues." A picture is taken of the team receiving the challenge trophy, which they hold for the month.

The BeeWell action team organizes many additional big and small events, including a proper introduction for new employees, a decent wave off for leavers, and shares information on new-comers and leavers with the rest of the company. Through collaborative efforts, the team is not only tackling immediate communication challenges, but also laying the foundation for sustained improvements. It signifies our dedication to creating a workplace where effective communication is a cornerstone of a thriving and harmonious professional community, ultimately contributing to overall employee wellbeing. It is another practical example of

putting our core values into action.

With a direct link to our customers, we also provide fresh food and drinks to our staff. For example, providing fresh fruit, fruit juice and drinking water to our colleagues in Mexico, working in extremely hot conditions. We have many sites across the globe where we provide our employees with free, pesticide-free products from our customers, such as fruit, vegetables and soup.

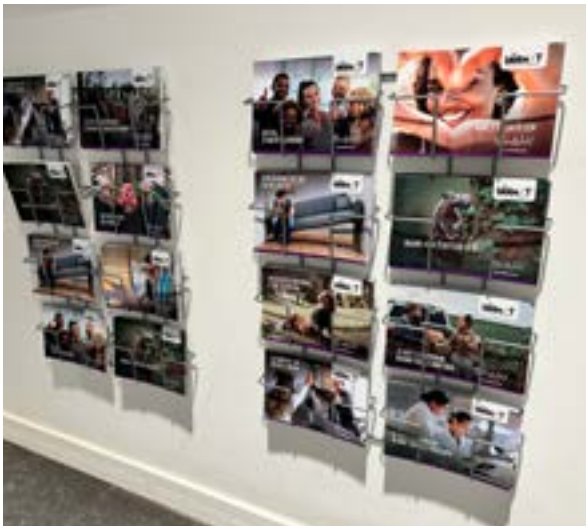
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*"Care for our staff's wellbeing is reflected in our low worldwide absenteeism rate"*

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Care for our staff's wellbeing is reflected in our low worldwide absenteeism rate. While historically low since 2019, it decreased further in 2024 to well below 1%. There are still some wellbeing issues to address, but this is focused on just a few specific sites. Overall, we are very proud of our global performance.

BeeWell team 'compliment cards' to motivate compliments to co-workers. Example: "Take a breather: you deserve it!"





# Annual action plan 2024

## THEMES OF THIS YEAR

### **Ergonomics**

- Risk mapping
- Resources and training

### **Safety culture**

- 6 safety topics
- Safety champions
- Tours

### **Health**

- Prevention of bumblebee stings
- Maternity policy
- Awareness raising

### **Psychosocial well-being**

- Self acceptance
- Training in recognizing signs of stress and building resilience
- BeeWell working group

### **Technical safety**

- Fire and Explosion safety
- Machine safety
- Chemical products
- Biological agents

# Community engagement & collaboration



The BIOTROP team during Pink Ribbon Day



We impact society daily and, by living up to our core values, aim to have a positive impact on everyone around us. This generates a net positive impact on our planet, staff, customers, business and especially the society we operate in.

Like many of our customers, most of our subsidiaries originate from family-owned businesses rooted in their community. Many of our employees around the globe live

near to our offices and production sites, and we strive to be an integral part of these local communities.

Working in biological control, we believe in caring for our roots: to keep growing together with our environment and to remain grounded.

We work hard to make a positive local impact. Some examples of our efforts are shared in this report,

such as improving soil and water quality, reducing waste with our customers, making healthy fruit and vegetables available locally, (re) forestation and wellbeing projects with the local community. Most of the projects are for, and in close collaboration with, our local communities.



In Belgium, sports remains one of the favorite ways to support local initiatives, as they also aid personal health, promote team building and add to a positive company culture. Apart from the daily opportunities to integrate sports activities into employees' daily routines, such as walking, running, padel tennis, and stretching, other group activities returned in 2024. A padel tennis tournament was organized for the second consecutive year as part of 'the warmest week': an initiative to raise funding for local charities around Christmas. Our team participated again in 2024 in the annual Ekiden Run in Brussels, donating to the Pelicano child poverty foundation. New initiatives from the Belgium BeeWell team helped to introduce microbreaks with exercise for colleagues. On 'World mental health day' this included yoga and mindfulness exercises during breaks, and started with a healthy fruit smoothy for everyone. Biobest Belgium also participated in Bike for Life in 2024, encouraging colleagues to ride their bike to work and donate to charity for each trip. The money raised was used by the external



Gert and Joris from the Biobest Belgium IT-team are present at every padel tournament and also helped set up several biking initiatives for charity

organization to battle 'bicycle poverty': funding the availability of bikes for families that cannot afford one; helping with bike repairs; and providing cycling lessons for immigrants not used to riding a bike. Over 1000 separate rides to work were registered within the month, not only raising money and awareness, but uniting the local team in a common goal.

Sports was definitely not the only activity on the list, as Belgians also

love great food and social events. Summer and Christmas markets brought everyone together after work to socialize, enjoy great food and to raise money for four other great charities at the same time. The charities were selected by the employees: selected by the employees: helping to battle child poverty, a local animal shelter, an international organization supporting biodiversity and a local organization helping youngsters with the need to find a safe place.



## Biobest — Sasja Handball Club

We also support local sports teams that need the support to perform at their level. Next to the talents of local basketball team CB La Mojonera in Spain, we also support Antwerp Handball team Sasja in Belgium. They were promoted back to the highest BeNeLux league in 2024 and Biobest will support them to compete at that level.

“We are pleased to be able to contribute to the growth story of Sasja HC with our Biobest division”, says Jean-Marc Vandoorne, BioFirst CEO. “Their rapid growth and success story over the last few years, matches our own and we are happy to help them continue on that path. The strong investment in their youth and the broad plans for social engagement of the club

strongly match our culture and values. With this cooperation, we aim to contribute to their long-term success in the future and to remain a local inspiration for youth and the local community”.



In 2024, Biobest Morocco continued to invest in its peoples safety and their wellbeing. With a great track record in safety training and proactively improving safety in production, the company planned large scale evacuation training for the site. In addition, a full day was set aside for a company-wide teambuilding event. Teams, formed from all work sites and including office staff, competed

in a series of challenges. It proved to be lots of fun and culminated in a big celebration at the end of the day. Lasting connections were forged and the day will be remembered for many years. We cannot be sure that the result is related, but the Biobest Morocco team went on to beat 18 local teams to win the 2024 football championship, organized by our local partner Azura Group.

## BIOTROP employees participated in the Pequeno Príncipe Hospital Run and Walk

Colleagues at BIOTROP Brazil also broke a sweat for charity. On a Sunday in July, employees participated in the Pequeno Príncipe Hospital Run and Walk, with routes of 5 and 10 km. Registration kits were raffled off to employees, offering everyone the opportunity to engage in a healthy and supportive activity. The Pequeno Príncipe Run helps raise funds for the hospital, one of the largest pediatric hospitals in Latin America. BIOTROP's donations to this hospital, and other medical facilities, fund equipment and facilities for sports activities for people with disabilities. The major part of these



monthly donations go to support oncology treatment for children at Pequeno Príncipe Hospital and is BIOTROP's way of helping in the fight against cancer. The hospital is renowned for its contributions to child and adolescent health,

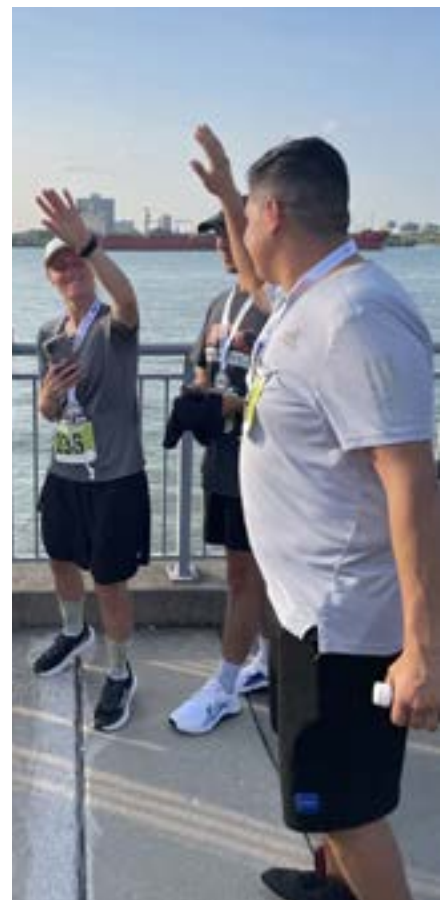
scientific research, and education. Collaborating with this institution, represents a unique opportunity for BIOTROP to make a lasting positive impact on the community and is very much aligned with our core values.

