



 **arvesta**  
*Experts in the field*

**ACTIVITY**  
**REPORT**  
**2022**



This 2022 Activity Report is the third of its kind for Arvesta. It tells our story – a story we are very proud of – and it allows us to report on our year-to-year progress in a comprehensive and transparent manner.

For more information, check back regularly:  
[www.arvesta.eu](http://www.arvesta.eu)  
[www.linkedin.com/company/arvesta/](https://www.linkedin.com/company/arvesta/)

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# Foreword from the CEO



**Eric Lauwers**  
Chief Executive Officer

In the future,  
there is only  
space for  
sustainable  
**agriculture**

Today more than ever, farmers deserve our wholehearted support. We must assist them in word and deed and, together with them, tackle the challenges of tomorrow. And that is exactly what we are doing. More than ever before, we are pulling out all the stops to continue to build a new agriculture – an agriculture that can only be sustainable. Because in the future, there is only space for sustainable agriculture. And we are doing everything we can to make this a reality. Our innovations, such as the methane-reducing Euroclim feed, ecological alternatives for synthetic fertiliser, precision technology, Carbon Farming, greenhouses, and so much more, are all proving that it is possible in today's market. Our sustainable innovations unite ecology with profitability.

### **We continue to grow and invest, for farmers and horticulturists**

Arvesta has continued to invest unceasingly in the development of these forward-looking innovations. Ever since the launch of our Stronger Together transformation project in 2017, we have continued to believe in a new future that unites ecology with profitability. In fact, from 2017 through 2020, we have invested more than 155 million euros in the future of our organisation – IT, production sites, logistics, training... – but, in equal measure, we have also invested in the future of agriculture, especially in agricultural innovation. And for the period 2021 through 2025, we will increase this investment to 275 million euros. This reflects our firm belief in the agriculture of the future. At the same time, as an organisation, we continue to

post strong growth figures (growth for the sixth year running) and to internationalise, and our employee satisfaction has risen to 91%, as shown in our 2022 pulse-check.

### **Arvesta as an indispensable link in the food chain**

Every day, thousands of farmers and growers are working to ensure a healthy and sustainable food supply. What arrives on our plates daily is there thanks to their hard work. Arvesta is an indispensable link in that food chain, especially by way of the expertise and guidance it offers to farmers and horticulturists. We are a unique knowledge centre within the agricultural sector, like the spider in the web that exists between the farmer, the producer, and the retailer/consumer. This allows us to occupy a unique position. The Alken-Maes Brewery, for example, wanted to increase its use of local barley in an effort to reduce its ecological footprint. Just like the people at Alken-Maes, the farmers the brewery asked to grow this barley did not always have the knowledge they needed to tackle this project. That's how they ended up at our door. Our experts then guided the process from start to finish. The result was a successful harvest and a sustainably grown Cristal beer.

### **Sustainable yet profitable? We prove it can be done.**

Economy and ecology absolutely must go hand in hand – if not, we are sure to hit the limits of growth. Is this a challenge?

Absolutely. Are we 100 percent there today? No, we are not. Yet, this is the only way forward, because in the future, there is only space for sustainable agriculture.

One aspect of this sustainability is circularity. For example, Arvesta is developing the fertiliser Haspargit, which is formulated on the basis of residues from the food industry. Not only does Haspargit reduce waste, it also provides extra nutrients to the soil. Today we have already converted 63 percent of the conventional fertilisers used for potatoes to eco-friendly fertilisers.

Another such innovation is Euroclim livestock feed for dairy and beef cows. When cows eat Euroclim, they emit up to 30 percent less methane. This has a huge, positive impact on climate change. If all Belgian cows were to be fed with Euroclim, it would have the same effect, in terms of CO2 emissions, as 130,000 fewer cars on the road every day.

### **Fighting on equal footing: a level playing field**

Beside all the amazing innovations, there is also this critical note: While Belgian farmers do their best to grow crops and cultivate livestock as ecologically as possible, on the other side of the world, less stringent rules apply. For example, greenhouse gas emissions from dairy and beef cows in Brazil are more than double what they are in Belgium. Yet meat and vegetables from all corners of the world can be bought in our supermarkets without a problem.

Belgian farmers are working long and hard to keep our food safe and healthy. Everything here is traceable, there is attention to animal welfare, and the final product is of the highest quality. Very strict legislation applies, and that is just as well. Nowhere can you eat better and healthier food than in our country. At the same time, in our supermarkets you can find Argentinian steak, blueberries from Peru at dumping prices or wine from Chile, countries that use plant protection products and fertilisers that are banned here.

The solution? Well, it lies with three actors. The first of these is the consumers, who still do not stop and think enough about the products they buy. Meat that was flown in is often of lower quality, while, no matter how you look at it, the local alternative is always healthier and more sustainable. Retailers also play a significant role. They must pay the farmers the correct price. Because if we want to ensure that there is financial room to innovate, then we must work hard to ensure that farmers get a correct income for their work. That is certainly not the case today. The government also has an important role to play. Consider our southern neighbours. France has decided to stop importing food products that do not comply with the rules that apply to French farmers. We are in favour of implementing something similar, not only in Belgium, but across the whole of Europe. This is the only way to create a level playing field for all. And we need that, both on a European and global level.

# REALISATIONS 2017-2020



# AMBITIONS 2021-2025

CAPEX INVESTMENTS  
More than 155 million euros

GROWTH  
Net result +74%

ACQUISITIONS



CAPEX INVESTMENTS

275 million euros

PEOPLE ENGAGEMENT

2021	2025
71%	75%

FOOTPRINT

Growing international footprint

	2016	2025
Abroad	10%	30%
Belgium	90%	70%

GROWTH

EBITDA 73.7 million euros  
↓  
+50%

ACQUISITIONS



+ ...

\*Arvesta currently holds a stake in Van der Hoeven and plans to increase this.

# ABOUT ARVESTA

**121** years  
the leading partner  
for agriculture and  
horticulture

  
**2,300**  
Experts in the field

## International activities



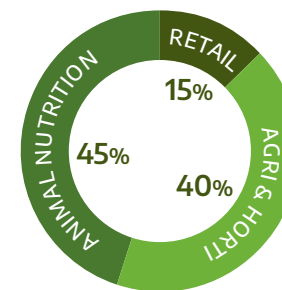
with locations in  
The Netherlands,  
Germany and France

More than **40**  
strong brands  
divided over  
3 business sectors



€ **1.9**  
billion  
consolidated revenue

Revenue  
percentage  
per  
business sector



€ **69** million  
investments in  
innovation, IT and  
production sites  
for 2022

## RETAIL

**200** Aveve  
stores



 **3** Eurotuin  
stores



**15**  
consecutive  
years



**3**  
consecutive  
years

**50** stores under own  
management

**210,000** m<sup>2</sup>  
shopping fun

## ANIMAL NUTRITION

 **1.6** million tonnes  
global distribution per year

 **14** production sites

 Specialist  
in both professional  
and hobby feed

## AGRI & HORTI



John Deere **importer**  
and **distributor**



**Global leader** in Mobile Gully  
Systems with Hortiplan and greenhouse  
systems with Van der Hoeven



**Belgian market leader**  
in seeds, grains and plant nutrition  
& protection for all crops



# ABOUT US | EXPERTS IN THE FIELD

Growth is the key word at Arvesta. Not just any growth, but sustainable growth, for Arvesta itself and for our various stakeholders. That is the driving force in everything we do and, therefore, also in the way we treat our people – our Experts in the field. Sustainable growth throughout their entire careers is our goal for them.



**Karin Van Roy**  
Chief Human Resources Officer

## Our objectives 2021-2025

These are our five Human Resources (HR) priorities and how we plan to realise them:

### Actions on the agenda in 2023

#### 1 | Offering *the employee experience*

- One digital HR platform for all our Experts in the field for:
- The optimal digital experience
  - Attracting and keeping top talent
  - Less administration
  - A secure and General Data Protection Regulation (GDPR)-compliant technical environment

#### 2 | Attracting new talent

- Strengthening our employer brand at an accelerated pace **✗**
- Continued upscaling of the Young Graduates Program (Also see page 70.) **✗**
- Developing and applying adapted working conditions and elaborating and implementing wage benchmarks, together with social partners **✗**
- Optimising our onboarding experience **✗**

PREPARATION

### Actions on the agenda in 2023

#### 3 | Acquiring the skills needed to succeed together

- Guaranteeing supportive leadership **✗**
- Feeling good = performing well: monitoring progress **✗**
- Strengthening the Arvesta Academy including > 120 soft-skills training courses, Commercial Excellence Academy, etc. **✗**
- Increasing internal mobility **✗**

#### 4 | Strengthening the Arvesta culture and Arvesta leadership in order to promote our mission and growth

- Creating a mobile app based on our mission, vision, and values, for the purpose of reaching everyone, including the blue-collar workers **✗**
- Continuing to develop an internal communications cell **✗**
- Further expansion of Fit@Arvesta **✗**
- Continued sustainability communication **✗**

#### 5 | Shaping our HR Department to succeed as a strategic business partner in Europe

- Pursuing operational excellence **✗**
- Further transformation into a single, European company **✗**



# Achievements in 2022

In 2022, we were able to achieve several HR goals by completing several specific projects:

## 1 | Offering *the employee experience*

### **Connected, autonomous, and supported**

In 2022, Arvesta selected SAP SuccessFactors as its strategic and European Employee & HR platform. SAP SuccessFactors will fully digitise Arvesta's HR landscape, offering individualised experiences and strategic solutions that enable employees to reach their full potential. Which gives people a sense of belonging, autonomy, and support.

## 2 | Attracting new talent

### **Young Graduates Program**

One of the ways that young people find their way to Arvesta is by way of our Young Graduates Program. In 2022, there were more candidates than positions. We also expanded our Young Graduates Community in 2022 by offering another 7 people a course lasting until 2024. In 2023, we anticipate supporting another 8 people in a course that will then run until 2025.

### **Employer Branding**

The fact that there is so much interest in our Young Graduates Program, for example, is a great feeling. It shows that we have managed to become more visible in a positive way. We have accomplished this via social media, job sites, and job fairs and, in 2022, also through Arvesta's participation in MNM JumpJobs.

By the way, in 2023 we will stand out even more, because in 2022, Arvesta designed a very nice and rather bold employer branding campaign under the slogan "Da's beestig" [That's wild]. It is actually our own people who are telling the outside world about Arvesta.

### **Sanac's Junior Sales Club**

When five of our experienced people left Sanac for the competition, we did not organise a sector-wide treasure hunt. Instead, we gave five junior sales talents, each paired in a duo with an experienced colleague, the opportunity to advance. It has been a great success – so much so that we plan to set up Clubs like this elsewhere.

## 3 | Acquiring skills

### **Arvesta Academy – digital version**

To enable our Experts in the field to learn anytime, anywhere, we have invested in the digitalisation of the Arvesta Academy. With FlowSparks, we can capture, structure, and share internal knowledge. In 2022, we launched 27 digital modules in 4 focus areas (onboarding, sales, IT, and retail) and launched the "create your own e-learning" concept. The popularity of the digital Arvesta Academy is not a given. It works because our Academy offers real solutions to real needs. But this is not a coincidence. The approach we take to every training course we offer is based on seeing the employee's perspective: What's in it for me?

Aveve's franchisees will also have access to the Arvesta Academy.

## 4 | Strengthening the Arvesta culture and leadership

### **Arvesta Activity Report 2021**

Arvesta's DNA is strong and varied, and occasionally it is a good idea to say so. In 2022, the Arvesta Activity Report 2021 was a good example of this. The direct target audience for the report may be external, but the report was written just as much for Arvesta's own people, and this created internal momentum. We do not make an annual report just for the sake of making an annual report. Just as we don't complete an Engagement Survey just for sake of the survey or set up an Arvesta Academy simply for the course offerings themselves. And just like the HR Tech Tool that we will continue to develop in 2023 is not an IT project but a project that focuses on employee experience. It is always all about the people. Because it is together with our 2,300 experts that we will achieve our successes.

### **Engagement Survey**

We organise the Engagement Survey as often as necessary. During the COVID pandemic, for example, that was sometimes every six weeks. What we really want to know from our people is this: How is it going? Both personally and in your day-

to-day work. That is the essence. Sincere interest in how our people are doing is not a privilege of HR. Every manager must be aware of this; it should be ingrained in their approaches to leadership. Because the world and the work are constantly changing. We make sure our people are ready for this.

## 5 | Shaping our HR Department

### **On our way to a single, European company**

Arvesta is 70/30 Belgian/European. In 2022, we reinforced our Stronger Together ambitions beyond our own borders. More specifically, in December, the people data from the Netherlands and France were also centralised and harmonised into the single Arvesta system. This is so much more than just a technical operation. It ensures that people can be doing the right things no matter where at Arvesta they are.

### **Corporate HR Award**

Hybrid working and being smarter about being "on the road" was already part of our Arvesta Way of Working, even before we were recognised for it by the Pioneering Employer certificate. COVID has been an extra accelerator. It made us feel like true trailblazers in the Pioneering Employer certification process. In fact, our HR policy has since also earned us a Best Workplace Transformation recognition.

# FINANCIAL RESULTS & CORPORATE GOVERNANCE

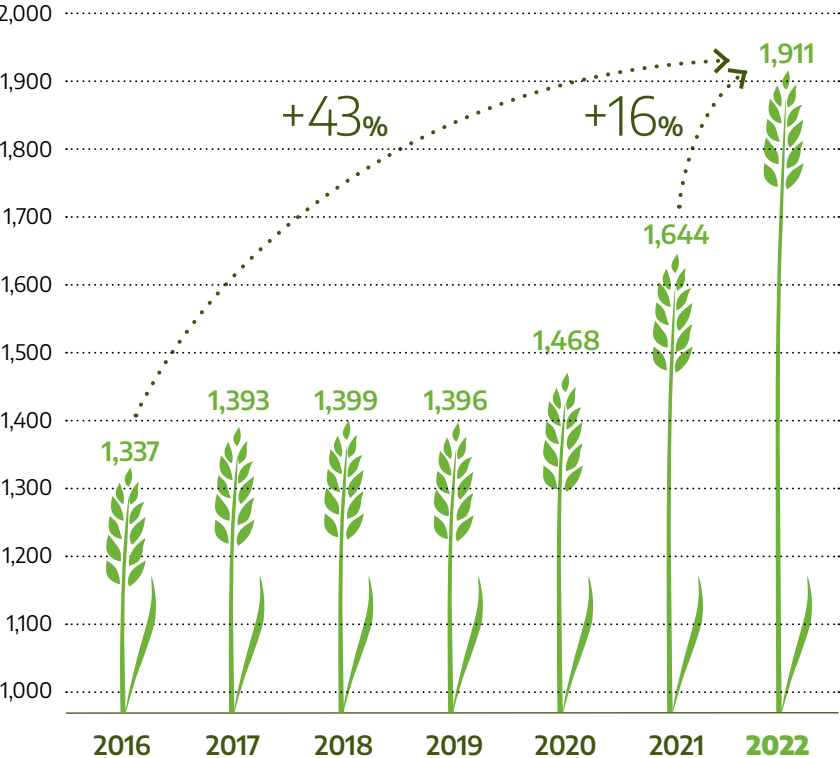
## KEY FIGURES

(in million EUR)	2022	2021	2020	2019	2018	2017	2016
Turnover	1,911	1,644	1,468	1,396	1,399	1,393	1,337
Gross margin	365	349	324	306	304	298	286
EBIT (Operating profit)	34	39	40	35	44	34	30
Net Profit	25	25	29	26	24	21	16
Number of employees in FTE	2,033	2,056	1,995	1,869	1,883	1,799	1,883
EBITDA	80	79	73	67	73	66	63
Net financial debt	108	149	113	99	113	80	79

# GROWTH

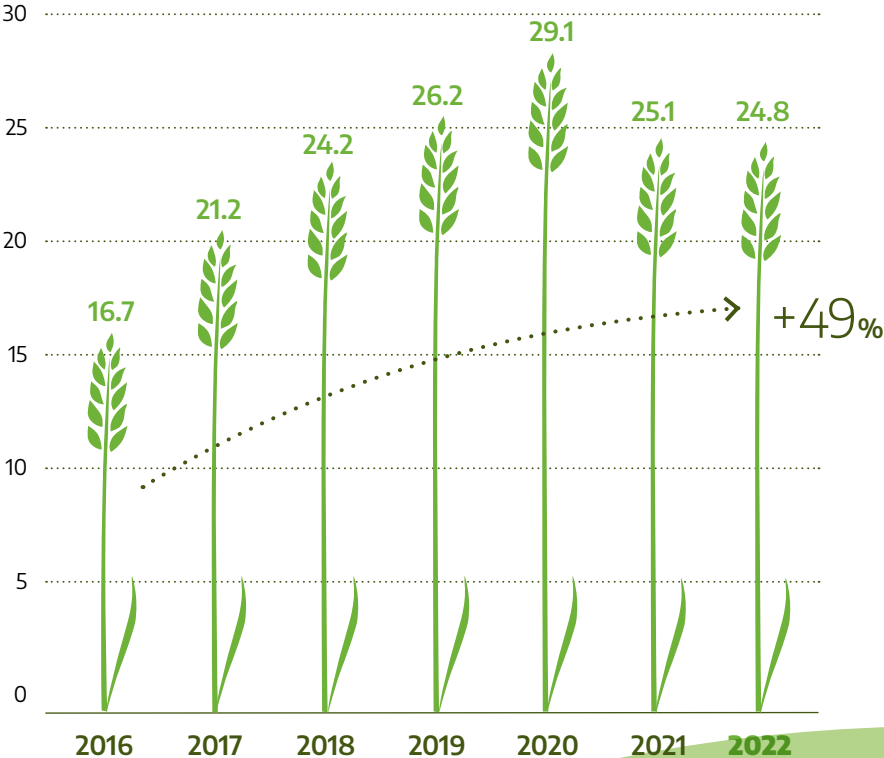
## TURNOVER

(in million EUR)