BIOTROP colleagues running for charity



In 2024, Plant Products employees gathered at Point Pelee National Park. Twice! Not only for the annual beach clean-up in April, but very early in the season for quite the sportive challenge: a polar dip in the lake. Team 'IceStickles' supported United Way with several thousand dollars in the support of children in the local community. Meanwhile, our Canadian team ran in support of children's mental health in the Tim Hortons Donut Run and also

supported the Nolan's SMILE kids dash and Crystal Drop Gala in support of two local hospitals. The 'Hogs for Hospice' motorcycle rally might have been a bit less sporty, but united members of the Plant Products team in a totally different way, creating lasting memories and raising funding for the Erie Shores Hospice. Overall, a major part of the Plant Products team engaged in fundraising activities in 2024.





# Sustainable crops for all

As already mentioned, our core business makes our largest impact on health and food safety, as it impacts all end-consumers. It is our mission to contribute to the sustainable production of crops, and our desire for healthy food to be available to everyone.

Our products contribute to making food systems fair, healthy and environmentally friendly: as set out in the EU Farm to Fork Strategy. Among other things, this strategy promotes the use of biological solutions for sustainable crop production. The aim is for agriculture to:

- have a neutral or positive environmental impact,
- help to mitigate climate change and adapt to its impacts,
- reverse the loss of biodiversity,
- ensure food security, nutrition and public health, making sure everyone has access to sufficient, safe, nutritious and sustainable food, and
- preserve affordability of food, while generating fairer economic returns, fostering competitiveness of the EU supply sector, and promoting fair trade.

The positive effects our products may have on crop production, also aligns with the Sustainable Crop Production Intensification (SCPI) as promoted by the United Nations Food & Agriculture organization (FAO). See on the right for an overview of our different product groups, and how they contribute to both the sustainability and intensification of crop production.



## Contribution of biological products to efficient and resilient crop production

| <b>Product Categories</b>  | <b>Sustainable</b><br>= Reduction of carbon footprint and/or biodiversity decline and/or negative impact on human health   | <b>Intensification</b><br>= Reduction of agricultural land-use  |
|--|--|---|
| <b>Biological Control</b><br>of pests, diseases, nematodes and weeds<br>(macrobiotics, insect pathogenic nematodes, biopesticides, semiochemicals) | <ul style="list-style-type: none"> <li>Reduction of <i>biodiversity decline</i> by reducing chemical pesticide usage and replacing them with biocontrol-based IPM</li> <li>Reduction of <i>carbon footprint</i> from crop protection by reducing chemical pesticide usage requiring high amounts of (fossil) energy for production</li> <li>Reduction of the harmful impact of chemical pesticides on <i>human health</i></li> </ul>   | <ul style="list-style-type: none"> <li>Increase in crop yield by reducing abiotic crop stress caused by chemical pesticide application</li> <li>Increase in crop yield by reducing the negative impact of chemical pesticide application on soil health</li> </ul>  |
| <b>Biostimulants</b><br>(abiotic stress)   | <ul style="list-style-type: none"> <li>Reduction of carbon footprint from crop protection by reducing chemical fertilizers usage due to enhanced nutrient use efficiency</li> <li>Reduction of biodiversity decline by reducing chemical pesticide and/or fertilizer usage due to enhanced plant resilience and/or enhanced soil microbial activity</li> <li>Reduction of the harmful impact of chemical pesticides and/or fertilizers on human health</li> </ul>                      | <ul style="list-style-type: none"> <li>Increase in crop yield by reducing abiotic crop stress caused by heat, drought, salinity, etc., often in combination with active plant growth promotion</li> <li>Increase in crop yield by root growth stimulation and improvement of nutrient uptake and nutrient use efficiency</li> </ul>     |
| <b>Biofertilisers</b><br>(nutrient use efficiency, NUE)  | <ul style="list-style-type: none"> <li>Reduction of carbon footprint in the production of synthetic N-fertilizers, and of mining P, K and other elements by reducing their usage</li> <li>Reduction of biodiversity decline by reducing synthetic fertilizer usage and associated effects on eutrophication and water, air and soil quality</li> <li>Reduction of the harmful impact of fertilizers on human health, through their negative impact on water and air quality</li> </ul> | <ul style="list-style-type: none"> <li>Increase in crop yield by facilitating better nutrient uptake, often in combination with active plant growth promotion</li> <li>Increase in crop yield by reducing the negative impact of fertilizer overuse on soil quality, often in combination with active plant growth promotion</li> </ul> |
| <b>Inoculants</b><br>(N-fixing bacteria)   | <ul style="list-style-type: none"> <li>Reduction of the carbon footprint of crop nutrition by reducing the use of synthetic N-fertilizers requiring high amounts of (fossil) energy for production</li> <li>Reduction of the harmful impact of synthetic N-fertilizers on human health, through their negative impact on water and air quality</li> </ul>  | <ul style="list-style-type: none"> <li>Increase in crop yield by reducing the negative impact of synthetic N-fertilizers overuse on soil quality, often in combination with active plant growth promotion</li> </ul>  |



The world population is forecast to reach 9 billion by 2025. Providing high quality food for everyone is more relevant than ever — particularly against a background of worldwide inflation and increased poverty. UNICEF estimates several hundred million people are living in extreme poverty. We cannot hope to tackle these huge global issues alone, but we are driven to play our part: to try and make a difference where we can. We aim to support sustainable intensification, simultaneously raising productivity, increasing resource use efficiency, and reducing negative environmental impacts of agriculture.

While there is high demand for

healthy food locally, the demand for imports of healthier, vegetable-based food is also growing in many regions. If we look at the European market, for example, studies show the sale of healthy plant-based food grew to 5.8 billion euro in 2022: a 21% increase on 2020. Earlier studies estimate that healthy plant-based food patterns will have positive economic effects, including significantly reducing health care costs and benefiting other areas of the economy in the coming years.

It is our business to help growers around the world optimize yields and prevent the use of pesticides where possible. Our mission is to be the most reliable partner in

producing healthier crops and maintaining healthy, high-quality productive soils. Traditionally Biobest has focused on indoor production, which is more resilient to external influences and the risks of climate change. With the addition of BIOTROP to our group, we aim to expand our impact to traditional agriculture as well.



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## Fair standard of living

We strive to be a good employer to all our employees. Besides personal wellbeing and growth, we want to offer a fair standard of living to all. In the current economic climate, we found that in some global regions the legal minimum wage may no longer meet our desired benchmark: to meet actual employee needs. Therefore, at the end of 2022, we went beyond the current global standards and started to investigate what we believe is needed to afford a decent standard of living. We began our study, the BioFirst Living Wages Analysis, in four countries where we operate, and we are gradually expanding our analysis globally.

In this study, we investigated whether our wages and remuneration package, at a particular site, are sufficient to afford a decent standard of living locally. In our view this includes food, water, housing, education, healthcare, transportation, clothing and other essential needs: such as provision for unexpected events. For this analysis, we use widespread industry standards. More specifically, we work with a salary matrix tool developed and provided by IDH (The Sustainable Trade Initiative). This is helping us evaluate how the total remuneration received, including wage, bonuses and in-kind benefits, compares to the relevant living wage benchmarks for the region.

The guiding principles behind our study are drawn from the Anker Methodology for calculating a living wage. This widely-used methodology is used to estimate living wages around the world. It has been applied and championed by the Global Living Wage Coalition. The data we received from The Wage Indicator Foundation allowed us to compare minimum wages, living wages, actual wages and wages in Collective Agreements (CBA). Annually we update our benchmark data, especially in regions with high inflation, and share the results of our global calculations with local management, to ensure we still meet a fair standard of living worldwide.

## Improved crop production in the local community

Real IPM, in Kenya, is best-in-class for spreading the knowledge and love for IPM and biological solutions, and linking them to social impact projects. Real IPM has set up their own NGO to share their knowledge on biological control and functional agrobiodiversity with local farmers. Real Impact aims to provide advice to increase food security and improve

nutritional health in East Africa. To reach their goal, Real Impact educates institutions, smallholder farmers, other NGOs, extension workers and community leaders. Training is not limited to biological control, but includes growing crops and nutritious cooking techniques. This is why Real IPM's facilities at Kichozi Farm, in Thika, include a training kitchen and a 2.5 hectare demonstration farm.

The vegetables grown on the farm are donated to people in need and public organizations. The staple 'vertical vegetable bags' are also produced at the demonstration farm, as well as most of the food for the staff canteen. Real IPM aims to distribute fresh products to their staff, and those in the local community who need them most. In 2024, Real IPM projects included:

- a partnership with SNV to sustainalize food production in Kenya, ensuring food security and healthy food availability through participation and inclusion;
- cooperation, through Biovision Africa Trust, on sustainable agriculture in Africa;
- sharing and developing IPM knowledge on sustainable agriculture with Colead;
- supporting adoption of IPM through FAO in Africa and Latin America, with pilot plots in Kenya;
- an innovative project to monitor the fall armyworm through social return projects, investigating the need and possibilities for innovative solutions with Icipe and GIZ.

### *A brief history of the Real Impact vertical bag gardening & schooling project:*

In 2009, Real IPM Kenya launched its vertical bag gardening initiative, to impart vegetable growing knowledge and skills to the local community, including schools. This community initiative led into another. Working with a local school for pupils with visual challenges, Real IPM Kenya came up with the idea for the Real IPM School Project. A fund was created and during the past 14 years, Real IPM Kenya has played a role helping to support education for local children in need, helping them build promising futures for themselves.

Many children have moved on to promising career opportunities, some now work for Real IPM. The company is immensely proud of the achievements of all the children supported by this project.



Elsewhere in the BioWorks division, the BioWorks U.S. team is also contributing to providing food for everyone. And where better to start, than the traditional Thanksgiving meal. The BioWorks Inc. team started a food drive for families in need in the local Rochester New York area. They rolled up their sleeves and with

warm hearts they filled four shelves with Thanksgiving meal boxes, so more local families could enjoy the occasion, plus take home an additional box containing dry goods and canned items. In addition, a back-to-school drive was organized with St. Peter's Kitchen of Rochester. Serving the community of Rochester since

1982, St Peter's Kitchen addresses food insecurity through daily meals, a food pantry, and additional supportive services. They provide consistent, nutritious meals and resources to those in need, fostering a sense of community and offering hope. BioWorks contributed by filling backpacks with school supplies for incoming



kindergarten children, ensuring they had everything needed to start the year. While providing a fresh start for these youngsters, they also supported the Sunny Mike Foundation with an entirely different target audience. Their mission is to uplift veterans by connecting them to resources and the local community, providing activities and a sense of meaning in support of their health, wellness, and resilience. They also provide financial assistance and partner with other organizations to ensure veterans have access to essential services. The foundation fosters a caring community where veterans can contribute and support each

other in achieving fulfilled lives. This year, BioWorks donated additional clothing for homeless veterans in the area.

At divisional level, we support similar initiatives with the same goals: to spread the knowledge and use of IPM for our business, and to optimize grower yields and provide healthy fruit and vegetables where needed. A great example is the Biobest division supporting Terre Vivante, in Benin. While there is great agricultural potential in the Za-Kpota region, the right resources and knowledge are still lacking for many. Agriculture is the primary source of livelihood in

the region, and a large number of children are not enrolled in school. Currently about 70% of agriculture workers have not received any schooling.

The project supports a schooling program, to add to three important goals we support:

- at least 50 out-of-school boys and girls to profit from an education, supported by this project,
- at least 1,000 local growers to benefit from knowledge from this project,
- a 20% plus increase in production for participating growers.

## Optimal use of tax incentives for the benefit of our communities

At BIOTROP, our finance department colleagues have worked to ensure we can optimize donations through tax incentives. It's a meaningful way to contribute to social, cultural, sports, and educational projects for our local community, by utilizing funds that were allocated to taxes. This model allows the company to direct a portion of its taxation to social and charity projects. BIOTROP makes it a priority to place people at the heart of their initiatives, contributing to the development and future of every individual impacted, and bringing these projects closer to our employees. It is an investment in our core values.

Last year, BIOTROP was able to support many important social projects that have made a real difference in the local community and to people's lives. Partnering with four institutions in Curitiba,

they collaborated in various campaigns and events creating even greater engagement and impact for social initiatives:

- donations and fund raisers for Pequeno Príncipe Hospital for oncology treatment for children and research into the treatment of cancer, and
- donations to organizations

in need of goods to support education, sports activities and other societal support, such as Solidarity Easter, Winter Clothing Drive, Food Collection, Solidarity Christmas and many others.

To achieve this great support and provide employees with the opportunity to get closer to



BIOTROP volunteer group 2024

our community and these social projects, BIOTROP launched the Volunteer Group in 2024. An enthusiastic group of colleagues, it deserve special mention. Its activities included supporting events for charitable institutions,

community service with hospitals, assisting homeless people, collaborating with animal shelters, and many more: these activities mostly take place after working hours. Helping to build a stronger team at the workplace, the

activities bring a big smile to our colleagues in the Volunteer Group and we greatly appreciate all their hard work and extreme dedication.

### Several examples of the 2024 charity work include:

- supporting NGO Amigos do Caximba by purchasing school supplies for 140 children and professional cleaning supplies for the school
- delivering Easter chocolates to public schools
- delivering cleaning supplies to an NGO that cares for the wellbeing of children



- supplying refurbished computers for children to work with to the Incanto cultural institution
- providing 140 school supply kits to an NGO helping families finance schooling for their children





# Learning & innovating with world's brightest

## Partnering for high quality research

BioFirst Group has been successfully pioneering and innovating in biological control for decades. Having our roots in biological protection and ecosystem functioning, the continuous growth, change and development of our

business are a fact of life for us. We are well used to dealing with change and thinking ahead. Our great team of R&D engineers and researchers is always looking for new solutions to further improve our customers' yields. As of 2024, with BIOTROP,

we have added a great innovation powerhouse in biological control to our global R&D team. This is opening the way to many new innovations and collaborations in both the greenhouse environment and open field.

Facility to fungi liquid fermentation at Bio Oracle, Brazil



New lab at BIOTROP's Curitiba site



Solid scientific research enables business development to bring effective innovations to market and allows our technical team to keep offering best-in-class advice to our customers. BioFirst Group has a growing global R&D and technical team exceeding 100 people. In addition we have visiting scientists and are continuously mentoring new groups of students on site. BioFirst frequently hosts students carrying out their bachelor,

masters, or PhD research. This provides opportunities for students to gain unique experience in performing innovative research within a company leading the field of biological control and pollination. In 2024, we hosted 14 interns on their way to promising careers in research and applied science. Our highly specialized R&D department maintains an extensive network of academic institutions and research stations

worldwide. We have also started many cooperations in the field = practical field studies. There are many collaborations each year, most of which have proven to be exceptionally fruitful for all parties involved. Through collaboration, BioFirst Group stays up to date with the latest developments from fundamental and applied research, and exchanges fresh insights of students, scientists and other colleagues working in the field.