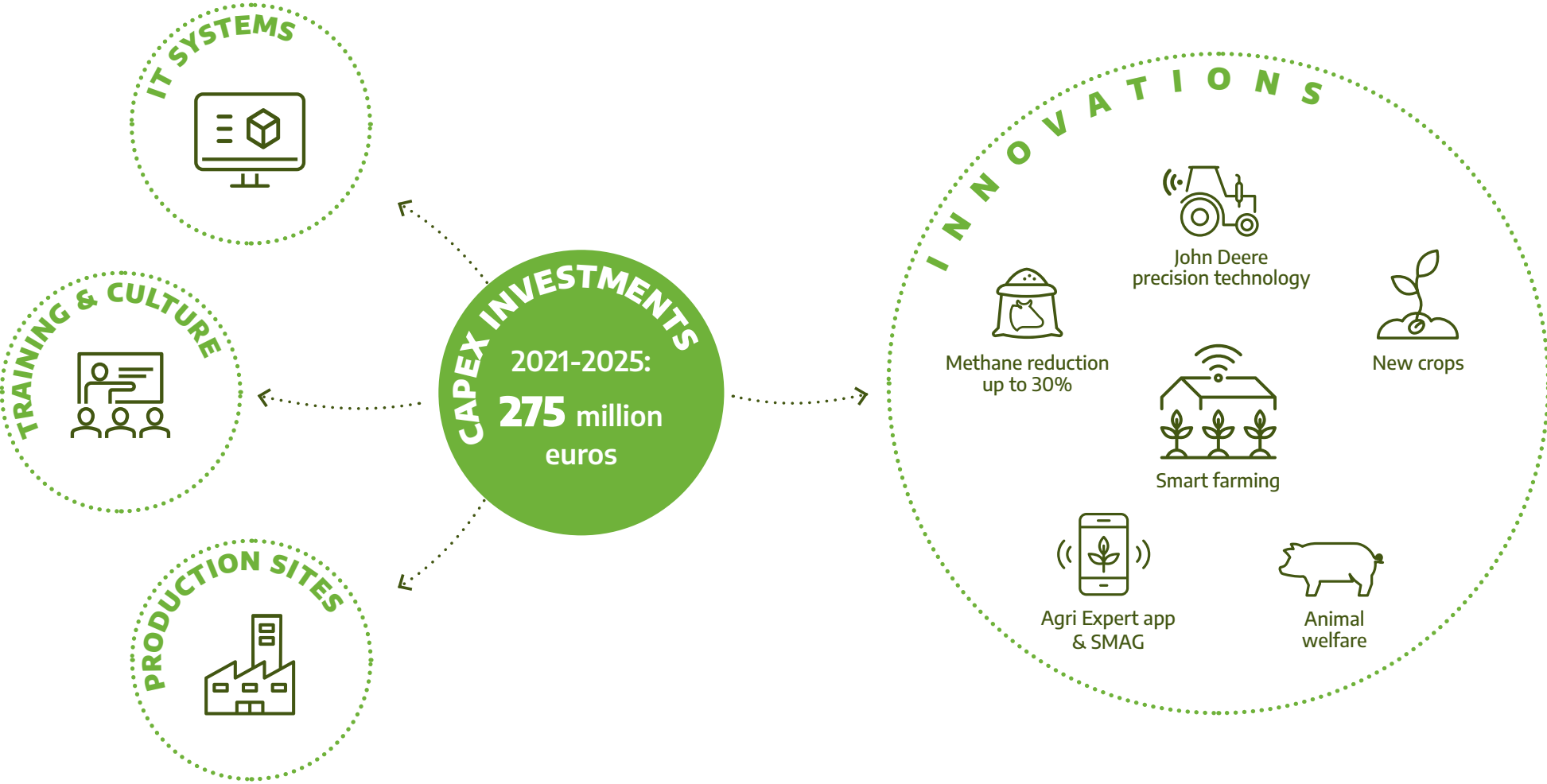


## NET PROFIT

(in million EUR)



# INVESTING IN THE FUTURE



## NOTES ABOUT THE FINANCIAL FIGURES



The consolidated financial statements of Arvesta BV (the “Company”) include the financial statements of the Company and its subsidiaries (hereinafter referred to as “Arvesta”).

The consolidated financial statements provide a general overview of Arvesta’s activities and the results achieved.

The financial statement is prepared in millions of EUR in accordance with BE GAAP.

The annual and consolidated accounts have been audited by EY bedrijfsrevisoren BV, De Kleetlaan 2, 1831 Diegem, represented by Wim Van Gasse (A-02276).

More information can be found on the website [www.nbb.be](http://www.nbb.be).

## CONSOLIDATED PROFIT AND LOSS ACCOUNT

(in million EUR)	2022	2021
Consolidated turnover	1,911.5	1,644.3
Cost price of goods sold	-1,546.5	-1,295.2
<b>GROSS MARGIN</b>	<b>365.0</b>	<b>349.1</b>
Services and other goods	-171.9	-176.7
Remunerations	-141.6	-141.1
Provisions	-0.2	2.6
Other operating expenses	-7.2	-6.5
Produced tangible assets	9.5	26.7
Other operating income (net)	26.6	25.2
<b>EBITDA consolidated</b>	<b>80.2</b>	<b>79.3</b>
Amortisations	-42.5	-40.8
Depreciations	-3.8	0.3
<b>EBIT (Operating profit)</b>	<b>33.9</b>	<b>38.8</b>
Financial result	-4.8	-3.1
Goodwill amortisation	-3.8	-4.8
<b>Profit for the financial year prior to taxation</b>	<b>25.3</b>	<b>30.9</b>
Tax	-11.5	-12.0
Change in equity share	11.6	7.5
Minority interests	-0.6	-1.3
<b>Consolidated profit</b>	<b>24.8</b>	<b>25.1</b>

## CONSOLIDATED BALANCE

<b>ASSETS</b> (in million EUR)	<b>31.12.2022</b>	<b>31.12.2021</b>
Intangible fixed assets	85.2	83.3
Tangible fixed assets	198.5	196.7
Financial fixed assets	26.3	22.8
Consolidation differences	8.0	11.2
<b>FIXED ASSETS</b>	<b>318.0</b>	<b>314.0</b>
Receivables (long term)	1.2	2.1
Inventories	375.3	287.4
Commercial receivables	241.9	229.7
Other receivables	11.9	14.6
Liquid assets	85.7	83.3
Deferred charges and accrued income	4.6	3.4
<b>CURRENT ASSETS</b>	<b>720.6</b>	<b>620.5</b>
<b>TOTAL ASSETS</b>	<b>1,038.6</b>	<b>934.6</b>

<b>LIABILITIES</b> (in million EUR)	<b>31.12.2022</b>	<b>31.12.2021</b>
Equity	509.7	408.4
Third-party interests	4.4	6.4
Provisions	10.3	10.5
Long-term financial debts	178.5	188.8
Short-term financial debts	15.0	44.1
Trade payables	235.1	201.6
Advances	44.6	32.3
Social and fiscal debts	35.7	32.3
Other payables	5.3	10.2
<b>CURRENT PAYABLES</b>	<b>320.7</b>	<b>320.5</b>
<b>TOTAL LIABILITIES</b>	<b>1,038.6</b>	<b>934.6</b>

### 2022 DEVELOPMENTS

- Turnover up by 267 million EUR (16,3%)
- Gross margin up by 15,9 million EUR (4,6%)
- EBITDA increased by 0,9 million EUR (1,1%)

# CORPORATE GOVERNANCE

## Corporate Governance Charter

The most recent version of the Arvesta Corporate Governance Charter was approved by the Board of Directors on 8 April 2022.

In this Corporate Governance Charter (the Charter), the Board of Directors explains the main aspects of its corporate governance policy within Arvesta (the Company) and, where relevant, within the group.

The Charter is based on the provisions of the corporate governance code for unlisted companies (Bysse Code III (2017)). It also complements the corporate governance provisions contained in the Companies and Associations Code (CAC (2019)) and the Company's Articles of Association.

The corporate governance rules aim to ensure efficient and transparent governance of and effective control over the company. The Board of Directors believes that clear corporate governance arrangements contribute to long-term value creation.

The Charter describes the composition, responsibilities and powers of the various bodies of Arvesta and regulates their operation. The Charter aims to provide a clear reference framework for efficient cooperation between the general meeting, the board of directors and management within the company.

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## Arvesta structure and operation

Arvesta BV has opted for a collegiate management body ("Board of Directors"). The Board of Directors draws up the strategy, is responsible for the general policy, is authorised to perform all acts that are reserved to the Board of Directors by virtue of the CAC and the articles of association and represents the Company.

The Board of Directors manages as a body and is accountable to the General Meeting, which appoints and dismisses the directors and decides annually on the discharge of the directors. The Board of Directors

is also responsible for supervising the implementation of the strategy and general policy by the CEO (Chief Executive Officer or Managing Director) and the ExCom (Executive Committee).

The CEO, assisted by the ExCom, is responsible for the day-to-day management of Arvesta within the strategy and general policy approved by the Board of Directors, and for their implementation. He submits proposals in this regard to the Board of Directors.

The ExCom is responsible for the implementation of the policy. The CEO leads the ExCom. The members of the ExCom report directly to the CEO.

For certain ad hoc matters, ExCom members may be asked to provide clarification during Board meetings. The ExCom members are responsible for developing proposals on the strategy to be followed within their respective areas of competence (business units or corporate functions) and for implementing this strategy as part of Arvesta's strategy.

Within each BU a "DirCom" has been established which is responsible for the implementation of the strategy within the BU. The DirComs are chaired by the BU Director.

The DirCom is responsible for setting the BU's budget, which includes the BU's short-, medium- and long-term strategy.

## COMPOSITION OF THE BOARD OF DIRECTORS



**Sonja De Becker**  
Chairwoman of the Board



**Eric Lauwers**  
Executive Director  
CEO



**Raf Sels**  
Non-Executive Director



**Kurt Deketelaere**  
Non-Executive Director



**Luc Gijssens**  
Independent Director



**Sophie Dutordoir**  
Independent Director



**Patrick Horten**  
Non-Executive Director



**Patrik Haesen**  
Non-Executive Director



**Pieter Verhelst**  
Non-Executive Director



**Marleen Vaesen**  
Non-Executive Director



**Rianne Covens-  
van Tilburg**  
Non-Executive Director



**Stefaan Gheeraert**  
Non-Executive Director

Arvesta's Extraordinary General Meeting on 9 August 2022 took note of the resignations of Messrs Georges Van Keerberghen and Marc Wittemans who had both reached retirement age and resigned their mandates on 31 August 2022.

During the meeting, Ms Sonja De Becker, chairwoman MRBB, and Mr Raf Sels, CEO MRBB, were appointed the new Directors of Arvesta. Ms De Becker was also appointed Chairwoman of the Board of Directors.

Upon the proposal of the Board of Directors, the General Meeting decided to extend the mandates of Messrs Horten, Haesen and Verhelst, which had expired at the 2023 Annual Meeting, until 31 December 2023. At that time, Mr Gijssens'

mandate will also expire due to his reaching the statutory age limit. Over the next few months, the Board of Directors will be looking for the right profiles to fulfil these mandates.





**Dirk Van Thielen**  
Business Unit Director  
Animal Nutrition

**Sabine De veilder**  
Chief Marketing Officer

**Stijn Vermeulen**  
Chief Information  
Officer

**Stefan De Clercq**  
Business Unit Director  
Franchise & Retail

**Kris Geysels**  
Chief Financial  
Officer

**Paul Deleu**  
Secretary General

**Karin Van Roy**  
Chief Human  
Resources Officer

**Eric Lauwers**  
Chief Executive  
Officer

**Niek Depoorter**  
Business Unit Director  
Agri- & Horticulture

COMPOSITION OF THE EXECUTIVE COMMITTEE

# OPERATIONAL SITUATION

Arvesta consists of

**3 Business Units**

with a total  
**of over 40 brands**

Arvesta supports farmers and horticulturists by offering them innovative solutions that further strengthen their entrepreneurship. We are a total supplier of advice and solutions, and our goal is to make our agriculture and horticulture future-proof and resilient in a global market.



## BUSINESS UNIT

# ANIMAL NUTRITION

### PROFESSIONAL FEEDS



### HOBBY AND HORSE FEEDS



### FEED ADDITIVES



1 Proxani, Kortrijk



2 Aveve Veevoeding, Aalter



3 Lannoo, Erpe-Mere



4 Aveve Veevoeding, Merksem



5 Natural Granen, Schoten



6 Natural Granen, Schoten



7 Proxani, Andenne



8 Proxani, Hombourg



9 Arie Blok, Woerden



10 Palital, Verdriel



11 Arie Blok, Balgoij



12 Sabé, Arques



13 Mifuma, Mannheim



14 Hafner Futter, Ichenhausen

Our Animal Nutrition Business Unit serves all animal groups with high-quality feed, for both professionals and hobbyists. Animal Nutrition is the market leader in this sector in Belgium. This Arvesta Business Unit has 14 production sites spread across Belgium, France, Germany, and the Netherlands. Together, they realise annual sales of about 1.6 million tonnes.

## Animal Nutrition in 2022

In 2022, the Animal Nutrition Business Unit managed to penetrate the market even further with its sustainable innovations. Meanwhile, more than 300 farmers are using the methane-reducing feed Euroclim. The new “Pré de chez nous” label was

launched – a label for delicious, local, and sustainably farmed meat. Arvesta also helped introduce “Beter Leven Kip” [Better Life Chicken]. This concept has led to slower-growing chickens, which are available in many supermarkets today.

## BUSINESS UNIT AGRI & HORTI

**SEEDS AND SEED POTATOES**

**PLANT NUTRITION**

**PLANT PROTECTION**

**HORTI-CULTURE**

**AGRICULTURAL AND HORTICULTURAL MACHINERY**



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### Agri & Horti in 2022

The specialist and Belgian market leader in seeds and grains, plant nutrition, and plant protection products is our Agri & Horti Business Unit. Agri & Horti consists of various production and storage facilities located in Belgium, the Netherlands, and France, plus some 50 grain depots in Wallonia and Northern France. As a John Deere importer and distributor, we are also active in agricultural and horticultural machinery.

Agri & Horti activities and projects did particularly well in 2022. Thanks to our sustainable innovations, we managed to replace as much as 63% of the synthetic fertilisers used to grow potatoes with ecological alternatives. Together with

Alken-Maes, Dossche Mills, and La Lorraine Bakery Group, among others, we are taking the first steps to introduce Carbon Farming on a large scale. And, with John Deere, our market share for larger farm machinery (+150 hp) grew from 18% to 30%.



## BUSINESS UNIT RETAIL

Through our Retail activities, we offer consumers a whole range of high-quality products based on our agricultural expertise. Our store network consists of 200 Aveve shops, some of which are owned by us and others owned by independent business owners, and 3 Eurotuin shops.

### Retail in 2022

For the third year in a row, Aveve shops have been voted Retailer of the Year Belgium, which is an absolute first in this category. On top of this, we also scooped up the award for Retailer of the Year Belgium in the Pet specialist shop category for the 15th year in a row. Meanwhile, we continue to work on the rollout of our new shop concept. In doing so, we are giving our shops a complete, fresh makeover, to further inspire our customers and provide an even more enjoyable shopping experience. 100 shops have already made the switch.



# THE TRUE COST OF FOOD



## 1 | Sustainable butter, milk, and cheese

It starts by providing Euroclim feed from Arvesta to dairy cattle. The effect? A reduction in methane production of up to 9%. (Methane is a greenhouse gas that contributes to climate change.) The result? A delicious glass of milk with a reduced CO2 footprint.



## 2 | Delicious meat with a lower CO2 footprint

It starts by providing Euroclim feed from Arvesta to beef cattle. The effect? A reduction in methane production of up to 30%. The result? A tasty piece of meat with a lower CO2 footprint.



## 3 | Bread made from local grain

It starts by supporting Belgian farmers who cultivate sustainable wheat. The effect? Eco-friendly fertilisation and crop protection, fewer CO2 emissions, less transport, more biodiversity, and a fair price. The result? Delicious, locally sourced bread.

Food concerns us all. A broad consensus on the need for sustainable food continues to gain momentum.

This consensus has not always existed. After World War II, the primary need was for sufficient quantities of food, and people wanted a model that would greatly increase agricultural and horticultural yields. And that worked. In terms of food supply, we are better off today than, say, 100 years ago.

However, what that more profitable model did not do was take into account the true cost of food. The impact on (animal) welfare, climate, water, soil, and biodiversity... these were not priorities then. But over the years, that has changed. The realisation that our food system is not sustainable in the long term due to its heavy pressure on our ecosystem has been gaining ground. And with that realisation, there is now also a growing awareness that the efforts made by farmers to produce food with less environmental impact must be more highly valued.

### The solutions are there – so what are we waiting for?

Service providers, with Arvesta in the lead, have become highly motivated to start looking into possible solutions for the food supply of tomorrow. In addition to developing innovative products and services, Arvesta also advocates a fairer earning model for farmers. Because sustainable agriculture and livestock farming require more time, more investment, and more expertise. Of course, we get a lot in return.



#### 4 | Chicken with attention to animal welfare

It starts with balanced, sustainable feed from the leading brand Spormans for locally reared chickens with longer lives. The effect? A chicken feed that contains all the necessary nutritional elements while, at the same time, having the lowest possible impact on the environment. The result? Healthy animals and delicious chicken meat!



#### 5 | Plant-based treats

It starts with pioneering vegetable proteins, such as the duo cultivation of peas & wheat and locally grown organic soy. The effect? More local, raw materials and fewer imports. The result? For farm animals high-quality concentrates as an alternative to imported soy, and for humans, tasty spreads and meat substitutes from De Hobbit.



#### 6 | Beer from here

It starts by supporting local farmers to grow sustainable barley. The effect? A short supply chain with a reduction in the impact on the climate. The result? A delicious, refreshing beer from here.