BIOTROP recognizes that innovation and research in health and sustainability are critical to company growth, unlike any other company. It is how its success and growth was built. The year 2024 was an incredible year for BIOTROP R&D, starting with the inauguration of a new multi-million-dollar research facility, fully focused on new product development. The new laboratory facility does not only bring additional capacity, but also hosts equipment to perform additional techniques in house. The full process is now covered, from the isolation of new microbes, their characterization and identification to creating own culture media and chambers to optimize growth conditions and establishment. Hi-tech equipment is available for work on microbiology, molecular biology, biochemistry, bioprocess and bioinformatics. Our new facility is state of the art in terms of its structure to develop new products, which have changed and will continue to change global agriculture.

Beyond our new lab in Brazil, BIOTROP has recently added a laboratory in the U.S., Gainesville, Florida, where our technologies can be improved and adapted for application in the North American market. It also provides access for our researchers to study the U.S. microbiome in soils, isolating new strains of microbes, enabling us to develop new biological products. Why is finding new microbes so important? Let us explain on the example Nimbles program. It was created to find and isolate functional microorganisms in different environments where they are already effective, and bring them to the production development. For example, finding microorganisms that are highly effective at helping plants take up water and nutrients in dry environments, isolating and then producing them to help other plants in dry areas.

In 2024, the Nimbles team visited two important biomes in Brazil,

Cerrado and Amazonia, in search of effective microorganism: completing our list of Brazilian biomes. These visits added to our functional culture collection, now totaling more than 3,500 isolates of bacteria, fungi and actinobacteria. All these microbes have been screened to identify their agronomical potential. This greatly benefits the future development processes, by helping to facilitate a very rapid response to any new demands in agriculture. Nimbles project has already contributed greatly to new generation of technologies, as measured by the number of new products deemed valuable enough to start the lengthy, and costly, registration process. During 2024, we initiated 12 new registration processes with microorganisms from the Nimbles program: for products fully developed in-house. All contribute to more sustainable agriculture and are in consonance with BioFirst's mission.

20 peer-reviewed scientific papers in 2024

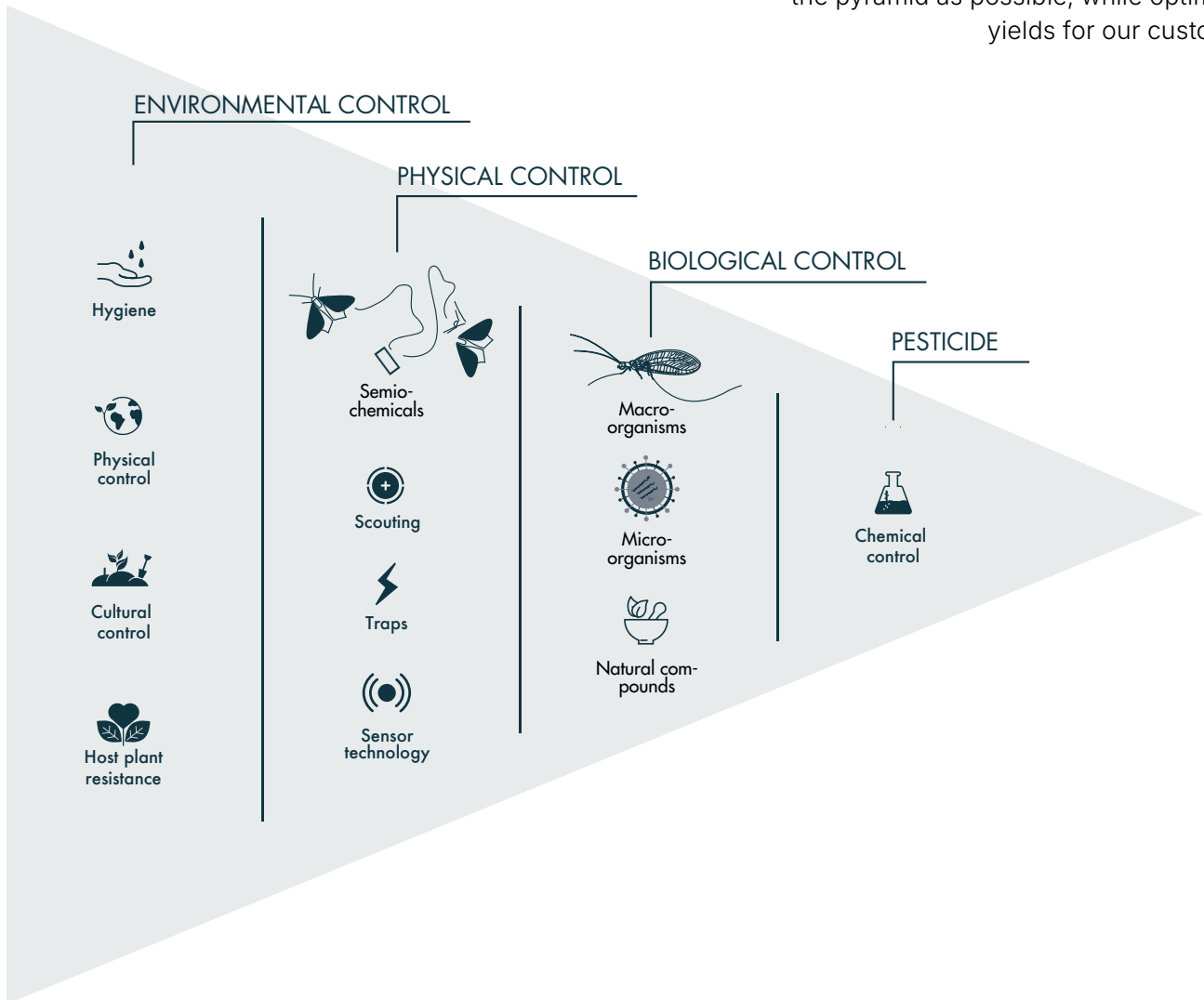


Our technical sales representatives love sharing their expertise



## Types of control in IPM

At BioFirst Group we advise on all possible methods, aiming to stay as far to the left of the pyramid as possible, while optimising yields for our customers



## Go to the Academy

The Biobest Academy is your one-stop knowledge shop for all things relating to Integrated Pest Management (IPM) training. Learn at your pace, from anywhere, anytime.

Join us today to empower your agriculture journey with IPM knowledge and practices, fostering a more sustainable future

[Browse all the available courses](#)



## The Biobest Academy: sharing our IPM knowledge with the world

Continued success: from the comfort of your own chair, without any airmiles. Whether you are a highly skilled member of our technical team, or entirely new to the world of biological crop protection, our Biobest Academy has something to offer you.

New additions in 2024:

- **internally reviewed field demonstration site** to share any findings, test results and questions from over 22 countries,
- **expert webinars** with the possibility to join live and ask question on very specific crops, pest issues and innovations,
- **over 30 new** courses on new crops, pests, biopesticides and other IPM tools, many on-demand,
- **updated mobile app** for e-learning,
- **training in new languages**, such as Greek and Dutch.

"In 2020, we started creating a central learning hub, for training our technical staff, by adding IPM and pollination knowledge from our global team of experts. What was a collection of documents and bits of information, soon became the foundation to create professional e-learning courses on our Biobest Academy," explains Neal, IPM specialist and manager of the Biobest Academy. "In June 2023, we launched our self-service webshop externally, to share our knowledge with customers and others directly. In 2024, approximately 2,500 courses have been completed with 600 views for our new Expert Webinars, a 35% increase compared to last year", Neal is proud to add. "With people spending at least one hour per course, this means we have a lot of daily activity on the platform, while the number of external users is still increasing rapidly. In 2024, already about half of our courses was completed by distributors and customers."

The Biobest Academy offers basic, advanced and expert courses

ensuring learners get the right experience. Each module includes an online assessment, with a certificate upon completion. We believe that our technical advice to our customers is the best in the IPM business and we want to keep it that way. The Biobest Academy means anyone who advises growers has an ever-expanding library of training and reference materials all in one place.