### Correct value distribution – a benefit to everyone

Today, some 5 percent of the retail price of a loaf of bread goes to the farmer, while it is exactly there, on the farm, that innovative techniques allow us to reduce the CO2 footprint of a loaf of bread by more than half. We can also significantly reduce the footprint for meat and milk. In terms of CO2 emissions, if all the beef and dairy cattle in Belgium were fed solely the methane-reducing feed

Euroclim, this would be equivalent to 130,000 fewer cars on the road every day.

Nowhere can you eat healthier and safer than in Belgium; our farmers produce the finest quality. If we can give them correct prices and a level playing field, they will continue to do so. One thing is clear: This challenge requires everyone – farmers, their suppliers and advisers, auditing firms, banks, the food industry, retailers, consumers... – to close ranks. Chain partnerships are

required if we want to have a real impact on greenhouse gases, water, and biodiversity, among other things. If the right parties work together, it is possible, today, to move towards a value distribution within our food ecosystem that rewards the correct practices and delivers sustainable and affordable food.



**Simon Eyers**

Business  
Development Manager  
Agri & Horti



**Quinten De Witte**

Innovation &  
Sustainability  
Manager



## RESEARCH, DEVELOPMENT AND INNOVATION

Just like the rest of society, agriculture and horticulture are facing a significant challenge: How do we make the food chain more sustainable? Arvesta, with its research, development, and innovation, has a multifaceted ambition to foster the agriculture and horticulture of today and of tomorrow.

Arvesta always looks at challenges from four different angles:

1. What new services and products does the farmer need?
2. How can we address this in an integrated way on the farm itself?
3. How do we work together with farmers to meet the needs of the food industry?
4. What digital solutions do we need to tackle all of this as efficiently as possible?

Through our bold approach to complex challenges such as global warming, biodiversity, and animal welfare, we have succeeded in being an indispensable link in the food chain.

### The future of agriculture and horticulture

Arvesta's ambition is to guarantee the future of agriculture. We assess the challenges and define the priorities, and aim, together with the sector, at developing more sustainable dairy products, meats, grain products, fruits and/or vegetables. By continuously

developing and offering new products, we help the future of agriculture in its transition to a more sustainable food chain.

In this way, Arvesta offers solutions that make agriculture and horticulture a sustainable business model. We are continuously investigating which products can help us achieve a smaller footprint, which products are more efficient, where the opportunities lie for circular alternatives, etc. We then develop those products and test them out. Once they have been perfected, we add them to our product offerings. In other words, in Arvesta, the farmer and the horticulturist have a partner that provides them with:

- Feed
- Seeds & seedlings
- Plant nutrition
- Crop protection
- Machinery
- Horticulture automation

### The agriculture and horticulture of the future: Arvesta is more than just its product range

*Simon Eyers, Business Development Manager Agri & Horti:* 'Arvesta is more than just its product range. We are also the agricultural and horticultural specialist that provides well-founded guidance, with a view to sustainability and optimisation, to help manage the agricultural and horti-



cultural business as a whole. Farm management based on knowledge and data that makes use of technology and digitalisation – that is the agriculture and horticulture of the future. Arvesta helps farmers to stay on the right path and to increase their efficiency, thereby increasing their contribution to a more sustainable food chain.’

**Arvesta, the knowledge partner between agriculture & horticulture and the food industry**

Today, Arvesta is already playing an active role in making our food chain more sustainable. As an expert mediator between the farmer and horticulturist, on the one hand, and the food industry, on the other, and beyond that to the retailer and consumer, we are the spider in the centre of the web.

In this role, we strive to create added value by way of our innovations, on the one side, by devoting our efforts to obtaining the correct appreciation and fair prices for local agriculture and horticulture. On the other side, we do this by ensuring that what the food industry buys from agriculture and horticulture is produced as sustainably as possible, i.e. with minimal impact on the soil, water and air quality, and biodiversity and with minimum waste and maximum care for the health and welfare of humans and animals. The total share of such collaborations rose sharply in 2022, thanks to partnerships with the Alken-Maes Brewery, Mondelez foods, several flour mills, chicken supplier Plukon and the “Pré de chez nous” meat label, among others.

**Local farm, food industry and Arvesta join forces in cultivation contracts and quality labels**

The role of expert mediator becomes very concrete in cultivation contracts, with a local farm, on one side, and the food company, on the other. How does it work? The farm can rely on Arvesta's expertise, solutions, and follow-up to ensure that the crop meets the buyer's specific requirements. For this extra effort, the farmer receives a better price, and he is guaranteed a buyer. The food company, in turn, is guaranteed the quality that Arvesta supervises and monitors.

- In 2022, under a cultivation contract with Alken-Maes, the first 200 ha of locally grown malting barley was harvested for the beer brand Cristal. Arvesta supports the local farm so that it can deliver to the brewer exactly the quality of barley needed for this tasty Belgian lager. The fact that the barley is locally grown, by the way, is essential to positioning this beer as truly Belgian.



Read this, too: “From field to fork” on pages 22-23.

- In the context of the Harmony Charter, Arvesta has a cultivation contract at Mondelez for 1,100 ha of grain for the biscuit brand LU. Together with the



local farm concerned and the biscuit brand, we commit to the terms of the Charter, thereby contributing not only to traceability from seed to biscuit but also to a richer biodiversity.

- Via the Belgian quality label “Pré de chez nous”, Arvesta is working with the Euroclim feed concept to promote sustainable and local beef with a lower CO2 footprint. In 2022, 15 Walloon farmers participated, and the meat was sold in some 30 outlets in Belgium.
- Arvesta co-launched the “Beter Leven Kip” [Better Life Chicken] concept. We are making a difference here, as one of the pioneers in Belgium, by motivating and advising poultry farmers to get on board with this concept and by providing them with adapted feed for these slower-growing chickens. This sustainable chicken can be purchased today at Lidl, Delhaize, Colruyt Group, and Aldi.

*Quinten De Witte, Innovation & Sustainability Manager:* ‘We are proud of the steps we take together with the food industry towards more local production. We are looking forward to continued structural cooperation, via the farmer, in supporting this sector – and by extension the retail

sector and the consumer – to find solutions for further increasing the sustainability of dairy, meat, grain products, and/or fruit and vegetables. In this way, all of us together can ensure a transition to more sustainable food, today and in the future.’

**Arvesta's sustainability ambitions are also directly visible to consumers**



Through our retail operations under the Aveve brand, Arvesta is also highly and directly visible to consumers. Our sustainability logo “We Care, We Act” makes it easy for these consumers to see how

and where everyday life can become more sustainable thanks to our products. We also use very concrete and practical tips, online and in the shops, to get consumers excited about making a more sustainable world a reality. “A more beautiful tomorrow grows here” is the (English translation of the) title of Aveve's sustainability plan. This plan has three pillars, three ambitions actually, achievable for everyone, with the help of a combination of products and tips & tricks:

- A biodiverse garden
- Happy and healthy animals
- Local delicacies

Read this, too: More on Arvesta's retail activities on pages 21 and 72.

# SUSTAINABILITY AT ARVESTA



## ARVESTA'S MISSION

Increasing the profitability of our farmers and horticulturists in a sustainable and innovative way – so that we can grow together – is the reason we come to work each day. Through our agricultural expertise, we also want to give our customers the best professional advice in our Aveve and Eurotuin shops.



## SUSTAINABILITY VISION

Arvesta will be more than ever a sustainable and innovative partner for the farmer, horticulturist and consumer of the future by 2025.



## AMBITION

Arvesta will be a leader in sustainability for the farmer, horticulturist and consumer through each of the three pillars by 2025.



### Pillar 1 | Sustainable agriculture and horticulture

As an expert in agriculture and horticulture, we offer the most sustainable and innovative solutions and services that guarantee farmers' and horticulturists' profitability. This is how Arvesta builds the agriculture and horticulture of the future with its customers and partners.

### Pillar 2 | Sustainable entrepreneurship

Together with our employees, partners, and customers, we work on sustainable, safe, and high-quality solutions and services.

### Pillar 3 | Care for our people and consumers

We work together for the well-being and safety of our employees. We strive for the best customer experience through our expertise and are committed to sustainable consumption.

**Arvesta, together with a working group of sustainability ambassadors, has formulated an overarching sustainability vision based on the Arvesta mission.**

**With concrete ambitions in 3 pillars, we focus on farmers, horticulturists, the planet, and our employees and consumers.**

Together with more than 50 of our experts, we have translated these ambitions into 36 commitments (see overview on pages 32-37). Numerous commitments are further explained by means of stories of achievements, actions and ambitions.

From the 36 commitments, we selected 10 sustainability priorities with measurable targets (see pages 38-39).

Starting in 2022, the 10 priorities were measured and monitored using an internal sustainability dashboard to measure progress against targets and to gain data-driven

insights into current facts and figures. (See pages 40-41.)

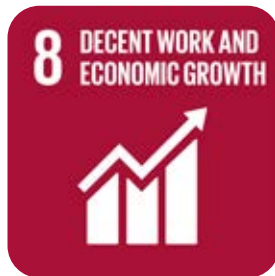
A double materiality analysis was carried out in 2022. (See pages 30-31.) From this, we learn which themes are most important to Arvesta and where we can make the greatest impact. We are currently reviewing our 10 priorities based on the lessons from the materiality analysis.

As a company, Arvesta falls within the scope of the Corporate Sustainability Reporting Directive and is preparing to report on FY2025 in 2026.

**Arvesta is particularly focussing on the following United Nations Sustainable Development Goals:**



Arvesta is continuously developing more sustainable and, simultaneously, more productive agriculture and horticulture processes, through innovations and technologies, with continuous advice for the farmer and horticulturist and by continuing to develop products and concepts with an eye for greater animal welfare and safety.



Arvesta aims for responsible economic growth, for itself and for the farmer and horticulturist, with committed employees and satisfied consumers.



Arvesta innovates sustainably in its own operations, with optimum traceability for its products, decreasing CO2 emissions both internally and externally, and realising a performance level of 'good' on the BREEAM standard for new buildings from 2020.



Arvesta is working with its customers and partners to make the food chain more sustainable, from field to fork, by committing to a sustainable purchasing policy for all its companies and by creating more transparency about the sustainability aspects of its value chain.



Arvesta is fighting climate change through its commitment to achieving CO2 reduction and also by reducing its direct impact, e.g. by ensuring 20% of its company cars are hybrid or electric by 2024.



As an expert in realising the agriculture of the future, Arvesta is the direct partner of farmers and horticulturists on a daily basis and acts as a constructive and accessible discussion partner for governments, the media and civil society.

# MACRO TRENDS

## CHALLENGES & OPPORTUNITIES

Our aim is to increase the profitability of our farmers and horticulturists in a sustainable and innovative manner so we can grow together. To achieve this, it is important to have a good understanding of the world around us. Market conditions are changing, and companies are expected to be resilient.

We regularly review our value propositions so we can respond to the changing conditions in our environment and so we can create more value for our customers. To properly align our strategic direction with the latest developments in our markets, we take into account the following important, macro trends that shape our operating environment:



### Consumer focus and awareness

- Changing purchasing decisions and habits
- Call for supply chain transparency and traceability and for sustainable products

### CHALLENGES

Companies will only be able to maintain their “licences to operate” if they meet the necessary consumer demands.

### OPPORTUNITIES

Changing consumer demands create opportunities for the use of new products and services.



### Climate change

- Climate risks and opportunities (extreme weather conditions / new products and business models)
- Expectations for setting ambitious decarbonisation targets

### Pressure on natural systems

- Loss of species and ecosystems due to climate change, pollution, changes in land use, and invasive species
- Scarcity of natural resources and ecoservices and the decline in circular products and business models
- Chronic and acute water shortages or flooding
- Decline in soil quality due to intensive practices and the nitrogen and phosphorus load



### CHALLENGES

The farmers, Arvesta, and their partners largely maintain their “licences to operate” on the basis of how and whether they meet the expectations of the agricultural sector and the rest of the chain. Failure to respond to these requirements and expectations could lead to a further loss of agriculture in our region, with a possible shift of production to regions with less regulation – with greater environmental impact as a result.

### OPPORTUNITIES

We continually respond in a proactive manner to trends within and beyond the sector. One way Arvesta does this is by being a pioneer in the Carbon Farming approach and by developing associated products, techniques, and services for the chain and the farmers. Arvesta does this by being a trendsetter in new techniques that increase yields and reduce impacts on soil, biodiversity, and water use. Feeds are increasingly being produced using raw materials from the circular industry and/or from sources that do not compete with human food. We develop products to reduce greenhouse gas emissions (see p. 48 among others) and systems to reduce water use (see p. 46 among others).



### Disruption of the global supply chain

- War in Ukraine and changing geopolitical factors
- Natural disasters

#### CHALLENGES

Intensive global value chains with limited resilience to shocks and limited buffers make it a challenge to maintain production and keep prices under control in the face of exogenous shocks.

#### OPPORTUNITIES

The Belgian and European agricultural sectors can create "shock resistance" by providing for the production of essential products within Europe.



### Digitalisation and automation

- Internet of Things
- Big Data & Analytics
- Artificial intelligence
- Metaverse
- Blockchain
- Privacy and data security

#### CHALLENGES

Consumers and retailers expect intensive digitalisation and automation in the food chain so that they have access to greater transparency and traceability.

#### OPPORTUNITIES

Comprehensive digitalisation increases the service provided to customers, reduces their workloads, increases efficiency, and offers clear traceability.



### Protection of humans and basic rights

- Awareness of human rights (including within the supply chain)
- Greater importance of diversity, equality, and inclusion
- Social and employee activism

#### CHALLENGES

- Companies should work on and safeguard good governance throughout their operations and with all stakeholders (employees, suppliers...), e.g. by means of a Charter.
- A society in continuous evolution expects companies to adhere to clear policies relating to diversity, equality, and inclusivity.
- Keeping our finger on the pulse of the social dialogue requires continuous contact with the various social partners.

#### OPPORTUNITIES

Constantly monitoring and responding to an evolving society and human rights ensures that we can give our employees every opportunity to develop to their full potential.



### Transparency

- Increased focus on corporate reporting (including sustainability reporting)
- Evolving regulations with a focus on sustainability transparency (CSRD, EU Taxonomy...)

#### CHALLENGES

Evolving regulations and policies related to agriculture and climate change can lead to uncertainty, unexpected changes in the legal framework, and additional costs for the farmers and the rest of the chain.

#### OPPORTUNITIES

By developing standardised ESG reporting, Arvesta can better understand the organisation's environmental performance, social impact, and governance structure. This can help us to focus more clearly on areas for improvement and to communicate about the results achieved. It can also help meet the expectations of more and more stakeholders and potentially attract sustainability-conscious investors and customers.

# DOUBLE MATERIALITY ANALYSIS ARVESTA



Arvesta invested in a double materiality analysis in 2022 (Material = relevant, essential, and crucial in this context). This analysis identified the ESG topics most crucial to Arvesta.

**A materiality analysis for a sustainability policy that is even more grounded in expertise**

Arvesta has, of course, been integrating ESG (Environment, Social, Governance)

into its operations for much longer. (See our Activity Reports 2020 and 2021, among others.) To achieve an approach to our ambitions that is even more grounded in expertise and to critically evaluate whether we are covering all impactful domains with

our sustainability strategy, we invested in a double materiality analysis, conducted under the guidance of KPMG, in 2022. This analysis resulted in a materiality matrix that allows us to:

- challenge Arvesta's existing sustainability strategy by identifying potential lacunae;
- build engagement related to sustainability among Arvesta's own Experts in the field and its relevant external stakeholders;

- prepare for the Corporate Sustainability Reporting Directive (CSRD), which Arvesta will have to comply with starting in 2025.

**Not a traditional materiality analysis, but a double one**

Arvesta opted for a double materiality analysis, i.e. an analysis with a dual perspective. In other words, we made an appraisal of the various ESG topics:

- what are the positive and negative impacts of Arvesta on society and the environment = from the inside out → the impact materiality on the y-axis of the matrix;
- what are the positive and negative impacts of the topic on Arvesta's (financial) success = from the outside in → the financial materiality on the x-axis of the matrix.

To inform itself broadly about which ESG topics could be potentially relevant for its business, Arvesta consulted various sources: peers and sector federations and what they see as their strategic ESG topics, the press and what the significant ESG topics are there, and the existing sustainability standards (such as SASB, GRI, and WBCSD). Arvesta also looked, of course, to what it had formulated for itself as sustainability priorities in the past.

This exercise first resulted in a long-list of 41 ESG topics, which could ultimately be reduced (including by classifying and filtering them) to 14 topics. To do this, the topics were examined to determine which of them were relevant to the agriculture, horticulture, and retail sectors.

After that, it was a matter of correctly prioritising the topics. We invited some 70 internal and external stakeholders to comment on Arvesta's impact on the various themes. We had an interview with a bank, and we organised a workshop with Arvesta's Executive Committee and several

internal experts. This allowed us to assign the topics a score, which the materiality matrix clearly visualised. The matrix clearly shows which topics are essential from one or both perspectives – see the coloured fields. The most essential of all 17 topics (the top-5) are shown at the upper-right:

- Customer and consumer satisfaction
- Soil Management
- Healthy and accessible food
- Sustainable innovation
- Climate change

### Looking forward

The identification of 17 strategic ESG topics allows Arvesta to pursue its sustainability policy even more effectively and efficiently from now on:

Based on the new insights from the double materiality analysis, we are re-evaluating our priorities and making adjustments where necessary.