Its contribution to our sustainability goals is twofold:

- Firstly, with the best-in-class knowledge of our products, our advisers are better at giving growers the confidence to solve pest and disease problems; with our new web shop, we can reach an even wider audience and educate them in the benefits of Integrated Pest Management and natural pollination.
- Secondly, the ability to deliver structured e-learning means we can cut down the amount of face-to-face teaching that often requires us to travel. We still teach

in the classroom from time to time, but now we can use that time to go in depth, or train in an even more tailor-made fashion.

## The future of the Biobest Academy

Every year, new technical courses and reference materials are added to the Biobest Academy, to satisfy popular demand and customer needs. In 2024, the focus was on new high-tech IPM products and bio-pesticides and on disseminating knowledge on the main pests in core crops. In the future, this platform will also deliver many other types of training for our employees and customers. In cooperation with HR, an onboarding process for new employees was developed, which we aim to further improve.

In 2024, the Biobest Academy delivered a series of 'expert' webinars presenting the latest technical developments in the sector. With many views, and positive feedback on these sessions, a new series is already planned. In addition, a certification program was added to the Academy that will be used as an internal measure for training and expertise in the technical team, and may serve as an external certification in the future. "Both the webinars and IPM courses were a great success and we aim to build on these. They both show great potential, and we already have 51 technical sales advisors enrolled in the program," Neal concludes and is looking forward to further expanding the success of the Biobest Academy.

## Best in class IPM advice

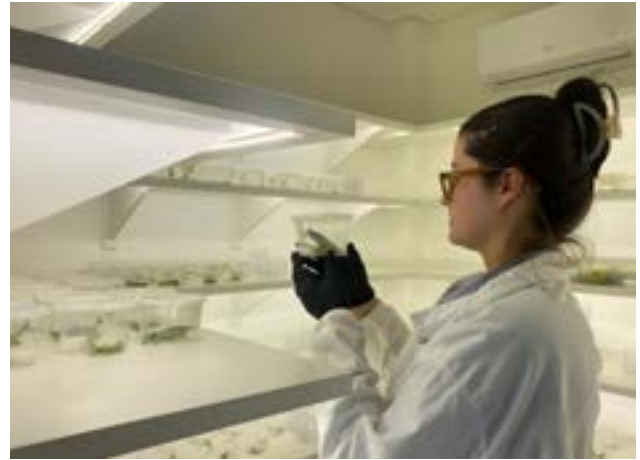
Delivering the best possible Integrated Pest Management advice is the cornerstone of our customer-oriented strategy. By delivering the best possible objective advice to growers and helping optimize their yields, we set out to build strategic alliances. And, by showing the results of our successful approach to the rest of the world, we help to spread the love and motivation to adopt biological crop protection.

To us this means combining all possible solutions, anything from working on natural plant and soil

health, to applying pesticides, to create the best possible strategy for successful pest and disease control and yield optimization. Working with living crops, even in controlled environments, is always challenging. Finding the right strategy is not always straight-forward. With extensive experience gained from visiting growers around the world, BioFirst team is uniquely positioned to collect, develop and share valuable knowledge and expertise with our customers. This is why we continue to invest in a large team of field experts: to support our customers worldwide.



Our R&D colleagues and technical specialists, sharing their knowledge and enthusiasm with the general public during the 2024 Nerdland festival



## High-tech business development

In the field of biological control, innovations do not necessarily need to be high tech. But of course, we implement all available technologies that may help us towards our goal. In 2024, we again saw further improvements in our hi-tech scouting and monitoring tools, our online learning platform, new technical methods to spread our beneficial insects, such as the Entomatic and many other hi-tech and low-tech innovations.

In this report, we would like to focus on many advanced developments at BIOTROP. A key innovation goal is the development of products based on fungi by liquid fermentation. This approach is many times more energy and resource efficient compared to solid state fermentation, while it

also generates less waste. The yields of effective metabolites are much higher. In 2024, the production of five species of fungi was optimized by liquid fermentation, opening a new era of fungi-based biocontrol.

Crucial technological launch: in 2024 of BIOTROP, the first technological launch of BIOTROP as part of the BioFirst Group, was AI tool Eva. "Eva is able to access information from several scientific databases related to agriculture and data from BIOTROP's extensive research: from over five thousand experiments conducted each year. Eva uses the information from the field and interconnects it with soil genetics data to provide more accurate insights for each customer. Trained to interpret

this data, Eva delivers tailored recommendations, helping clients understand the current state of their soil biology."

With Eva, it is possible to generate meaningful data on different dimensions of your soil health. The first is biological fertility, which indicates how soil biology allows for nutrient uptake and plant nutrition. There are also biological agents, which indicate how soil microorganisms can contribute to the protection and health of crops biodiversity: which evaluates the presence of fungi and bacteria and determines the main threats that can impact production. The tool is part of the Agrobiota project, created in 2021, to easily carry out soil analysis on a commercial scale.



# Winning by having the most engaged team in the industry



At BioFirst, we are passionate about leading the world in sustainable crop management as the preferred partner for growers and farmers.

“Central to our HR mission is a profound dedication to shaping the path for every BioFirst employee”, says Kristof Truyens, CHRO at BioFirst Group. “We are dedicated to enable everyone to make meaningful contributions, that elevate the overall company value.” This is why, our Global HR team pursues excellence in attracting, developing, and retaining talent. “In this process we enhance employee engagement to better serve our customers.”

“At the core of the HR strategy is winning, by having the most engaged team in the industry,” says Kristof. “Building a workplace where people feel valued, motivated, and inspired to give their best is essential. Wherever people work, their passion is leading. Creating this kind of environment drives exceptional performance and fosters a culture that will set our company apart as a leader in its field. We work to align employee engagement with organizational goals to ensure long-term success and a competitive edge. To achieve this”,

Kristof continues, “we work on 3 major pillars:

- building upon our solid foundation through continuous improvement,
- integrating the desired culture into every aspect of our organization, and
- aligning leadership development and talent management with a customer-first approach.

Our focus is on having the right talent, in the right roles, with the right managers driving employee engagement,” he clarifies. “Developing leaders is key, as great managers will create engaged employees. Engagement efforts are crucial, because customers will never love a company until the employees love it first. Engaged employees foster loyal customers, and loyal customers lead to sustainable growth, increasing company value. Since engagement is a critical component of our overall business strategy, we conduct regular global engagement surveys, allowing employees to express their opinions and pinpoint future opportunities.”

“Regarding development”, Kristof points out, “we focus strongly

on our employees’ talents rather than their weaknesses. Our basic principle is that every employee is unique, each with their own set of talents. By further training and developing these talents, we create strengths. Efforts spent on weaknesses would only result in mediocrity. By deploying these talents and strengths in multidisciplinary teams, we capitalize on the power that diversity and inclusion offer us.”

“In pursuing our corporate social responsibility, we encourage our employees to engage in, and commit to, local community projects. This both contributes to their personal development and to their involvement in our sustainability goals. Sustainability is not only a core activity for our company but also a value we encourage our employees to embrace,” Kristof concludes.

## Setting a solid foundation

In this first pillar, HR works on a consistent roll-out of a worldwide compensation and benefit philosophy. The target is a transparent pay culture with a clear rewards strategy and philosophy, based on five critical keys: clarity, differentiation, technology, fairness and transparency. In this



context, we conducted our pay gap analysis and a project on Living Wages in countries where we do business. The compensation and benefit philosophy is subject to clearly defined operating principles: determining the percentile at which we want to place employees in our different local markets with their compensation and benefits package, defining the industry with which we want to benchmark ourselves for competitive alignment, positioning the roles, and installing local calibration meetings in line with the budgets. We are also strengthening our technological base with the start of the design, development and implementation of an HR Information System: SAP SuccessFactors. We are continuously improving our digital HR transformation to get people

working on the right things, finding the right people and making them great, to ultimately run the business better.

## Behavior and culture

Within the second pillar, 'behavior and culture', we can look back at several solid Corporate Social Responsibility projects that were rolled out in local communities worldwide. Some of these exciting projects that also contribute to the wellbeing of our employees, have already been described in previous chapters of this report.

## Leadership development and talent management

Since 2023, an internal training and mentoring program for management roles has been

in place. We gained our first experiences using 360° feedback, continued working on improving our onboarding system for newcomers, introduced a new method for succession planning, implemented a continuous non-violent communication program, and implemented methods to reduce absenteeism. More importantly, we implemented over a hundred local actions linked to the outcome of the 2023 global employee experience survey, with a global 74% response rate. In December 2024, we launched a very short Pulse Survey, designed to update us on the progress of our employee experience with the help of 11 simple questions.



# Our talent management strategy

Harnessing the power of diversity



In Human Resources, we have been navigating several transformative megatrends over the last years, that are reshaping the global workforce. Most recently these include the impact of AI leveraging technology to enhance human potential, balancing the modern workforce needs with organizations' requirements, and addressing the interplay between the package of new regulations and paperwork and the entrepreneurship of our people. Additional trends, such as the rise of the gig economy, skill-based employment models, demographic shifts, an aging workforce, global workforce challenges, shifts in economic power, and smart technologies, are rapidly reshaping the HR landscape.

As a result, critical topics like achieving a sustainable work-life balance, investing in reskilling and upskilling, and driving digital transformation have never been more urgent. Several projects working on these aspects are launched yearly, all fit to local needs and legislation. Chief HR Officer Kristof Truyens and his team are dedicated to finding innovative solutions that align with business objectives, meet customer expectations, and address the evolving needs of our local teams.

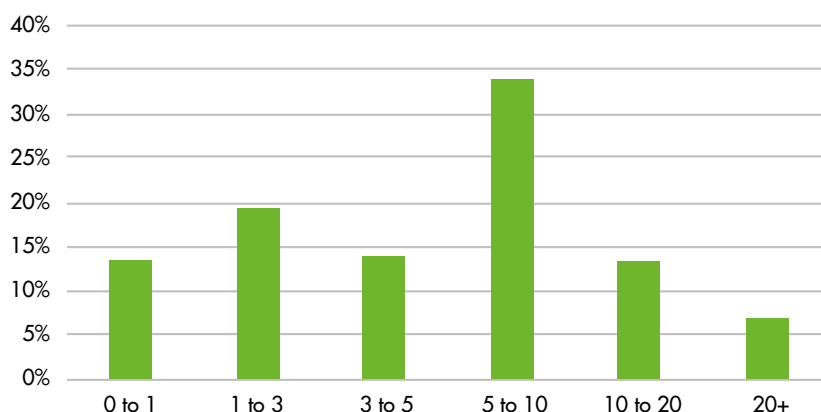
"Against the background of megatrends, we encourage employees to have a growth, and not fixed, mindset. We move our people in a consistent and goal-oriented manner. Financial and

legal discipline, a goal-oriented focus, corporate housekeeping and high-quality processes and procedures are the foundation of the BioFirst performance management cycle we implemented." Kristof continues. "By focusing on the strengths of our people, and the stimulation of that passion for our business, we continue to buckle up together for exponential growth."

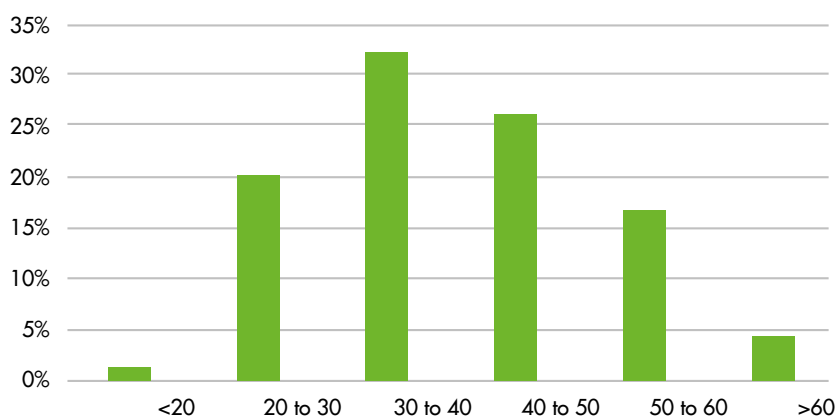
We manage to grow this positive mindset within the company, by working on the strength of the diversity in our workforce. We actively organize training and working sessions to increase our employees' abilities to find, and call on, each other's strengths. This way we truly get to know each other, learn how we may cooperate



Employees per years of service



Employees per age



better, both internally and with our strategic supply chain partners. Within BioFirst Group we greatly value diversity on a global level: there is a high level of autonomy for each company within the group to adapt the strategy to local needs. We plan meetings on many different levels to learn from each other's practical successes, situations and approaches.

We believe in building the most engaged team, relying on individual strengths and harnessing the power that diversity and inclusion provide us. Our diversity reflects that of the local communities we operate in. Both in local staff

and management, we have a real spread in gender, age groups, and different educational levels. We currently have colleagues of 37 different nationalities working for us. We focus on developing talent within teams, purely based on an individual's skills. At our experienced BioFirst Group management team level we are gradually adding more diversity to match.

In 2024, we published our Code of conduct and continued the implementation, increasing the training options and initiatives on open communication. A deep respect for individuality and

diversity is not only embedded in our company culture, but also firmly rooted in our Code of conduct. We believe that embracing diversity enriches our workplace, drives innovation, and strengthens collaboration across all levels of the organization. We stand for equal opportunities and treatment of all people inside the Group and there is zero tolerance towards any types of discrimination.

The BioWorks and BIOTROP teams, that joined us in 2024, have traditionally been strong on taking great care of their employees. BioWorks has a highly developed HR strategy and many great initiatives we learned from in 2024. It was no surprise to us, that they were among the highest ranking companies in the employee experience survey. And for BIOTROP, people engagement and true employee branding are equally important, being one of the fastest growing companies in the region, and attracting hundreds of new employees annually. Despite their growth, they have a very high level of engagement and were certified as a Great Place to Work in 2024, for the third consecutive year. The annual BIOTROP participation in the Great Place to Work satisfaction survey is an opportunity to listen to employees, reinforce the company's strengths and identify improvement opportunities. BIOTROP continues to improve, towards their goal to be the most attractive and desired company in the biological segment.



Biobest employees sharing their work and expertise with their families

More specifically we wanted to emphasize our dedication to:

**SDG 5: Gender equality:**

- Evaluating disparities in compensation to foster equality in the work environment;
- Stressing our intention to empower women within our organization and promoting their leadership.

**SDG 8: Decent work and economic growth:**

- As a part of our overall efforts in promoting fair wages and equal opportunities for all employees;
- Ensuring our workplace supports economic wellbeing without discrimination.

**SDG 10: Reduced inequalities:**

- Identifying areas where pay gaps persist and targeted actions to narrow them;
- Creating an inclusive corporate culture that celebrates diversity and builds on it in equal respect for all individuals.

## Exploring gender pay gap through the lens of Sustainable Development Goals

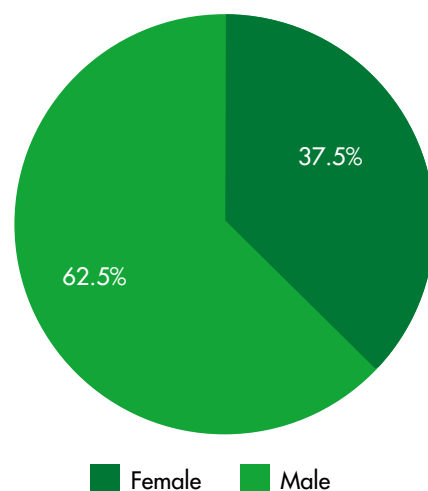
With our steadfast commitment to sustainability, we naturally extend our focus to addressing gender and pay gap disparities in our organization. Not just as a workplace concern, but as a critical step towards advancing with the Sustainable Development Goals (SDG). Our BioFirst Fair Living Wages study is explained in the chapter on "Sustainable crops for all". With our gender pay gap analysis we made a start in aligning our intentions with key SDGs.