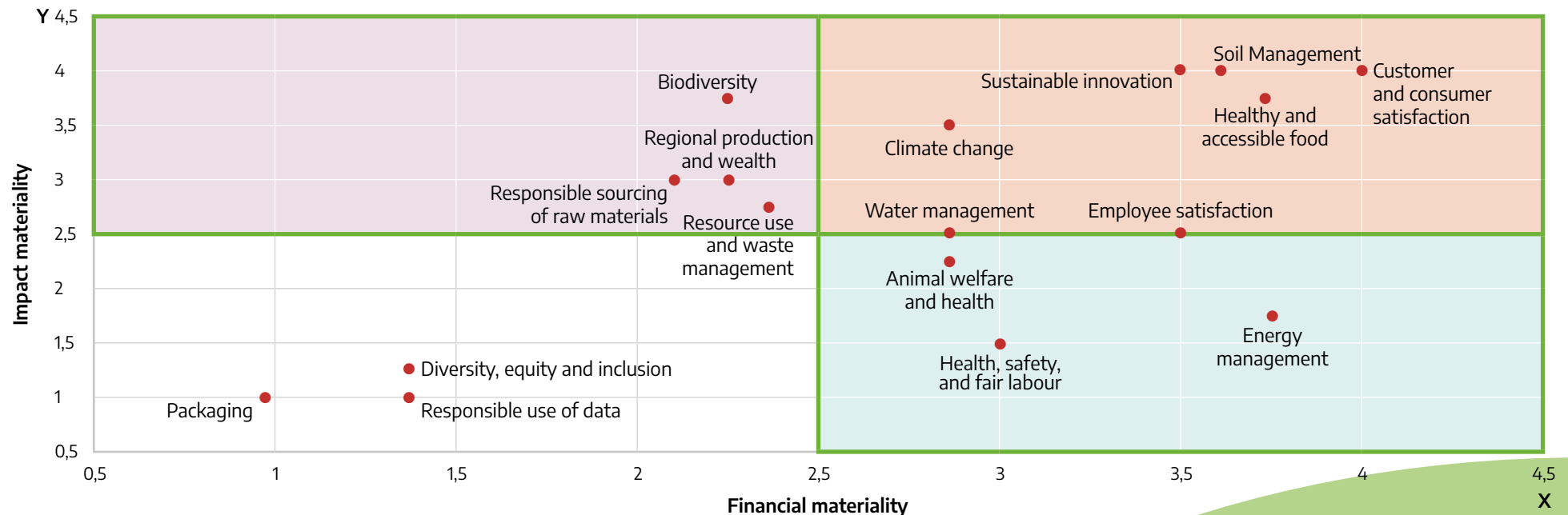
To track the progress of its priorities and commitments, Arvesta also invested in 2022 in the development of sustainability

dashboards. (See pages 40-41 of this Activity Report.) This tool will also be adapted to the output of the materiality analysis.

The double materiality analysis will be reviewed annually, and adjustments will be made where necessary.

In line with the double materiality analysis and against the background of the political ambition to achieve climate-neutral agriculture by 2050, Arvesta will also define its longer-term vision in 2023.

### MATERIALITY MATRIX ARVESTA 2022



OUR 36  
COMMITMENTS  
AND SOME HIGHLIGHTS

Develop  
sustainable  
agriculture  
and  
horticulture

1  
PILLAR  
FOR FARMERS AND  
HORTICULTURISTS



Offer sustainable  
and high-quality  
solutions

- **Develop sustainable offerings**
- Increase advice on sustainable agriculture and horticulture
- **Promote the use of low-impact plant protection products**
- Optimise the composition of products
- Improve the traceability of products



Develop smart  
agriculture and  
horticulture

- Use technology for efficient agriculture
- Use data responsibly

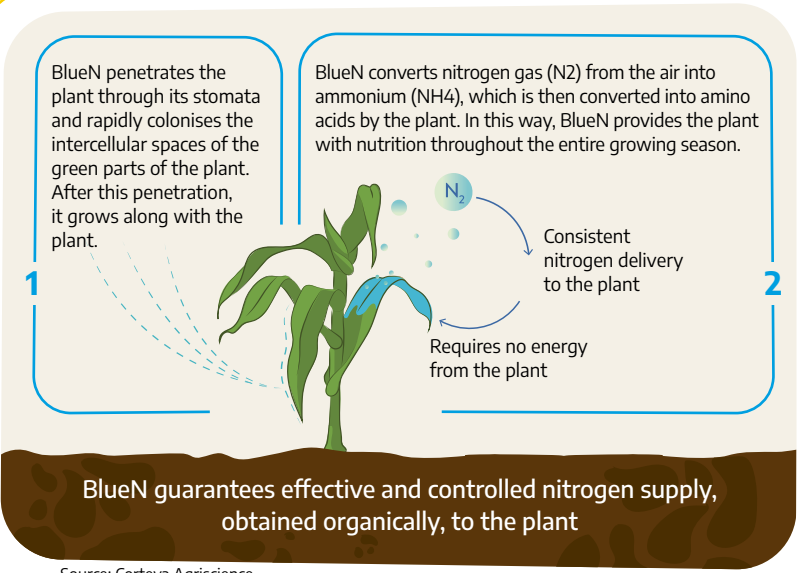


Reduce the climatic  
and environmental  
impact of agriculture  
and horticulture

- Improve the carbon content of the soil
- Conduct R&D on sustainable agricultural and horticultural practices
- Reduce methane emissions
- Consult with chain partners regarding sustainable and innovative agriculture

Progress of our commitments: ●○○ Launch ●●○ Busy ●●● Achieved





Source: Corteva Agriscience

●●○ **Develop sustainable offerings**

**The future belongs to foliar fertilisers and biostimulants**

Arvesta encourages the use of foliar nutrition and biostimulants (products that can increase plant resistance) as soon as leaves start forming on the plant. After all, with foliar fertilisers, you apply nutrients in a very targeted way at the ideal time and at a much lower dose than with conventional fertilisation. By applying the nutrients directly

to the plant and not in the soil, the plant can directly absorb the nitrogen. Biostimulants themselves do not contain nutrients. What they do instead is adapt to the climate. They make plants more resistant to stress (heat, drought, etc.) so they can absorb nutrients from the environment more efficiently, e.g. nitrogen from the soil or from the air.

Read this, too:  
More on the foliar nutrition N-Leaf and the foliar fertiliser BlueN on page 48.



**Arvesta is active in the shift to organic crop protection**

●●○ **Promote the use of low-impact plant protection products**

The use of crop protection products will have to be reduced by half by 2030 – an ambition agreed at the European level. In 2020, this ambition encouraged Arvesta to elaborate its strategic vision on the topic. Arvesta's focus is twofold: it involves, on the one hand, replacing chemically active substances with biological control agents and, on the other hand, reducing the dosage of active substances by boosting their efficacy by way of other substances which have smaller impacts (adjuvants).

*Guillaume Colmant, Technical Manager Crop Protection Products:*  
'Arvesta's testing capabilities and experience allow it to play an active role in what are currently niche products but will soon become mainstream products.'



Vertipin, a fungicide based on sulphur and pine terpenes which is already widely used in grain and flax cultivation – on some 20,000 ha in total in 2022 – is already a big hit.

OUR 36  
COMMITMENTS  
AND SOME HIGHLIGHTS

Promote  
sustainable  
entre-  
preneurship

PILLAR **2**  
FOR OUR PLANET



Focus on  
animal welfare  
and animal safety

- Install a charter on animal welfare and safety for directly owned animals
- Present ourselves as a leading discussion partner regarding animal welfare and safety
- Reduce antibiotics in animal feed



Focus on  
efficient  
production

- Optimise energy consumption
- **Optimise water consumption**
- Optimise CO2 emissions linked to production
- Reduce waste/recycle more
- Bring new buildings up to BREEAM standard
- Make company fleet more sustainable and promote sustainable alternatives



Focus on  
efficient  
distribution

- Develop a sustainable purchasing policy
- **Reduce CO2 emissions from own transport**
- Push for alternative transport modes
- Optimise the load and fill factor of freight transport

Progress of our commitments: ●○○ Launch ●●○ Busy ●●● Achieved



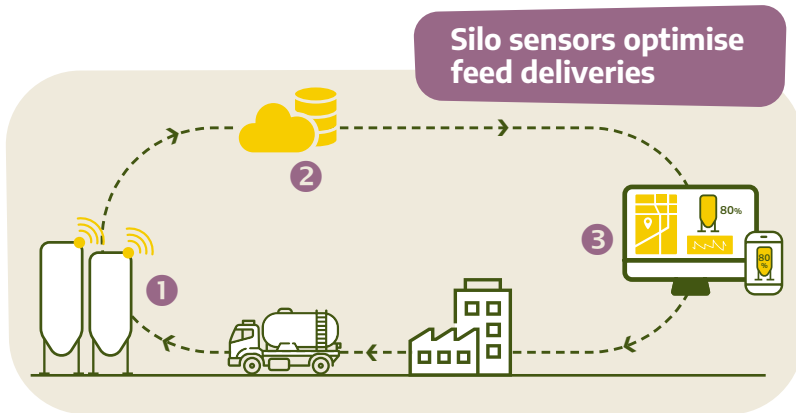
**Rainwater recovery  
three times better than the target**

### ●●○ Optimise water consumption

For new Aveve shops and renovations, both under our own management and in “build-to-suit” concepts with a developer, Arvesta insists on a rainwater recovery capacity of 30,000 litres per site. That is 20,000 litres more than the government's proposed 10,000 litres. Arvesta decided to commit to this extra effort because our stores demand more than the average quantity of water. Not only do we rely on this rainwater for flushing toilets and for cleaning, we also use it to maintain our plants.

Today, in at least half of its own stores, rainwater recovery to the tune of 30,000 litres is already a reality.

Our new headquarters in Wilsese, which will be in use by the end of 2023, has already had an additional 20,000-litre cistern installed. Together with the 20,000-litre well that was already there, that makes 40,000 litres of rainwater. According to our calculations, this will cover the entire demand when 100 to 120 people are (soon-to-be) working here.



**Silo sensors optimise  
feed deliveries**

Dark weather, poor visibility, inattention due to a busy schedule, a larger feed intake than expected... These are just some of the common causes that complicate the monitoring of feed levels in silos. So, Arvesta set out to find a solution for farmers – the silo sensor.

### ●●○ Reduce CO2 emissions from own transport

The silo sensor is affixed with adhesive to the top of the silo (no drilling required) and is protected from rain and wind by a hood.

① It continuously measures the volume in stock and transmits that information to a platform ② where the volumes are converted into tonnages. ③ These tonnages are visualised to the farmer in a clear manner, giving the farmer accurate insight into the feed throughput and current tonnages, and it does this anytime and anywhere, on the smartphone or PC. From the moment the silo reaches a certain minimum volume, the farmer receives an e-mail reminder to order feed on time.

The result? More efficient operations without worries.

The aim is to evolve towards automatic silo refilling, so the farmer can eventually skip the order entry step all together. In this way, Arvesta gets a better overview of all feed deliveries to be carried out, and it can plan its transport more efficiently, resulting in fewer kilometres and fewer CO2 emissions.

The sensors work completely autonomously. Their powerful batteries have a service life of approximately five years, and the sensors are equipped with their own internal data networks.

OUR 36  
COMMITMENTS  
AND SOME HIGHLIGHTS

Care for  
our people  
and  
consumers

3  
PILLAR  
FOR OUR SOCIETY



Increase the safety,  
health and well-being  
of employees

- Raise awareness about safety with a view to 'zero accidents at work'
- Apply a uniform EHSQ approach
- Continue to develop our health policy
- **Develop a policy related to 'corporate volunteering' for employees**



Focus on  
sustainable  
employability

- Continue uniform policy concerning diversity and non-discrimination
- Develop training and development opportunities
- **Raise awareness and provide training on sound business operations**



Focus on sustainable  
and high-quality  
solutions for  
the end consumer

- Deliver excellent quality in products and services
- Supply certified sustainable products
- Reduce sugar and salt content
- Promote local products/short supply chains
- Raise consumer awareness regarding sustainable consumption

Progress of our commitments: ●○○ Launch ●●○ Busy ●●● Achieved



Like to try working in one of our shops? No problem!

### ●●● Develop a policy related to ‘corporate volunteering’ for employees

Arvesta offers its employees the chance to switch jobs for a day. A great example of an opportunity to take a peek behind the scenes is the Helping Hands campaign. During the high season – from March to June – colleagues

from other departments can come work for two days in an Aveve or Eurotuin shop. It has been a great success and certainly a win-win. In 2022, 30 employees participated; we expect more than double that in 2023. Meanwhile, we have been asked to expand Helping Hands’ opportunities, and we certainly are considering it. After all, Helping Hands is another great example of our philosophy, Stronger Together.



Compliance with the competition regulations

### ●●● Raise awareness and provide training on sound business operations

Arvesta has a very active “competition compliance” programme which covers competition law, the rules related to price fixing, information sharing, etc. For every new employee who comes into contact with suppliers, customers, and/or competitors, this programme begins with a mandatory, in-person training.



*Ilse Winters, Legal Director:* ‘Participants are always enthusiastic about the interactive way in which we manage to convey this legal material. For this purpose, we work with our external partner Contrast Law. We also handle the

training follow-up, as creatively as possible, together with them. For example, the website that was developed especially for Arvesta is kept up to date and running by the regular addition of “cartovies” – animated cartoons – from Lectrr. This website also contains all the relevant presentations and guidelines and a comprehensive Q&A. All those who have ever participated, some 450 employees by now, must successfully complete the “competition compliance” quiz every year. Those who do not score an 8/10 or higher must go back to the start – back to the in-person training. This way we keep awareness related to “competition compliance” on point.’

# OUR TEN PRIORITIES

This overview shows the progress made on our ten priorities. Each Key Performance Indicator (KPI) indicates the evolution we have made towards the target. (Also see pages 76-77 for more explanation and for definitions of the KPIs.)

**Pillar 1 | FOR FARMERS AND HORTICULTURISTS**

## Develop sustainable agriculture and horticulture

We offer the most sustainable and innovative solutions and services that guarantee the profitability of farmers and horticulturists. This is how Arvesta builds the agriculture and horticulture of the future together with its customers and partners.

**1** 

100% **certified** soy

Share of the total mass of purchased conventional soybean meal that is sustainable, in %:

82.1%	68.2%	100%
2021	2022	2026

In 2022, we are on the right track to achieve our target of 100% sustainable soy by 2026. In 2021, this share was exceptionally high, but also in 2022 we are fully on track to achieve our target.


**2** 

Global **water savings**

Annual water savings, in billions of litres, among farmers and horticulturists as a result of innovative developments by Arvesta (Hortiplan only):

5.9	6.05	8
2021	2022	2025

Using a modified calculation methodology based on more substantiated sources and data, we determined that we could save much more water in 2022. The target for 2025 is a global water savings of 8 billion litres as opposed to 3 billion litres.

**3** 

Reduction of **methane emissions**

The evolution of methane emission reduction by cattle customers using the Euroclim product:

12.3%	12.9%	50%
2021	2022	2025

The switch to Euroclim feed remains a challenge. We are focussing on Belgian customers, and we continue to set the bar at a 50% Euroclim conversion by 2025. Recent support from the Flemish government is helping to make progress here.


**4** 

Annual reduction of **CO2e\***

**Pillar 2 | FOR OUR PLANET**

## Promote sustainable entrepreneurship

Together with our employees, partners, and customers, we work on sustainable, safe, and high-quality solutions and services.

**5** 

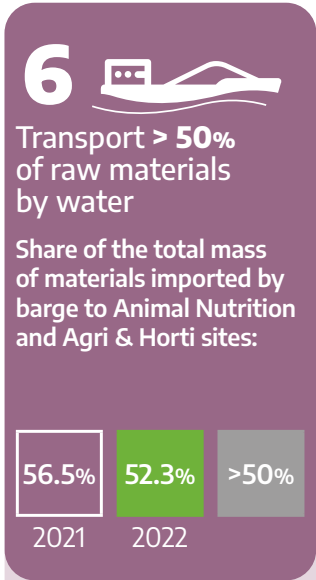
Share of the total mass of feed for piglets, fattening pigs, and sows that does not contain antibiotics:

99.2%	99.6%	100%
2021	2022	2028

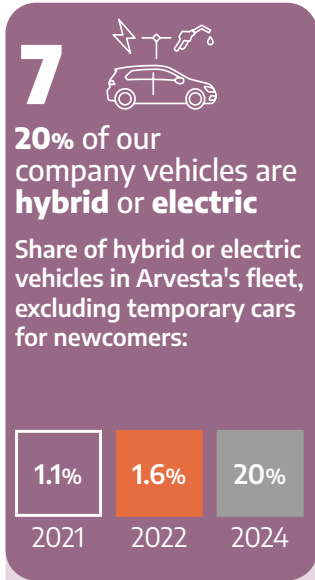
When it comes to sustainable animal feed, Arvesta continues to remain some two years ahead of the goals on antibiotic use set by sector federation BFA. In 2022, we are fully on track to meet the target.

■ Key challenges ■ Good progress with challenges ■ On track ■ Target

\* More information on Scope 1 & 2 emissions can be found on page 52.



Despite some challenges in 2022, we met and achieved our target. We even did slightly better than the set objective of 50%, namely 52.3%.



We are well on track to meet our target by 2024. The somewhat slower progress that we see today in the number of electric or hybrid cars within our fleet is related to the extremely long delivery times for these cars.

**Pillar 3 | FOR OUR SOCIETY**

**Care for our people and consumers**

We work together for the well-being and safety of our employees. We strive for the best customer experience through our expertise and are committed to sustainable consumption.



Reducing workplace accidents remains a point requiring special attention. For Arvesta, safety at work is an extremely important priority. The total number of accidents has fallen, but every accident is one too many.



In 2022, we started counting our registrations on the Fit@Arvesta platform differently. We only count unique users, unlike in 2021, when duplicate registrations still occurred. Not only did we make progress, we now have a more accurate picture due to a better counting method.

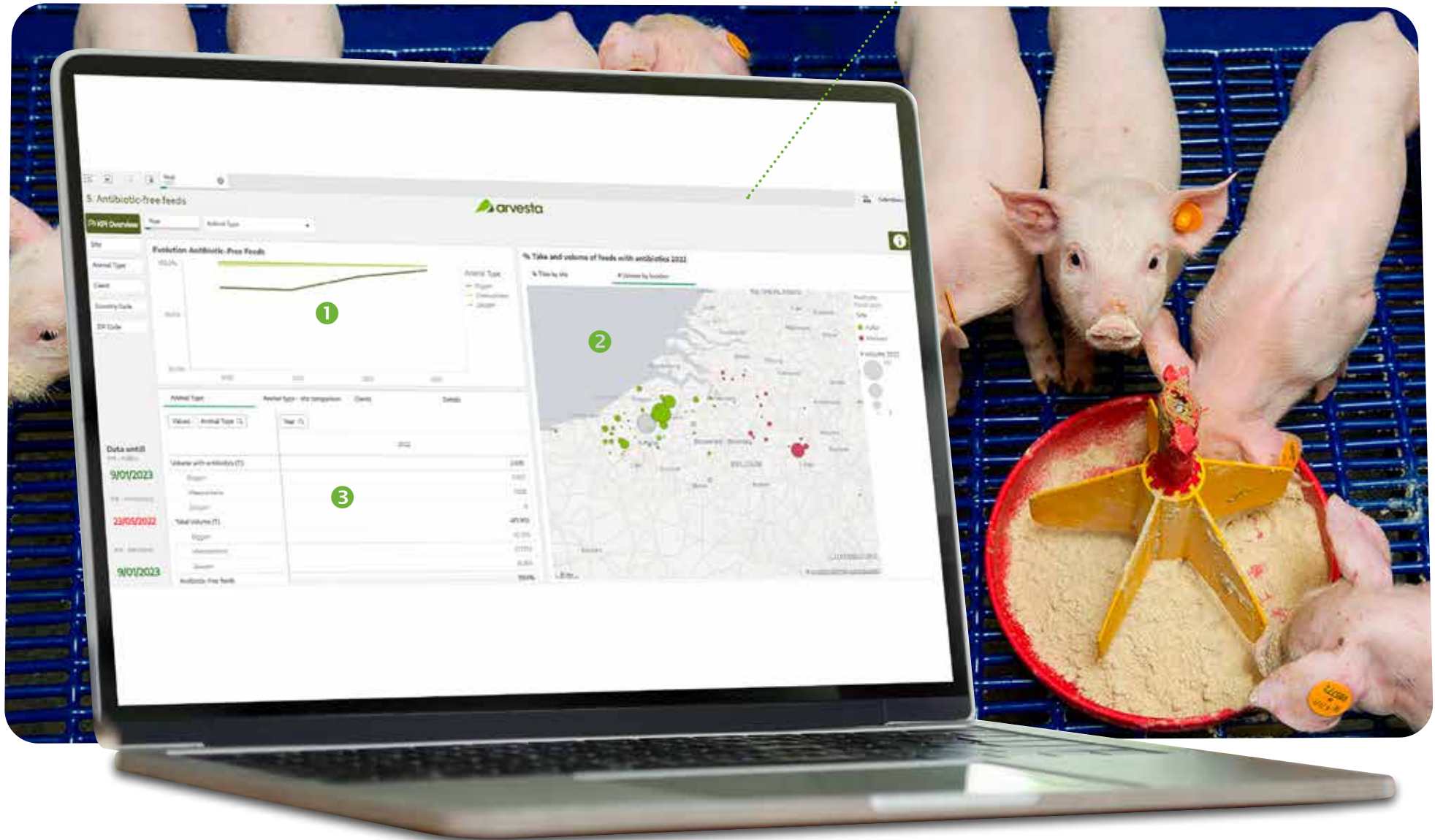


We are progressing right on schedule with this target. By the way, this is just the beginning. We are also looking at whether it is also possible to make other packaging (e.g. pet food) more sustainable.

# ARVESTA SUSTAINABILITY DASHBOARDS

FOR THE CONTINUOUS MONITORING OF OUR SUSTAINABILITY AMBITIONS

LANDING PAGE WITH KPI OVERVIEW  
Example of an underlying page – here on the reduction of antibiotics in animal feed





## In order to monitor our sustainability priorities even more efficiently, Arvesta developed the Arvesta Sustainability Dashboards in 2022.

### The motivation

It has long been Arvesta's ambition to be a leader in the area of sustainability. To this end, we have defined our sustainability priorities in recent years – in other words, what are our priorities in the areas of Environment, Social engagement, and Governance – and we have set targets for each. (See the Arvesta Activity Reports 2020 and 2021 and pages 38-39, Our ten priorities.)

Defining priorities and agreeing on goals is one thing, realising them in practice is what really matters. The only way to achieve goals is to work on them every day. The only way to see if we are doing well is to monitor the results step by step. Therefore, in order to monitor our sustainability priorities even more efficiently, Arvesta's IT Department developed the Arvesta Sustainability Dashboards in 2022, under the guidance of KPMG. The aim of these sustainability dashboards is threefold:

- To monitor our progress
- To provide actionable insights that allow for the acceleration of decision-making processes
- To provide transparency

### The dashboards

On the landing page of Arvesta's Sustainability Dashboards, you see a Key

Performance Indicator (KPI) overview. This dashboard page allows you to see, at a glance, the progress that has been made for each of the defined sustainability priorities.

From this KPI overview on the landing page, it is then easy to click through to the underlying pages. Each of Arvesta's sustainability priorities has its own page containing detailed information presented in a very clear way. This information includes:

- 1 The agreed target and the progress, clearly showing the date when the information was last updated
- 2 Additional, specific, valuable information per priority
  - In the example, this is relevant information about antibiotics in livestock feed. In these pages, our experts can easily find which customers buy more feeds with antibiotics, within which category of feeds, etc.
- 3 A clear overview of the sources used to monitor the progress
- 4 The name of the person responsible for the data update

*Dirk Konings, Business Intelligence Manager Arvesta: 'Formulating a precise definition of our sustainability priorities proved to be a challenging but extremely interesting exercise. It has contributed significantly to an even greater increase in awareness regarding the sustainability issues.'*

### Input and output

For each of the sustainability priorities, Arvesta designated a topic manager and an input manager:

- The topic manager is responsible for achieving the targets, identifying new products or segments to be taken into account when calculating performance, and monitoring data quality.
- The input manager is responsible for updating the data in a timely manner, checking any automatic data updates, and correctly reflecting any functional changes in the data source (e.g. changes to classification labels of a feed type).

Each priority also features a list of which specific stakeholders, if any, are included in the communication. All stakeholders received a Sustainability Dashboards Reporting Manual.

So much for the input. On the output side, Arvesta is formal. The sustainability dashboards must be accessible to all our Experts in the field, without any access restrictions. That means that everyone at Arvesta can follow how well Arvesta is doing on its sustainability ambitions at any time. The detailed dashboards are designed to meet the needs of those involved in the specific topics. Taken all together, the Arvesta Sustainability Dashboards should provide data-driven insights, maintain awareness of the business best practices, and enable us to make the right decisions quickly.

### Quality control

When the development of the first version of the Arvesta Sustainability Dashboards was complete, sometime around the summer of 2022, Arvesta subjected the tool to an external audit performed by Ernst & Young. This process is called an "assurance readiness assessment". In other words, the thrust of this audit was to assess the data collection, reporting, and control processes as developed by Arvesta for calculating the indicators in the sustainability dashboards. This audit was carried out by means of analyses, interviews, risk assessments, and discussions. The aim was to identify (potential) areas for improvement and to test whether the data were accurate, complete, reliable, and comparable.

The findings of this assessment led to recommendations and, from there, to an action plan for further refinement of the Arvesta Sustainability Dashboards.



**Dirk Konings**  
Business Intelligence  
Manager Arvesta





**FOR OUR FARMERS AND HORTICULTURISTS**

# Agricultural and sustainable

We offer the most sustainable and innovative solutions and services that guarantee the profitability of farmers and horticulturists.

This is how Arvesta builds the agriculture and horticulture of the future together with its customers and partners.



100% certified soy  
by 2026

## PROTEIN IN CATTLE FEED

# Arvesta's dual-track policy: more sustainable soy + less soy



**Patrick Boone**  
Director Procurement  
Animal Nutrition



**Filip Vanmeirhaeghe**  
Senior Procurement  
Manager (Raw Materials)  
Animal Nutrition

When it comes to soy, Animal Nutrition from Arvesta remains even more ambitious than the Amazon Soy Moratorium, which forbids the use of soy from newly deforested areas. The Belgian Feed Association (BFA) has also committed itself to this policy. This does not detract from our commitment to ensure that by 2026 all the soy (meal) we use as a raw material for our livestock feed be certified soy (meal). The figures prove once again that we are right on schedule: In 2022, 68.2% of the soy used was certified soy (meal).

tion. So now, when selecting raw materials, we also systematically include alternative, stable protein sources such as rapeseed, DDGS, sunflower seeds, field beans, broad beans, peas... We consider the differences in their intrinsic nutritional quality versus other parameters such as price and transport.

### No more protein than necessary = no more soy than necessary

*Filip Vanmeirhaeghe, Senior Procurement Manager (Raw Materials) Animal Nutrition:* 'Of course, offering balanced cattle feed remains our goal. We rely on the expertise of our nutritionists when it comes to finding the right balance. The balanced production feeds for dairy cattle from Arvesta no longer contain soy meal. A balanced animal feed for a young animal, for example, requires more soy/protein than a balanced feed for an adult animal. We will always strive to find this precise balance; in other words, we won't utilise more protein than needed.'

experimentation with mixed crops of wheat and peas. Peas capture nitrogen from the air and pass that advantage along to the wheat, which means that the wheat requires less artificial nitrogen (fertiliser, in other words). In this way, Animal Nutrition obtains a kind of 'pre-prepared mixture' with a limited ecological footprint. Hybrid rye (a cross-fertilisation of two varieties of rye) is another example of this. This specific rye variety requires less water and is more resistant to moulds, which means it also requires fewer crop protection products. And that gives Animal Nutrition yet another raw material that is friendlier for our planet.

### Arvesta is also a pioneer in a 360° approach

*Patrick Boone, Director Procurement Animal Nutrition:* 'Gradually, for all our raw materials, we are evolving toward a kind of carbon footprint score – a score that takes into account the carbon footprint of the entire chain. As the largest Belgian manufacturer of compound feeds, Arvesta also has a prominent role to play in this 360° approach. At the same time, we are only one of many links in this chain. If we truly want to achieve a food chain that is ecological and economically feasible for everyone – which, in fact, is the only option – then everyone is going to have to want to contribute. That's our goal.'

Certified soy	2022	2023	2024	2025	2026	2027	2028	2029	2030
BFA									100%
ARVESTA	68,2%	70%	75%	80%	100%				

Commitment Arvesta vs. commitment BFA regarding the 100% switch to certified soy

The 5% soy bean content in Arvesta's livestock feed is non-modified soy exclusively from Europe, from France, Hungary, Austria, and Ukraine, among others.

### More sustainable soy and less soy

The policy that Arvesta is pursuing is a dual-track policy. On the one hand, we are striving for more sustainable soy, and at the same time, we are also searching for a responsible way to reduce our use of soy. After all, using less soy is also a way to increase the sustainability of livestock feed produc-

### More sustainable raw materials result in more sustainable livestock feeds

By increasing the sustainability of the cultivation process of a raw material, you also make the animal feed that utilises this raw material more sustainable. In response to this, Arvesta's strong brand Walagri is carrying out some significant

## RAW MATERIALS FOR ANIMAL FEED

# 50% from residual flows and as local as possible



For its animal feeds, Arvesta uses many raw materials that would otherwise be waste – the so-called residual flows. Utilising residual flows, or by-products, from one industry as a raw material for another industry is one of the fundamental concepts of the circular economy. This concept is firmly embedded in the Arvesta Animal Nutrition production model. As the largest Belgian manufacturer of compound feeds, we have a pioneering role to play in this concept.

Arvesta fulfils its need for the most essential nutrients – protein and starch – from residual flows as much as possible. And even when the challenges become greater, we set and hold the bar at 50%.

### Residual flows and as local as possible

Arvesta keeps the distance between itself and the largest suppliers of residual

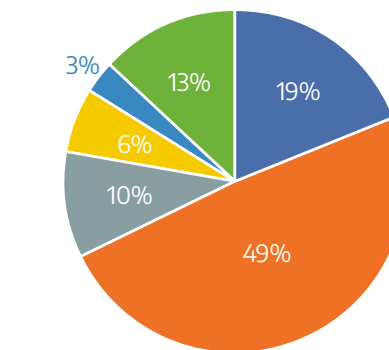
flows as short as possible. Both literally and figuratively. Figuratively by creating and maintaining close partnerships with our suppliers. And literally by prioritising local partners, where possible, since transport is and will remain an important environmental and cost factor.

### Which residual flows and from where?

The residual flows that Arvesta valorises come mainly from oil processing plants, flour mills, sugar and biscuit factories, and breweries, among others, but also from the starch industry, for example.

By-products of oil processing account for nearly half of the residual flows that we use, and this includes maize germ meal, sunflower meal, and soy meal. Almost one-fifth are by-products and residual products from the food industry, for example,

residual products from the production of biscuits or beet pulp from sugar factories.



- Food industry by-products and residual products
- Starch industry by-products
- Biofuel by-products
- Oil processing by-products
- Flour mill by-products
- Miscellaneous



**Wannes Verstraeten**  
Purchaser Commodities  
Animal Nutrition

*Wannes Verstraeten, Purchaser Commodities Animal Nutrition:* 'In addition to their nutritional value, we also set other requirements for the residual flows we use: They must be correctly certified, and their supply must be continuous. The latter also depends on the levels of supply and demand at the primary processing plants. During the COVID pandemic, for example, the demand for flour was reduced since the hotel and restaurant sector was closed down. This hindered the supply of those residual flows.'

### Multiple impacts: Arvesta is involved in more ways than one

Arvesta is active in a great many links in the grain processing chain. This means that we can create greater impact. An example: Walagri is a supplier of superior-quality seeds for the arable farmer. We also supply the necessary fertilisers and crop protection products. After the harvest, Walagri takes responsibility for the collection and storage of the crops and for the marketing of these crops to the flour mills, for example. Via Aveve Flour, Arvesta is the consumer of the flour from these flour mills, and via Animal Nutrition, it is the consumer of by-product flows for the production of animal feed.



Global water savings  
of more than  
8 billion litres by 2025

## The global relevance of high-technology, greenhouse horticulture



Australia



Japan

The demand for fresh, convenient, and local food continues to grow worldwide. Self-sufficiency – making local cultivation possible and ecologically responsible at all times and in all places – is becoming increasingly important as the solution to a wide range of challenges related to transport, climate, politics, etc. The fact that high-tech, greenhouse horticulture

succeeds in optimising production volumes throughout the world and the year makes the innovative greenhouse systems from Van der Hoeven in combination with the automated Mobile Gully System (MGS) from Hortiplan more relevant than ever. The installation of a Mobile Gully System and a greenhouse system is especially positive for customers in regions with water risk.

A savings of 8 billion litres of water per year by 2025 – the equivalent of 3,200 Olympic-sized swimming pools

In our Activity Report 2020, we announced that our aim was to have the products and developments offered by Arvesta save 3 billion litres of water per year by 2025. When defining that objective, we only took the automated Mobile Gully System from Hortiplan into account. By using an adapted calculation method that includes more substantiated sources and data and by adjusting the ambitions with regard to MGS surface areas, the goal has now become 4 billion litres of water saved per year by 2025.

The positive impact of the greenhouse system from Van der Hoeven had not, at first, been included in the calculation. According to current calculations, at least another 4 billion litres of water could be saved with these greenhouse systems. This amounts to a global water savings of 8 billion litres instead of 3 billion litres. This water objective is voluntary and not based on any legal requirements.

In 2023, we will also make an inventory of how water savings in our own operations can contribute to our overall water-savings objective

## Van der Hoeven and Hortiplan: Stronger Together in greenhouse horticulture of the future

Hortiplan and Van der Hoeven have been pioneers for many years now as the suppliers of Mobile Gully Systems (MGS) and ecological greenhouse systems, respectively. Our continuous pursuit is this: How do we achieve the most optimal cultivation process for each specific circumstance? In other words, how do we optimise conditions, such as temperature, humidity, air circulation, light, and nutrients while reducing CO2 emissions and the consumption of water and crop protection products, taking into account the location of the greenhouse and its surrounding climate?

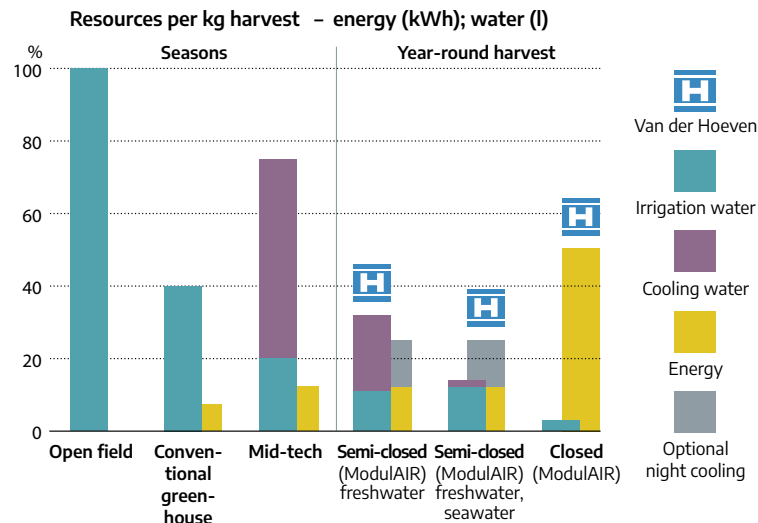
In 2022, the first joint project from Hortiplan and Van der Hoeven was completed –

Comfresh in Australia. This project consisted of a ModulAIR system with a 1-ha MGS for leafy vegetables (lettuce/herbs) and a 2-ha MGS for fruiting crops (cucumber).