In the 2024 update of our comprehensive gender pay gap analysis, we re-examined the average gross monthly base salary for various jobs grades and classifications, including manual labor, several types of staff members and management.

We divided the pay data both regionally, and per grade of work, to make a fair comparison between the wages. In our current analysis, independent employees were not included. We ensured anonymity in wage comparisons and abstained from comparisons if three or fewer employees of either gender were included in a grade. We provided explanations for current pay gaps of 5% or more per grade in all our subsidiaries.

The key finding of this first, basic analysis is an overall gender pay gap in BioFirst Group of less than 5% across all grades and classes. Well below the EU pay gap average. Some gaps in smaller subsidiaries remain hard to compare, due to the small number of employees per grade and our commitment to anonymity. We did identify some opportunities from this analysis though. For example, existing discrepancies in certain grades that may arise from factors such as seniority, or divergent median

market salaries in specific job families. The overrepresentation of men in IT roles is a clear example. While we have observed an increase compared to 2023, women are still underrepresented in management positions and higher-level staff roles. We are working on standardized ways to enhance our reporting, as we are aware that by addressing any possible pay gaps, we contribute to a more just, equitable, and sustainable future: both within our company and on a broader scale.





Exercise for body and mind during World Mental Health Day

A grayscale photograph of a field of crops, likely a soybean field, with a building visible in the background. The image is overlaid with a semi-transparent dark gray filter. The word "General" is written in a white, thin, sans-serif font across the center of the image.

General



 BIOTROP

  
www.biotrop.com

# About this report

## Methodology

Our sustainability efforts and report were structured according to the United Nations SDG, to align with recognizable international ESG topics and standards. The report has been prepared using the CSRD and GRI principles as a guideline for disclosure on the different topics. By no means do we claim to be fully compliant with either for this report. No external verification has taken place on either standard. BioFirst has a clear ambition and targets, as set out in this report, and we transparently report on our progress.

The underlying data included in this report was included in the Floridienne CSRD report, which may be found [here](#). In preparation to align with the European Sustainability Reporting Standards (ESRS), as required by the Corporate Sustainability Reporting Directive (CSRD: 2022/2464/EU) and as amended by the Omnibus Package, we are taking the necessary steps to ensure compliance. Reporting under the CSRD will become mandatory for the BioFirst Group starting from the 2027 financial year, with reports due in 2028.

Our management system for ESG reporting, collection and tracking of KPIs were designed according

to the process of continuous improvement as outlined in ISO standards and other management schemes.

Energy related emission conversion factors used to determine the scope 1 emissions are derived from the website [www.co2emissiefactoren.nl](http://www.co2emissiefactoren.nl) as used for the Dutch CO2 reduction scheme (data from 20th of January 2025). These factors are used for most countries, as they are Well-to-Wheel factors that encompass complete supply chain emissions for energy use. They are preferred, as many other schemes adopt a Tank-to-Wheel approach, and we aim to avoid any possible underestimations. Currently the factor for "shreds" is used to approximate the use of Macadamia shells, as biomass fuel, for heating in Kenya. We aim to find exact factors to match the local supply chain for the use of this biomass in the future. The impact of this biomass is currently minimal (<0.05%).

In the calculation of scope 2 emissions, electricity sourced from on-site renewable energy production or entirely from certified renewable energy, such as wind or solar power supported by Guarantees of Origin or equivalent reliable tracking mechanisms, is accounted for as zero emissions. For any portion of electricity

consumption not covered by such certificates, the country's residual electricity mix is applied to determine the associated emissions for the location based approach.

The following sources were used for emission conversion factors for Scope 2, consisting mainly of electricity, as these emissions factors have a high international variation:

- for EU countries, AIB - Association of Issuing Bodies ([www.aib-net.org](http://www.aib-net.org)), the data published for the 2023;
- for Australia, Australian National Greenhouse Accounts Factors 2025;
- for US, 2024 Green-e® Residual Mix Emission Rates (2022 Data);
- for the remaining countries, Carbon Database Initiative (CaDI) 2024.

For the calculation of the scope 1 and 2 footprint of BIOTROP, specific conversion factors were adapted from the GHG-Protocol Brazil ("Ferramenta de Cálculo do PBGHG - ferramenta\_ghg\_protocol\_v2023" from Brazil | GHG Protocol / FGV EAESP). The emissions reported from this tool are audited annually by Bureau Veritas in a green bond certification process. The BIOTROP carbon compensation efforts are also

based on these calculations. There are minor differences in calculation methodology for this tool compared to the BioFirst group calculation. For example, the GHG Protocol Brazil tool calculates emissions of local car models and building year into account, where the BioFirst group calculation is based on an average factor the total liters of fuel used. To minimize variance between the two footprint calculations (<5%), average values were adapted from the tool to calculate the BIOTROP footprint from the BioFirst database. The emissions for BIOTROP are included in our carbon footprint, even though they have been compensating their full scope 1 and scope 2 emissions starting from 2022.

2.33 kg CO<sub>2</sub>/m<sup>3</sup> for natural gas  
2.60 kg CO<sub>2</sub>/liter for diesel  
2.21 kg CO<sub>2</sub>/liter for petrol  
0.015 kg CO<sub>2</sub>/liter for bioethanol  
0.0385 kg CO<sub>2</sub>/kWh for electricity

Since there were no standard conversion factors available for electric ferry use in Denmark, we calculated our own based on data from the 'Ellen' project. The ferry was found to use 1,600 kWh of electricity for a 40 km round trip, which averages out to 40 kWh per kilometer. Assuming an average of 20 cars on board per trip (even though the ferry can carry up to 31), this works out to roughly 2

kWh of electricity used per car per kilometer. The average emission factor for Denmark was used from AIB Europe as stated above.

The total of the scope 3 emissions was calculated externally using the spent-based approach. The calculation was performed for the 13 entities that generate the biggest part of the revenue: together >95%. The following entities were included in the calculation: Plant Products USA Inc, Plant Products Inc., BIOTROP, Biobest Belgium, Beneficial Insectary, Biobest Maroc, Biobest Mexico, Distributiones Imex, BioWorks, Biobest Antalya, Real IPM Kenia, and Polyam. As mostly financial data was used, and the calculation was based on general conversion factors and assumptions on the material groups and mode of transport, the scope 3 emissions profile is expected to improve in the coming years. This is based not only on an improvement in operations, but on improvements to the data acquired. We will report on any changes in underlying data and calculations that have a material effect on the emissions reported in each consecutive year, as we gradually improve the input and assumptions. General conversion factors from the Ecolnvent and Ademe databases were used to calculate the emissions.

## Exclusions

Scope 1 and 2 emissions were reported according to the guidelines of the GHG protocol. The principle of materiality was applied per entity and all own emissions were measured and reported where significant for the current year (>5% at entity level and >0,5% at group level). Currently the use of refrigerants is therefore excluded from scope 1, as is the use of district heating for scope 2. Due to our target towards carbon neutral, we have begun measuring them and the refrigerants will be probably included in future reports, as these emissions become more material and emissions in other categories decline. Measurements were made and checked, according to the GHG protocol requirements.

For all emissions data and other ESG data, the 2019 base year data has been updated, including emissions intensity, in line with any scope changes. The major additions for 2024 were the inclusion of BioWorks and BIOTROP data to the report. Their data was also added for 2019, in order to maintain a fair comparison to the base year. Any exceptional trends and changes are explained in the corresponding chapters.



For HR data, two systems are used: data for all employees from Foundations and detailed information from Employee Central (SAP). Data in Foundations is present for all employees. For age intervals, information was used from Employee Central and recalculated as a representation for the entire population. We are in the process of registering all employees in Employee Central, with 50,3% now registered. The total amount of worked hours was used to weigh reported absenteeism percentages at group level. The data for headcount or FTE published is the data for year end, 31th of December 2024, unless stated otherwise.