*Emanuel Marreel, Managing Director Hortiplan:* 'The Mobile Gully System from Hortiplan results in the saving of labour, space and water (up to 90% of the latter) when cultivating leafy vegetables and herbs. Since the plants are situated in gullies above the ground as opposed to in the ground, the humidity of the air around the plant is lower. This reduces the pressure from pathogenic moulds which, in turn, reduces the need for crop protection products.'

### ADVANTAGES

Energy efficiency | CO2 reduction | Zero crop protection  
Water-saving: VDH: 90% saving, MGS: 90% recuperation



### Tailored to the customer – always and everywhere

The Van der Hoeven/Hortiplan greenhouse system is always customised according to the specific needs of the customer. As a rule, this customisation will fall somewhere between a 1- to 1.5-ha MGS (small) and a 5-ha MGS (large). What's more, 'customisation' also refers to the fact that our starting point is the customer's wish list, and then, based on that, we work out the best possible options for the system and its lay-out. This wish list can be very diverse: What does the customer want to grow? Which is more important: volume or flexibility? What is the situation when it comes to available surface area, water, hours of sunlight, etc?

### Once a customer, always a customer

It is not uncommon for projects to grow with the years. A nice example of this is Hortiplan customer Hidroponicos La Cruz S.A. in Chili. In 2011, Hortiplan started there with a 7,000-m<sup>2</sup> MGS. Upon the request of the customer, we have expanded the system by that much every other year since. So, the current system clocks in at more than 5 hectares.

### Sustainable greenhouse horticulture: a 360° puzzle

In order to know how sustainable innovative greenhouse systems truly are, you cannot simply compare them with open-field cultivation and/or with conventional greenhouses. Not only do you want to know how much of each type of water (sanitary, seawater, rainwater, etc.) is used, you also need to know the whole picture: the hours of natural sunlight and/or the possibilities of wind energy, whether or not cooling is needed, whether or not open-field cultivation is even possible, the transport costs or savings due to local cultivation, the environmental costs of building the greenhouses...

*Jessie-Lynn van Egmond, Water & Sustainability Manager Van der Hoeven:* 'Arvesta strives to solve the complete puzzle; even though, as we proceed through the process, we are sure to discover new puzzle pieces and new relationships between the pieces. Whenever you strive for sustainability, you are never limited to just one challenge.'



**Emanuel Marreel**  
Managing Director  
Hortiplan



**Jessie-Lynn van Egmond**  
Water & Sustainability  
Manager Van der Hoeven



A yearly reduction of CO2e

## NITROGEN-REDUCING MEASURES

# New generation of ecological plant nutrition



**Yannick Hardy**  
Product Manager Pomagro



**Dieter Peeters**  
Development Manager  
Foliar Fertilizers and  
Biostimulants

In order to reduce the pressure of agriculture on the environment, Agri & Horti continue to search for alternatives to conventional fertilisation and plant protection products as well as for nitrogen-reducing measures.

### The new generation of fertilisers is more sustainable, less expensive, and more cost-effective

The war in Ukraine made synthetic fertilisers four to five times more expensive in 2022 than they were a year before. The reason for this is that expensive natural gas is required to produce nitrogen-rich fertilisers. Arvesta, however, offers several innovative alternatives for synthetic fertiliser that are less expensive, more cost-effective, and more environmentally friendly. The cost of these alternatives is up to 70% less than traditional synthetic fertilisers. Today, we can replace an average of up to 30% of synthetic fertilisers with these alternatives, and for potatoes, this rises to 63%.

### Circular fertiliser – Haspargit

In the first phase of fertilisation, Haspargit may be utilised in addition to liquid manure and synthetic fertiliser. Haspargit is the brand name of the circular fertiliser produced by our subsidiary Pomagro using mineral residual flows from the food industry.

*Yannick Hardy, Product Manager Pomagro:* 'The nitrogen in Haspargit mixtures comes from residual flows from the food industry. And since Haspargit is also rich in sulphur, it also ensures more efficient nitrogen utilisation by the crop. What's more, the nitrogen in Haspargit is ammoniacal nitrogen, which means that the risk of

leaching is minimal. This has a beneficial effect on both the groundwater and the surface water, which improves the quality of the water in creeks and rivers.'

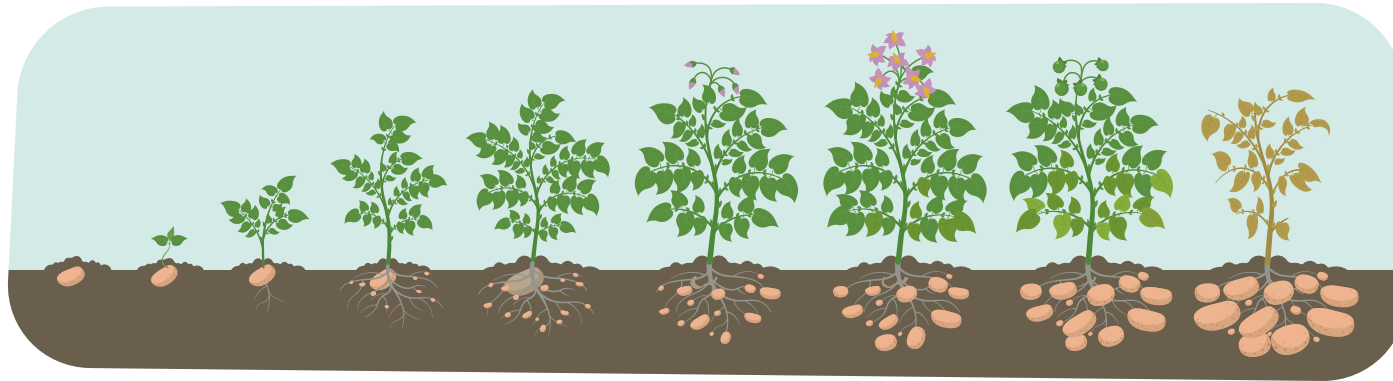
### The future belongs to foliar fertilisers and biostimulants – N-Leaf and BlueN

Arvesta's Agri & Horti has been screening biostimulants and foliar fertilisers for 7 or 8 seasons now in various research stations (including in Neerhespen), and these screenings were positive every time. Farm fields are naturally heterogeneous environments, but we can now state that:

- BlueN allows each crop to (naturally) bind 30 to 40 kg of nitrogen per hectare;
- Foliar feed N-Leaf is 3 to 4 times more efficient in delivering nitrogen than when plants must obtain nutrients from the soil.

*Dieter Peeters, Development Manager Foliar Fertilizers and Biostimulants:* 'By using the biostimulant BlueN at the beginning of the cycle and foliar fertiliser N-Leaf during the growth phase (directly on the leaf), we reduce the need for bulk fertilisation, which delivers the extra benefit of reducing the leaching of nitrogen into the soil and water. With BlueN and N-Leaf, we create an optimised micro-climate, as it were, in which stronger plants – and all crops – can flourish.'





## Circular fertiliser for potatoes: less expensive and more environmentally friendly



### Microgranulates – Humiseed NP – BoosterStart – MicroBooster Nofos

As a starter fertiliser, microgranulates are a sustainable investment since they can more efficiently deliver a lower dose of nutrients to the crop. These starter fertilisers are enriched with biostimulants which reduce the dosage of nitrogen needed per hectare while maintaining and even improving the yield. Microgranulates are applied in the rows at a dosage of 25 kg/ha as opposed to the 150 kg/ha required

of traditional starter fertilisers. When it comes to nitrogen (N), this means: 3 kg N/ha with microgranulates instead of 30 kg N/ha with the traditional application – a nitrogen-reduction efficiency of times 10!

### Nitrification inhibitors - Eminex

Nitrification inhibitors result in a more efficient use of the nitrogen in the fertiliser. Thanks to a nitrification inhibitor, nitrogen is released more gradually to the crop. As a liquid manure

additive, Eminex is the first step in this evolution. It improves the quality of liquid manure and reduces both greenhouse gas emissions and nitrification, because ammonium remains stable longer in the soil. And this results in the crops more efficiently taking up nitrogen and in a reduction in leaching, which ultimately results in an increase in yield of up to 5%.

In the future, Arvesta will launch other innovations for the optimisation of nitrogen utilisation using nitrification inhibitors.

## AMMONIA EMISSIONS IN LIVESTOCK FARMING

Besides industry, traffic, households..., livestock farming is certainly one of the sectors that must reduce its nitrogen emissions. This can be achieved in a variety of ways, but not each of these methods has the same impact. Installing air scrubbers in the stables has, by far, the greatest impact, but using adapted feed can also reduce nitrogen emissions. Arvesta is ready to help find a solution and has in its range various feeds with low, crude protein contents, which result in less nitrogen emissions. Arvesta continues to search for the best possible balance between the correct nutritional value, an optimised protein structure, the lowest possible nitrogen emissions, and an affordable price. As a knowledge centre, Arvesta commits to continuing to share information that is as complete as possible about the situation today and about the (possible) innovations of tomorrow with all concerned parties.



**Dirk Van Thielen**  
Business Unit Director  
Animal Nutrition

## Arvesta, knowledge centre for biodiversity and soil quality



As a knowledge centre and as agricultural expert, Arvesta is committed to helping solve the challenges of modern and sustainable agriculture, such as biodiversity, soil quality, and nitrogen. On the one hand, we do this by making our knowledge about the current situation and our insights into (possible) innovations available to sector organisations, governments, and customers so that they can take the right decisions. And, on the other hand, by taking this knowledge out into the field.

### About biodiversity:

Arvesta assumes an active role in the search for ways to cultivate crops with a minimal impact on biodiversity. The first steps toward this goal have already been taken by means of various initiatives in the field. And the necessary study work has been initiated to continue this work throughout 2023 using appropriate methodologies. In 2023, an impact & dependency assessment for biodiversity will be conducted. This assessment will investigate the impact of Arvesta's activities on biodiversity as well as the degree to which biodiversity has an impact on Arvesta. After all, biodiversity is becoming an increasingly important challenge, both for the professional grower as well as for the consumer with a kitchen garden.

Initiatives that are already making tangible contributions to the protection of biodiversity:

- Offering flower seeds, perennial meadow flowers, and flowering plants that attract butterflies and bees. We do this via several channels: Aveve, Walagri, Hermoo, Sanac Seeds & Bulbs, Alliance, Vaesken and Avenir Agro.
- Supporting fruit growers in planting biodiversity strips. This is done using the LBS method\*, a way to manage diseases and infestations in the field. LBS stands for Lokken (Attracting), Behouden (Maintaining) and Sparen (Sparing) of natural enemies. Natural enemies can be attracted by sowing the Invito wild flower mix from Alliance, for example. We stimulate the maintenance of natural enemy populations by offering them places to shelter and spend the winter from Predasect House, and by adapting the crop protection schedules as much as possible to include selective products.
- Offering cultivation contracts such as the one from Mondelez in the context of the Harmony Charter. This Charter specifies that 3% of the ground be sown with strips of flowers to attract butterflies and bees.
- Working on non-monoculture innovations, for example, the continued roll out of the intercropping of yellow pea and wheat, with parcels in Wallonia, Flanders, the Netherlands, and France. This combining of crops reduces the need for fertilisation and limits the impact on biodiversity: Insects and birds find opportunities for sheltering and nesting here.



### About soil quality:

As Franklin Roosevelt once said, 'A nation that destroys its soil, destroys itself', and we here at Arvesta are also very aware of the importance of healthy soil for guaranteeing the yields of our farmers but also for making them more resilient in the face of climate change. After all, good soil not only ensures better nutrient efficiency, it also results in a better climate buffering capacity, especially with regard to water, which can make a difference in periods of drought and excessive rainfall.

Specifically at Arvesta, we have developed a soil advice module that allows us to propose concrete actions for farmers to take to structurally improve their soil quality in the middle and long terms. After all, getting the soil into optimal condition and then keeping it that way is a project that can take several years. In 2022 alone, some 400 farms received advice through this module.

# Supported by technology, we are making agriculture more ecological *and* more profitable

## VARICARE: VARIABLE FERTILISATION AND SOWING, WITH GREATER YIELD FOR THE FARMER



**Matthias Appel**  
Integrated Solutions  
Manager

Varicare is an example of “precision farming”, a service in which ecology and economy go hand in hand. Based on satellite images of farmers’ fields over several years, we can determine which locations are best, less good and worst for the yield of a particular crop. We convert this knowledge into variable fertilisation and sowing maps which outline a varied distribution of fertiliser and seed application – hence the name Varicare. Varicare ensures that the full potential of the soil, as well as the fertilisers and seeds, can be maximally exploited. Preventing waste is also being sustainable.

In 2021 Arvesta was able to conduct an initial test with three customers. In 2022 we were able to successfully finish the complete validation test on a larger scale and on different soil types. This test

confirmed that by simply optimizing the application of seeds, fertilisers, and crop protection products, a gain in yields of up to +6% can be achieved. Greater yield with the same resources on the same acreage is a sustainable model. Varicare was able to go live with this model at the end of 2022. Today, the results tell the whole story. In the case of potatoes, for example, variable planting and fertilising can lead to up to € 400 greater profits per hectare.

### Real-time guidance thanks to technology

*Matthias Appel, Integrated Solutions Manager:* ‘In modern agriculture, the benefits of technology are becoming increasingly clear and crucial. Sustainability and efficiency go hand in hand. Thanks to technology, it is increasingly evident

for the Expert to assist the farmer with specific knowledge at crucial moments. And knowing that he or she can count on guidance is not only very important to the farmer, it also reduces stress. Especially during the fertilisation and sowing phases – the most crucial phases of the entire cycle – agronomic advice from an expert is very welcome. The farmer can get that advice, in real time, while sitting on his tractor. For example, the test customers from the Varicare pilot project worked with John Deere equipment. The formula cards could be uploaded directly, and we could follow along, provide explanations, and make adjustments, all in real time, where needed.’

The fact that Arvesta has experts in agriculture and horticulture (via Agri & Horti), on the one hand, and in equipment and machines (via Cofabel), on the other,

gives us unique added value along the road to the agriculture of the future.

### Technology for biodiversity

In America, John Deere introduced the combine machine, a seeder that also sprays liquid manure. Even if this is not exactly a machine tailored to European agriculture, we at Arvesta are going to give it a try. Couldn’t it be a solution to another challenge? An example of a problem for which a solution has not yet been found is the problem of the seeds with crop protective coatings. Due to their negative impact on bees and other beneficial insects, these are on the list of prohibited products, but they are tolerated as long as there is no alternative. Our experts are investigating the possibility of replacing the coating with a liquid crop protection product and this could then all be administered in one pass thanks to the combine machine.

## Using a holistic approach to achieve a reduction in greenhouse gasses



In order to optimise the ecological footprint in a substantiated, comprehensive, and consistent manner, we are working to map out the greenhouse gas emissions for our entire organization. We are doing this according to the Greenhouse Gas Protocol (GHG Protocol) standard.

This standard distinguishes 3 domains/ scopes of CO<sub>2</sub>-equivalent\* impacts and therefore 3 domains in which we can achieve reductions:

- **Scope 1:** direct emissions, as a direct result of our activities (e.g. burning fossil fuels for heating buildings and for our vehicle fleet)
- **Scope 2:** indirect emissions, due to the energy we need for our activities (electricity, steam, heat, cooling) and which we purchase
- **Scope 3:** indirect emissions, which are generated outside Arvesta but which can be linked to our organisation, such as emissions linked to purchased goods, the transport and distribution carried out by suppliers, waste (processing), employee travel, use of sold goods, and emissions from the franchises.

It is up to us to make an inventory for these 3 domains and to then focus on the most impactful opportunities. The sum of these efforts will become our holistic approach to greenhouse gas emissions.

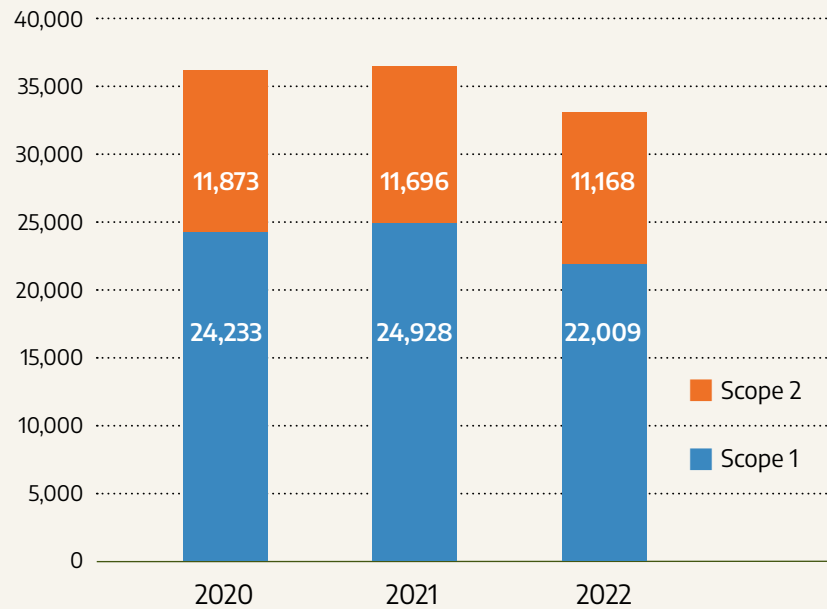
For its reporting, Arvesta opted for operational control; in other words, in those instances where Arvesta can determine the policy, we will also take into account 100% of the emissions.

### Arvesta's inventory of CO<sub>2</sub> emissions

In 2022, we started making an inventory of our greenhouse gas emissions. Initially, we investigated scope 1 and 2 emissions for the period 2020 to 2022. The scope 1 and 2 emissions together amounted to 36,106 tonnes of CO<sub>2</sub>e for 2020 and 33,177 tonnes of CO<sub>2</sub>e for 2022. We based these calculations as much as possible on source data and supplemented this with estimates where data was missing. For 2020, 94% of the calculated emissions are based on source data. Information from various foreign branches could not be collected in time for 2022, so those figures are based on 79% source data.

\*CO<sub>2</sub>-equivalent or CO<sub>2</sub>e: The greenhouse gas impact of various greenhouse gases, including methane (CH<sub>4</sub>), is translated into CO<sub>2</sub> emissions with a comparable impact, according to the IPCC (Intergovernmental Panel on Climate Change) guidelines.

### GHG EMISSIONS (TON CO2e)



### EMISSIONS (tonnes of CO2e)\*

	2020	2021	2022
<b>Scope 1: direct emissions of CO2 by:</b>	<b>24,233</b>	<b>24,928</b>	<b>22,009</b>
mobile combustion sources	9,541	9,099	8,402
permanent combustion sources	14,692	15,830	13,607
<b>Scope 2: indirect emissions of CO2 by:</b>	<b>11,873</b>	<b>11,696</b>	<b>11,168</b>
purchased electricity	11,609	11,387	10,859
purchased heating, cooling & steam	263	309	309
<b>Total emissions</b>	<b>36,106</b>	<b>36,625</b>	<b>33,177</b>

\* rounded figures

### Next steps

Arvesta will take the following steps to further reduce greenhouse gas emissions:

1. We will fully map out the carbon footprint by also calculating scope 3 emissions (emissions within our value chain).
2. We will re-evaluate the reduction target, based on the methodology of the Science Based Targets initiative (SBTi).
3. Based on the carbon footprint, we will roll out the most efficient measures to reduce emissions. We are already strongly committed to reducing our greenhouse gas emissions by “greening” our vehicle fleet (p 64), by working with greater energy efficiency to reduce our energy consumption (p 62), and by reviewing our energy contracts.

Read this, too:

Elsewhere in this Activity Report, we have also illustrated how we use innovative solutions to help make tomorrow's agriculture less CO2 intensive, in particular in those sections where we delve even deeper into specific products and their impacts, such as:

- Haspargit (p. 48): on how we achieve CO2 reductions at the level of raw materials purchasing;
- Euroclim (p. 56) and precision technology (p. 51): on how we achieve CO2 reductions where our solutions are being used;
- Carbon Farming (p. 54-55): on how we help farmers to also contribute to CO2 reduction, because sustainable agriculture and sustainable food is what we ultimately want to achieve with all parties involved – from field to fork.

### ENERGY CONSUMPTION

	Unit	2020	2021	2022
Fuels (diesel/petrol)	litre	3,555,685	3,369,707	3,113,994
Fuels (fuel oil)	litre	667,666	926,154	781,083
Fuels (propane)	litre	3,000	9,183	9,183
Natural gas	MWh	69,867	72,402	62,452
Electricity	MWh	72,108	70,729	67,449
Steam	MWh	1,397	1,603	1,603
Heat network systems	MWh	129	206	206

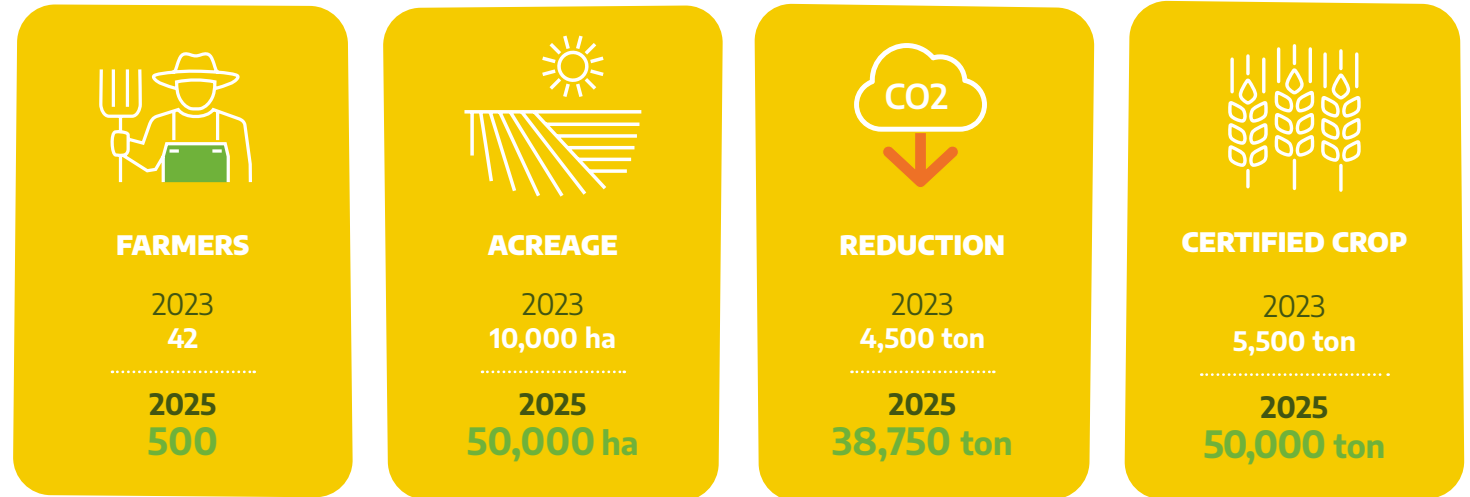
# CARBON FARMING, AGRICULTURE AS A SOLUTION TO CLIMATE CHANGE

## and for a fair, sustainable food chain, starting with cultivation

One of the biggest challenges for the coming decades is to reduce the impact of human activity – our CO2 footprint – on our climate so that our planet remains habitable. The agricultural sector is both part of the problem and of the solution, because not only can we reduce our emissions, we can also increase CO2 storage in the soil by introducing the right practices.

**A model that allows Arvesta to support and motivate farmers to keep improving their climate-friendliness every single day**

There are solutions to growing crops in a climate-friendly manner, but the impact of these actions or products on the CO2 footprint was not known and there was no incentive for farmers to apply them. By using the Soil Capital platform (a Belgian, B Corp-certified agronomic company that is helping farmers to make 1 million hectares of land more profitable and more ecological by 2025), farmers can calculate the CO2 footprint of their entire farm and are then rewarded, year after year, if they can improve it. By doing this in an audited and certified way, Arvesta can offer farmers an additional source of income based on their climate efforts.



### Carbon Farming, better for the climate and for the yield

Farmers who have their footprints calculated at Arvesta automatically become members of the Carbon Farming Club, which offers the following benefits:

- Guidance from our Carbon Farming experts who work with the farmer to plan for short- and long-term CO2-footprint improvements
- Guaranteed sales for their certificates
- Access to exclusive cultivation contracts in collaboration with our industrial partners

- Access to exclusive Carbon Farming events where we inspire farmers with new innovations, stories from colleagues, and lectures from our industrial partners

In this way, we motivate farmers to join us in our Carbon Farming story, and we work with them to keep improving every year. In 2022, this generated additional income of € 3,560 for a 100-ha farm. Moreover, the practices implemented not only have a positive impact on the CO2 footprint but also on soil quality and biodiversity.

### Local product with a reduced CO2 footprint

Industrial partners at the end of the food chain, such as Alken-Maes and several flour mills, are important when it comes to lending even more credibility to the Carbon Farming story. Since Arvesta can supply them with raw materials with a certified reduced footprint obtained via the Soil Capital platform, these partners hope to take steps to realise their sustainability ambitions while at the same time being able to offer their consumers more sustainable products. The added value generated by this is the leverage used to motivate farmers to do better every year.

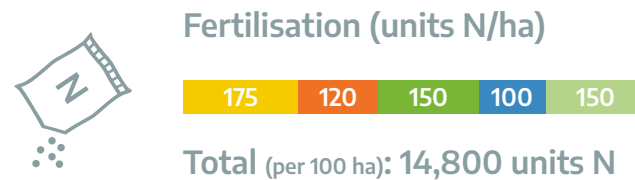
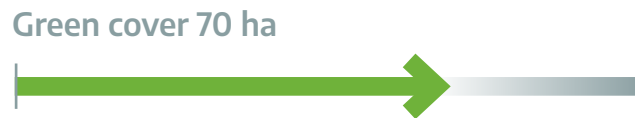
In coming years, Arvesta will continue to build on this model by establishing new partnerships with industry, by recruiting more farmers for the Soil Capital programme, and by coming up with new innovations that reduce the CO2 footprint.

**Results 2022 and ambitions 2023**

In 2022, Arvesta and its partner Soil Capital completed a successful pilot project. Three farmers improved the practices on their farms – their CO2 footprints were calculated via the Soil Capital platform – and after certification, they were compensated for the improvements in their CO2 footprints. Starting in 2023, Arvesta will launch this project on a large scale (10,000 ha) together with partners from the food industry, including La Lorraine Bakery Group and Dossche Mills. Because Arvesta has succeeded in setting up a model that meets the needs of both the farmer and industry, a significant impact on the climate can be expected in the coming years, with an estimated reduction of 4,500 tons of CO2 for 2023 compared to 2022. For the time being, the model can only be used for arable farming and vegetable cultivation, but we hope to add mixed farms with animals in the near future. Interested farmers will receive an initial simulation of what Carbon Farming can do for their farms from their Arvesta representative.



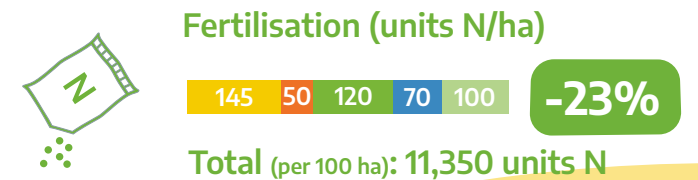
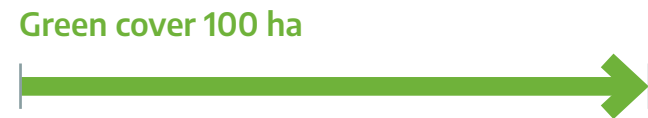
CO2 1.4 t CO2/ha



**Carbon Farming farm**

Return + €3,560

CO2 0.6 t CO2/ha





50% cattle customers  
use Euroclim  
by 2025

## EUROCLIM leverage for methane reduction in cattle

Belgian agriculture and horticulture are responsible for 10% of greenhouse gas emissions, and 6% of this is produced by livestock farming. There is a broad consensus that we must do something about this 10%. The Flemish Covenant for Enteric Emissions from Cattle makes this concrete: The aim is to employ feed measures to achieve a 13% reduction on that 10% by the agreed deadline of 2030.

In response to the challenge of reducing methane emissions by way of feed measures, Arvesta developed a solution that combines ecology and efficiency: the methane-reducing livestock feed Euroclim.

The Euroclim line is based, among other things, on extruded linseed and rapeseed oil. Studies confirm that its use reduces methane production per cow by 9% per day for dairy cattle (12% per litre of milk) and by up to 30% for beef cattle. The Flemish Covenant recognises and supports Euroclim within the pre-eco scheme of 2022 for a reduction of up to 9% on dairy cattle. In 2023, recognition within the Common Agricultural Policy (CAP) 2023-2027 will follow.

According to the preconditions of the Covenant, practical tests with Euroclim were carried out in 2022 in order to validate this new feeding method, and those trials are successful! Methane reduction



that would have a negative effect on milk production would mean that more dairy cattle would be needed for the same amount of milk. This, in turn, would increase methane emissions, which is certainly not the intention. As the tests showed, this is not the case with Euroclim – on the contrary. In 2022, the technical expertise involved in the applications of the preconditions within the Covenant was further expanded in collaboration with farmers and dairies. In 2023, we should be able, with the necessary support from the chain, to expand even further.

Methane-reducing livestock feed is therefore the leverage for Arvesta's ultimate goal – that 50% of Belgian cattle customers will be using this type of feed by 2025. Because if all dairy and other cattle in Belgium were fed in this way, it would mean a gain of 225,000 CO<sub>2</sub>. This is the equivalent of the emission of 130,000 cars. In order to maximise these efforts, Arvesta will continue to fulfil its role as a committed link in the chain by continuing to offer solutions for sustainable agriculture and by continuing to inform the retail sector about the evolutions that are underway in the

transition to meeting the challenge they face – sustainable food.

### Results 2022

The sustainability dashboard on methane-reducing livestock feed shows Arvesta that in 2022 almost 13% of the Belgian Arvesta customers who purchased feed opted for methane-reducing feed. This is approximately the same as the result from 2021. In 2023, Arvesta will continue its efforts to demonstrate the importance of Euroclim to farmers.





**Sabrina Damsin**  
Brand Manager  
Animal Nutrition

## PRÉ DE CHEZ NOUS **Belgian, sustainable, delicious, and responsible meat**



We expect a lot from meat – it has to be tender and tasty but also sustainable and animal-friendly. To meet the growing expectations, continuous innovation is a must. That is why Arvesta's livestock feed producer, Dumoulin, together with master wholesaler Bernard Gotta, meat cutter Viande de Liège, and cattle trader Sobemax, took the initiative to establish the Belgian quality label “Pré de chez nous”.

Pré de chez nous is a guarantee of local, sustainable, and delicious beef. With its small ecological footprint – up to

21% lower per kg of meat – and special attention to animal welfare, this meat is unique on the market.

The requirements listed in the Pré de chez nous specifications clearly go beyond the market standard:

- Regarding livestock feed: fatten the animals for at least 100 days with Dumoulin's methane-reducing Euroclim feed;
- Regarding animal welfare: more light and fresh air in the stables, grooming brushes freely accessible to the animals, and fewer animals per pen;

- In return, the livestock farmer can count on a higher price for the meat.

### **'Mmmm, yummy!'**

On 25 April 2022, farmers, butchers, the press, and the Federal Minister of Agriculture, David Clarinval, were guests in Fernelmont near Namur, for a premiere: the launch of Pré de chez nous. And, of course, there had to be a tasting. The feedback was unanimous: 'Mmm, this is really tender and delicious meat!' At the time of the launch, 5 cattle farms participated, by the end of 2022, there

were 15. The ambition for 2022 was to slaughter 20 animals per week with this quality label. By August of that year, that goal had been achieved. It is clear that this label appeals to the consumer and to the now 30 artisanal butchers that offer Pré de chez nous meat. The goal for 2023 is to further distribute the meat at multiple outlets and to scale up the volume to 30 animals per week.





**FOR OUR PLANET**

# Sustainable entrepreneurship

Together with our employees, partners, and customers,  
we work on sustainable, safe, and high-quality solutions  
and services.

## ANIMAL WELFARE

# Healthy feed, healthy animals, healthy livestock farming



**Koen Nackaerts**  
Sales Manager Pigs

### Taintstop in quality-label specifications for animal-friendly and delicious meat

With Taintstop from livestock feed brand Dumoulin, the livestock industry has a pig feed with which it can market tasty meat from non-castrated animals. The “Le cochon bien-être” quality label has included Taintstop in its specifications and then brought it to the end consumer via Marcassou. It was a beautiful story of local cooperation and respect for animal welfare. But 2022 was a difficult year. The low market price for pork placed the price for quality meat under severe pressure.

In the meantime, Taintstop has been included in the Colruyt-label specifications for pigs. Arvesta will help the local farmers who have committed to Le cochon bien-être to do the same for Colruyt.

The balance between animal welfare, quality, and price is never achieved once and for all, and as experts we believe that we must continue to take responsibility for this by continuing to search for the best solution using our innovations and expertise.

### Animal welfare is a default goal in the development of our feed

*Koen Nackaerts, Sales Manager Pigs:* ‘Animal welfare is always Arvesta’s concern. Because healthy animals live longer and perform better. For sows, for example, it is crucial that they are fit for farrowing and lactation. This requires a balanced feed that contains sufficient fibre and is not too concentrated, so that the animal retains its appetite. Pregnant animals in group stables with feeding troughs that are always accessible require a feed that the animals can eat at will. For fattening pigs, the feed must be adapted to their specific genetic intestinal sensitivity. For example, crushed barley may be indicated instead of ground cereals when there are problems with intestinal health. We see it as our job, in every specific context and for each animal, to achieve maximum welfare with our feed. That is why Arvesta has several ranges of feed, each with its own specificity. Where necessary, we adapt them even further until every animal can have a quality life.’



## ARVESTA SUPPORTS PROFESSIONALISATION toward antibiotic-free piglet and chicken farming



In the field of sustainable feed, Arvesta's experts continue to do pioneering work. In 2022, this again led to the launch of several new products.

### SafeMax or PrestaSafe, for antibiotic-free piglet husbandry with maximum results

At the end of February 2022, on the occasion of the Agridagen in Ravels, Arvesta officially launched its new health line for piglets under two brand names: SafeMax for Aveve and PrestaSafe for Dumoulin. These new piglet feed lines can be proud of their strong results which are bringing us one step closer to sustainable, healthy, antibiotic-free pig farming:

- A highly efficient feed conversion
- 57% lower piglet mortality
- 50% fewer medicinal treatments needed thanks to improved gut health

The SafeMax/PrestaSafe range – being called Balance 2.0 in the development phase – is a safe and effective feed range aimed at consistent and predictable top results for piglets. The feed is used from weaning until the animals weigh 20 to 25 kilos.

### With Optibalance, Arvesta also helps the broiler sector become antibiotic-free

On broiler farms, antibiotics are sometimes also used, although not via the feed, to combat infections. Nevertheless, Arvesta also saw opportunities here to control the use of antibiotics through feed. After successful trials in 2021, we launched Optibalance for meat chickens in 2022.

There are multiple advantages of Optibalance for intestinal health in chickens:

- its precisely balanced, nutritional composition
- its optimal use of plant extracts: to achieve this we can count on the expertise and products from Palital Feed Additives, another Arvesta company
- its production processes

The result? Fewer antibiotic treatments are needed, the welfare of the chickens is improved, and the farmers' work is simplified. The Optibalance feed line ensures healthier intestinal function, which keeps the bedding on which the animals walk drier longer. The chickens' skin stays healthier, and the farmer has to change the litter less often.



**Filip Van den Bossche, Nutritionist:** 'In the summer of 2022, Arvesta also launched another product range for the meat chicken sector – Optifair. This is a range of feed specifically for slow-growing chickens, and it fits perfectly within the framework of the "better chicken" commitment, which requires, among other things, antibiotic-free cultivation.'