## Assurance

ESG data collection started in 2019, and data quality has improved to maturity over the past years. Starting from 2022, internal audits were performed on data for subsidiaries, and 'sanity checks' were implemented in the reporting system. Some subsidiaries were selected for an internal audit regarding their data trail and data collection process. To upgrade the robustness of the reporting process, BioFirst Group had an external audit performed for Biobest Belgium and Biobest Maroc in 2023 as both have a significant impact on the ESG data

for the group. The findings of this audit were used to improve the reporting manual and reporting process.

In 2022, we started to expand our data reporting system to align with CSRD / NFRD reporting obligations, an ongoing process of continuous improvement. Data is now collected and consolidated quarterly in dedicated software (SigmaConso). A quarterly management report was drafted to track progress, while our larger production entities report monthly.

In 2024, the first double materiality exercise according to the CSRD was performed. This analysis and the resulting reporting requirements, both disclosures and data, served as input for the audited Floridienne Group report.

## Scope

All data included in this report is for the full year of 2024 and, in some cases, our progress was reported compared to our base year (2019). In line with carbon accounting, 2019 data is collected for newly acquired companies. For relative KPIs, their 2019 turnover, headcount and other relevant indicators are taken into account as well.

For consolidating our ESG data,

we used the operational control approach, as outlined in the GHG protocol. 100% of the data was consolidated for all entities where BioFirst Group had operational control.

For 2024, this includes: Beneficial Insectary, Biobest Antalya, Biobest Argentina, Biobest Belgium, Biobest China, Biobest France, Biobest Maroc, Biobetter, Biobest Mexico, IMEX, Biobest Nederland, Biobest Poland, Biobest Portugal, Biobest Spain, Biobest UK, Biological Services, BioWorks, BIOTROP, Borregaard Bioplant, Biobasiq Sweden, Pollinering Norway, Bugs for Bugs, Polyam, IVOG, BKS, Plant Products, Real IPM Kenya & Tanzania.

Data for Agrotech-Gartenbautechnik GmbH was not yet included in the 2024 report and will be included in 2025.



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# Glossary

## Beneficials

Beneficial insects or other organisms, like mites or nematodes. Organisms that feed on or parasitize on pests of crops or ornamental plants.

## Carbon compensation, or carbon offsetting

Purchasing and retiring a volume of voluntary carbon credits to compensate for carbon emitted by the organization. These carbon credits are generated elsewhere by reduction avoidance or removal of greenhouse gasses.

## CO<sub>2</sub> ladder (CO<sub>2</sub>-Prestatieladder)

A Dutch management system, and certification standard, that offers tools and calculation standards to organizations to aid them in calculating their carbon footprint and reducing their emissions and energy usage. It uses a management cycle and continuous improvement methods comparable to ISO standards (ISO 50001).

## CSR: Corporate Social Responsibility

A self-regulating business model that helps companies to be socially accountable with respect to economic, social and environmental impact. A term used by companies in the same breath as ESG.

## CSRD: Corporate Responsibility Reporting Directive

The EU directive concerning the mandatory ESG information for companies to report on.

## FTE: Full Time Equivalent

Refers to the unit of measurement equivalent to one unit of a work year for an employee under a full-time contract.

## ESG: Environmental, Social & Governance

An international framework that helps stakeholders understand how an organization is managing risks and opportunities related to

environmental, social, and governance criteria.

## ESRS: European Sustainability Reporting Standards

Reporting standards to promote standardized reporting under the CSRD.

## GHG Protocol: Greenhouse Gas Protocol

An international standards and tool to help organizations measure their greenhouse emissions and track progress toward climate goals.

## GRI: Global Reporting Initiative

A comprehensive and widely used set of global sustainability reporting standards.

## IF-rate / Injury Frequency Rate (IFR)

A measurement of how often injuries occur in the workplace in a globally comparable way. It is the number of incidents per million worked hours.

## IPM: Integrated Pest Management

An effective and environmentally sensitive approach to pest management. IPM programs use comprehensive information on the life cycles of pests and their interaction with the environment to manage pest outbreaks. Pest information, in combination with available pest control methods, is used to manage pest damage with the least possible hazard to people, property, and the environment and by the most economical means.

## I-REC

International Renewable Energy Certificate (I-REC) is an internationally used standard to guarantee the origin of electricity.

## ISO 50001

An energy management system based on the model of continual improvement as set out in other widely used ISO standards.

## Location-based approach versus market-based approach

A location-based method reflects that organizations use the average

emissions intensity of national power grids to calculate their carbon footprint from the use of electricity. A market-based method reflects emissions from electricity that companies have purposefully chosen. BioFirst uses both approaches: we use location based averages where we did not choose a specific contract type (even should this be slightly better than the grid average). Where we do purposefully choose, we opt for contracting fully renewable energy (certified wind or solar).

## LTI: Lost Time Injury

A work-related injury that results in the loss of productive work time.

## SDGs: Sustainable Development Goals

17 interlinked goals set out by the United Nations in 2015 and adopted by all member states as part of the 2030 agenda for sustainable development. They provide "a shared blueprint for peace and prosperity for people and the planet, now and into the future".

## Waste separation percentage

Is the percentage of waste delivered as separated monostreams by BioFirst Group, that is readily reusable by other parties, such as waste companies.

## Worked hours

Is the number of worked hours globally. Where the number of worked hours are not measured, they may be calculated according to contractual working hours multiplied by the number of active days. Active days do not include any days of leave or other lawful absence (non-working days in the weekend, (public) holidays, respite, sick leave, maternity or paternity leave, filial leave, etc.).

# Annex: BioFirst Group consolidated ESG data

|  | 2019    | 2024          |
|--|---------|---------------|
| CO <sub>2</sub> emissions scopes 1 & 2 (in tons, location based) | 19,867  | 24,394        |
| CO <sub>2</sub> emissions scope 3 (in tons)                      | 1,375*  | 277,193       |
| *2019 includes business travel and commuting only                |         |               |
| Number of Lost Time Injuries                                     | 81      | 41            |
| Incident Frequency rate  | 23.5    | 6.6           |
| Absenteeism  | 1.60    | 0.81          |
| Discrimination incidents reports                                 | N/A     | 4             |
| Total amount of waste (in tons)                                  | 17,192  | 28,604        |
| Waste separation %   | 58.5%   | 76.2%         |
| Tap water usage (in m <sup>3</sup> )                             | 216,353 | 160,687       |
| Water usage from other sources (in m <sup>3</sup> )              | 333,307 | 494,944       |
| Number of research internships                                   | 16      | 16            |
| Number of assessment centre assessments                          | 11      | 47            |
| Hours of internal training on the Biobest Academy                | N/A     | 1646          |
| Number peer-reviewed scientific papers                           | 13      | 20            |
| Total number of employees  |         | 2,970         |
| Total number of FTE  |         | 2,937.6       |
| Permanent / temporary employees %                                |         | 92.4% / 7.6%  |
| Men / women %  |         | 62.5% / 37.5% |
| Employees by age group %   |         |               |
| < 20   |         | 1             |
| 20 to 30   |         | 20            |
| 30 to 40   |         | 32            |
| 40 to 50   |         | 26            |
| 50 to 60   |         | 17            |
| > 60   |         | 4             |
| Employees by years of service %                                  |         |               |
| 0 to 1   |         | 13            |
| 1 to 3   |         | 19            |
| 3 to 5   |         | 14            |
| 5 to 10  |         | 34            |
| 10 to 20   |         | 13            |
| > 20   |         | 7             |
| Inflow and outflow of personnel                                  |         |               |
| Outflow: employee turnover %                                     |         | 18.1 %        |
| Inflow: new hires %  |         | 16.5 %        |
| Number of nationalities employed                                 |         | 37            |
| Employees with detailed information in Employee Central          |         | 1,496         |





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