### Arvesta continues to be at the forefront of the evolution towards pig farming without antibiotics

In 2022, 99.6% of our pig feed production was antibiotic-free. By ensuring that animals remain healthy with balanced feed, we have made it our goal to raise this to 100% by 2028. This means that Arvesta remains some two years ahead of the goals on antibiotic use and resistance formulated by the sector federation BFA.

### Dirk Bogaerts, Manager Nutritional Solutions

**Monogastrics:** 'We believe that antibiotic-free cultivation is certainly feasible. However, it is not enough to offer feed solutions alone. Specialist expertise and professionalization on all fronts are just as important. Our expert veterinarians and nutritionists know the challenges and have the know-how to respond appropriately. But the role that our technical advisors play in the field is also decisive. And it will be this professionalism in all areas – nutrition, management, guidance, etc. – and on all topics – infection risk, vaccinations, genetics, fertility, etc. – that will achieve more sustainable, healthier, and antibiotic-free pig and chicken farms.'



## ENERGY

# Every kilowatt-hour is counted/counts

### RETAIL

#### Energy savings in Aveve stores with standardised and centralised management

In 2020, Arvesta started a pilot project on energy management at Aveve. This meant connecting two Aveve stores to nanoGrid's energy management platform, where the consumption of gas, electricity, and water was monitored. The quick wins from that pilot project justified a rapid expansion of another 11 stores to bring the total to 13 Aveve stores.

#### 2022: quick wins

The quick wins turned out to be in standby consumption and energy consumption when the stores were closed, for example, for the lighting and/or heating that remained on. We were able to correct this quickly and easily since we could use the nanoGrid platform to control the energy consumption – for example, switching the heating on and off – in all 13 stores at the touch of a button. By standardizing and centralizing energy consumption in this way, we can compensate for human imperfection.

#### 2023: scaling up 200%

Meanwhile, more comprehensive data have been received from all 13 stores for the entire year of 2022. Electricity consumption

appears to have decreased by 14.26% and gas consumption by 42% compared to the reference year 2019. The goal for 2023 is to connect twice as many more stores to the platform.

#### Solar panels on Aveve stores prevent another 805 tonnes of CO2

With the installation of solar panels (PV installations) at our Aveve stores and Aveve buildings, we were able to avoid another 805 tonnes of CO2 emissions in 2022.

The potential relevance of solar panels is always evaluated in new stores and/or stores where renovations are being carried out. These additional PV installations are already planned for 2023:

- In January-February on the Rigaux SA buildings in Mettet
- In May-June on the Aveve Veevoeding buildings in Merksem

In addition to these, there are also franchisees and site owners of Aveve stores who are investing in PV installations. Of course, we applaud them for this. Because, after all, increasing sustainability requires a joint effort and will ultimately be a shared success.

Still more optimisations:

- In 2022/2023, the replacement of the outdoor lighting at the stores by LED lighting will be accelerated. The indoor lighting will be re-evaluated, and motion sensors in common areas will control the lighting.
- The law also contributes, starting from 2022, when transporting money. Coins and paper money may now be combined. That saves a lot of trips.

### ARVESTA AS A WHOLE

#### 3,500 tonnes of residual flows became energy raw materials

During production at Arvesta sites, residual flows are created; these are mainly grain residues, maize, chaff, and grass seeds – 3,500 tonnes were given a second life as a secondary raw material for energy generation. In 2022, Arvesta was once again able to increase the use of residual flows in its own processes.

#### A sustainability score for preferred suppliers

In the summer of 2022, General Procurement finalised and published its sustainability policy and strategy for preferred suppliers, with sustainability criteria that these suppliers will have to meet. In 2023, we will perform a sustainability scan of the suppliers with whom we have a framework agreement. This scan will result in a sustainability score.

#### Arvesta Energy Ambassadors – for group-wide energy management

In October 2022, the Arvesta Energy Ambassadors project team was launched. Two ambassadors per BU (Animal Nutrition, Agri & Horti, and Retail) and two from HQ form an eight-person team that is committed to economizing energy consumption for all of Arvesta. They meet every two weeks to identify opportunities, seize upon initiatives, and create awareness. More on this in 2023.



Arvesta Energy Ambassadors



**Cedric Jacobs**  
Indirect Procurement  
Manager





20% of our  
company vehicles  
are hybrid/electric  
by 2024

The overarching mobility plan for all of Arvesta has three goals: less time on the road, smarter and greener on the road, and more sustainability on the road with the company car.

Less time on the road is a direct result of the now well-established hybrid work regime, the essence of the Arvesta Way of Working (AWOW). In 2022, the number of kilometres driven by the passenger cars in our fleet was once again some 20% lower than in 2019.

### The bicycle leasing policy is ready

For smarter and greener mobility, Arvesta quickly turned to the bicycle. As early as 2021, during the first phase of our bicycle leasing pilot project, 14 of the 150 workers we asked to partake joined in. Following a second registration round in 2022, another 6 participants were added.

*Rebecca Bongaerts, Mobility Manager:* 'The interest is there, and the policy has been worked out. For a wider ranging roll-out, we are now just waiting for an overarching Flexplan.'

### Overarching Flexplan is a work in progress

The intention of the Flexplan is to focus on

## OUR MOBILITY GOALS less, smarter and greener

the second pillar of our sustainable mobility vision, namely smarter and greener on the road. With the Flexplan, we offer mobility as a service and give our people the flexibility to choose from a range of mobility solutions, such as a leasing bike, public transport, parking at the station, shared bicycles, shared cars...

*Perihan Silay, Reward Manager:* 'The study for this overarching Flexplan will be completed in the spring of 2023. This study will give us a good insight into which salary elements can legally be used for a mobility budget, taking into account the various populations within Arvesta: employees with and without company cars, blue-collar and white-collar workers, and the 10 joint committees. This will make it clear which mobility budgets are possible for which populations.'

### Fleet electrification plan: development and test phase completed in 2022

In 2022, Arvesta elaborated the third pillar of its sustainable mobility vision – more sustainable on the road – with the addition of an electric company car, and we completed the test phase. Eighteen Experts in the field with company cars volunteered to be pioneers and joined in the pilot project. They were given an explanation of Arvesta's sustainability vision in the area



of mobility, and they were also extensively informed about the new approach: the new car list, the charging solutions, and the ordering process. They were able to give feedback on all of this. We used this feedback to further optimise and finalise the entire concept. For example, the car list has been adjusted for the wider roll-out, and a FAQ has been developed.

One electric company car was able to hit the road in 2022, and 15 more have been ordered. None of our pioneers chose diesel.

### Further electrification of the fleet in 2023

- At the beginning of 2023, the new vision will be communicated to the whole of Arvesta Belgium.
- Out of a total of about 600 leasing cars, about 70 Experts in the field will have the opportunity until May 2023 to order a hybrid or electric car. From May 2023 onward, only electric cars will be ordered.
- Also in 2023, we will address our vision on car management and electrification internationally and roll it out in the Netherlands and France.

### A charging station for every electric company car

#### At home:

Arvesta currently provides a charging station (or a smart cable, for those who are not owners) at home for everyone who orders an electric company car.

#### At the Arvesta site:

There are already concrete plans for the installation of charging stations at various Arvesta sites – 35 units, to be exact, in the spring of 2023. The quote for another 21 charging stations is being evaluated. An additional 50 are planned for 2023.



**Rebecca Bongaerts**  
Mobility Manager



**Perihan Silay**  
Reward Manager





## MORE SUSTAINABLE TRANSPORT despite extra challenges

To continue optimising its transport, Arvesta is investigating potential efficiency gains in the following areas:

- Centralisation of transport,
- Maximisation of capacity utilisation,
- Optimisation of transport over water, and
- Continuation of the active search for new avenues.

### Centralisation of roadway transport – from plan to realisation

In 2022, Arvesta once again took steps toward the network planning we envisage, across its own sites and beyond its own borders. We moved from the study phase to realisation. We centralised four of our own transport entities, including the drivers, externally under one partner, AB-Texel Feed. Obviously, multi-faceted sustainability was an important criterion when choosing a transport partner.

A first result of this centralisation is that we now have a plan to optimise 40% of the empty kilometres – a reduction to 0% would be unrealistic. Additional studies are needed to formulate our further ambitions. The central route planning system, which was delayed in 2022 for IT reasons, will help us with this.

*Henk Declerck, Procurement Specialist.*  
‘For road freight transport, Arvesta is also

investigating which transport company can be its partner in a possible switch to alternative fuels, such as hydrogen, HVO (Hydrotreated Vegetable Oil), bio-LNG, etc.’

**+7.8% capacity utilisation in trucks = 25% fewer trips**

As announced in 2021, Arvesta started loading more bags of its feed onto each pallet in mid-2022, namely 42 instead of 30. This transition has been done in phases, at the same pace as the transition to the new bags with a more efficient format – simply throwing away the old bags would not have been sustainable either. Even though the new system did not reach cruising speed right from the start, the capacity utilisation of trucks increased by 7.8% in the second half of 2022.

*Kris Lalou, Logistics Manager Retail.* ‘Since the profit margins went up consistently and we achieved an increase of 15% greater loads during the last month of 2022, the expectation is that we will reach at least this 15% increase every month in 2023, perhaps even +20% is possible.’

Expressed in trips:

- Between the factory in Merksem and the distribution centre in Wilsel: 25% fewer trips. The maximum gain is estimated to be 33% fewer trips.



- Between the distribution centre and the stores: 10 to 15% fewer trips.

### 51% over water despite extra challenges

In the final months of 2021, a problem developed with the availability of barges. In 2022, the challenges of the war in Ukraine were added to this, and in the summer of 2022 the drought reached such a level that even parts of the Rhine became unnavigable. Even though we occasionally had to look for other suppliers, who were not necessarily situated on the water, we were able to organise half of the transport of our raw materials for livestock feed over waterways in 2022. We even did slightly better than the set objective of 50%, namely 52,3%.

### Over rail – turning a challenge into an opportunity

In 2022, we also succeeded in turning a challenge into a (commercial) opportunity. With four trains from Ukraine, we conveyed soy twice and maize twice.



*Patrick Boone, Director Procurement Animal Nutrition.* ‘Sustainable transport is not the only thing the railway guarantees. Since we were able to fulfil the contract despite the war, we avoided having to import less sustainable soy from South America, for example. If you then take into account the fact that a train is equivalent to 75 trucks, we took about 300 trucks off the road.’

As far as Arvesta is concerned, rail remains a strategic option for the future.



**Henk Declerck**  
Procurement Specialist



**Kris Lalou**  
Logistics Manager Retail



**Patrick Boone**  
Director Procurement Animal Nutrition

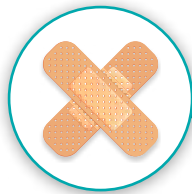




## FOR OUR SOCIETY

# Care for our people and consumers

We work together for the well-being and safety of our employees. We strive for the best customer experience through our expertise and are committed to sustainable consumption.



Aim for 0 accidents

## ALL TOGETHER NOW towards zero accidents at work



Because Arvesta has a wide variety of activities under its umbrella, the safety challenges are very diverse. But what remains the same, no matter the activity, is that safety concerns everyone. Safety is everyone's responsibility – everyone can be a victim, and every accident is one too many. That is why safety is a permanent priority throughout Arvesta, and Safety Sam is our mascot.

### Figures for 2022

- In 2022, 36 of the 42 company-owned stores with company staff remained accident-free. Twenty-two of these stores have not had a single accident for 3 years, and 6 of the stores have been accident-free for 8 years (2,957 days).
- Arvesta's head office remained accident-free in 2022, as it was the year before.

### Every accident is one too many and, at the same time, a wake-up call

*Martin Coomans, Prevention Adviser HQ & Retail:* 'One accident with a pallet truck can have major consequences. It shouldn't happen, but when it does it is essential that we learn from it. That is why every accident is discussed in the Prevention Committee, and every accident is a wake-up call for the entire company. After all, safety is never achieved once and for all. When it comes to safety, habituation and routine are the enemies.'



### True prevention takes place on the terrain

*Dominique Poelmans, EHS Officer Animal Nutrition:*

'We have a Prevention Adviser at every site, the Animal Nutrition advisors hold weekly meetings, we can now rely on the very comprehensive 'Arbeidsveiligheid voor de mengvoedersector' [Occupational Safety in the Compound Feed Sector] manual from BFA and on IDEWE (an external service for prevention and protection at work), we know the European, Belgian, and Regional directives, we undergo audits, and every three months we perform a self-evaluation. There is also a global prevention plan, we carry out risk, accident, and hygiene analyses... The real challenge is always the implementation on the work floor, again and again.'

### Theory, but above all, practice

In our retail activities and our logistics, most of the accidents are related to lifting and carrying loads. That is why every new store or logistics employee receives training from IDEWE, with some theory of course, but also – essential! – with applications for the work floor. In fact, part of the investments made by Arvesta in 2022 are linked to the problems of lifting and carrying loads.



**Martin Coomans**  
Prevention Adviser  
HQ & Retail



**Dominique Poelmans**  
EHS Officer  
Animal Nutrition

### Campaigns and Investments in 2022

- Instead of developing a manual itself, Animal Nutrition decided in 2022 to purchase the "Occupational Safety for the Compound Feed Sector" manual from BFA.
- In 2022, as part of the progression towards a single, uniform, occupational accident policy for Agri & Horti, the safety issues of all branches were mapped out. The Agri & Horti Prevention Coordinator will then visit, evaluate, and make adaptations at all sites.
- The installation of a smiley speedometer on the company terrain has reduced the average speed from 24 km/h to 17 km/h.
- For Retail, an update of the evacuation plans began at the end of 2022 and continued on into 2023. This was done primarily as a result of an adjustment made to the shop interior.
- In the logistics centre, lifting and carrying work is now systematically alternated with other, less physically demanding work.
- New, sturdy step stools have been provided in the Aveve stores.



Fit@Arvesta  
100% participation

## FIT@ARVESTA in mind and body



Fit@Arvesta is the online coaching platform for Arvesta employees designed to help them live a fit and healthy life, both physically and mentally. The tool is practical, simple and, above all, accessible. Exercise, healthy eating and sleeping, mental resilience... it's all covered.

### Fit@Arvesta on promo tour at the production sites

One target that Fit@Arvesta had set for itself for 2022 was to reach more blue-collar workers. In order to increase participation, a Fit@Arvesta promotional tour was organised at three production sites (Merksem, Aalter, and Andenne), in close collaboration with the plant managers

and with a playful challenge – the smoothie bikes.

### Strengthening the connection among all employees

From now on, in an effort to get a better idea of who we do and do not reach, we will look at the individual registrations. In 2022, 48.1% of our Experts in the field participated; our aim is to increase that share in various ways. *Stéphanie Deleul, Communications Manager*: 'The goal, of course, is to get people moving and to make and keep them fit, but the interpersonal connection that it entails is also important. To that end, the online predictions for the World Cup were something extra – something that generated the necessary enthusiasm.'

### A healthy mind in a healthy body

In 2022, there were also four sporting challenges for individuals and teams – the Fit Challenges – each of which was linked to a current sporting event such as the Olympics, the Paris and Boston Marathons, the Tour de France, and the World Cup, for example.

For some of the sporting challenges, Fit@Arvesta also launched a group challenge, and we proposed a number



**Stéphanie Deleul**  
Communications Manager

of charities for each one. If the goal was reached, a contribution was made to the charity with the most votes. In 2022, Arvesta donated € 8,250 euros, to Ukraine 12-12 (€ 5,000) and to River Clean Up (€ 3,250).

### The main focus of the Fit@Arvesta webinars for 2022 was mental well-being:

- Booster Energy, by Dominique Monamie, on how to use your energy, focus and vitality more efficiently;
- Mental Reset, by Elke Geraerts, on how hybrid working and living can strengthen your resilience;
- Changing Habits, by Anneleen De Lille, on how to develop mental flexibility and how to turn frustration into motivation.

### Fit@Arvesta in 2023

Live + virtual: For creating even more real connectivity, two of the four Fit Challenges in 2023 will be live events, namely the Antwerp 10 Miles and a padel initiation/ tournament.

Outside of Belgium: In 2023, Arvesta will extend the connection beyond our national borders. We will actively appeal to our colleagues from the Netherlands, France, and Germany to "Fit" along with us.

## A COMPLETE CAREER REVOLVING AROUND the agriculture of the future

Arvesta is a house consisting of various strong brands. Yet everyone who works at Arvesta has one thing in common – we are all experts in our fields. Experts in the field. Arvesta's challenge as an employer is to find these experts and connect them with one another.

### Arvesta – Da's beestig [Now, that's wild]

In 2022, we worked hard on developing an Arvesta-wide employer branding. By the end of 2022, the “Da's beestig” [“That's wild” in English] campaign was ready for a roll out. It has become a campaign in which authenticity is key.

*Louise De Wulf, Talent Acquisition Lead:*

‘Your employer brand is only strong if your OWN people stand behind it. In order to connect our people with each other and with the organization, we involved them in the campaign.’

### Sustainable careers grown here

For the careers of its Experts in the field, Arvesta focuses on sustainability.

Through our Young Graduates Program, young talent can first participate in various projects in different departments. The wide range of experience they gain in this way allows them to have an even greater impact in their further careers at Arvesta.

Anyone who works in an Aveve store and indicates at the start that they want to grow into the position of store manager can participate in a nine-month, Future Store Manager programme.

And at Arvesta, the Arvesta Academy is a source of continuous development for all our Experts in the field. On the digital platform Goodhabitiz, there are more than 120 virtual training courses for our people. Those who have leadership ambitions/abilities will also receive progressive training in three phases – start, grow, and lead – at the Leadership Academy. And that is by no means the only possible perspective. At Arvesta, we certainly encourage internal mobility between the Business Units, sites, and positions.

Every Expert in the field has ownership over his or her own career. Arvesta is the facilitator, and everything is negotiable.

*Luna Daenen, HR Business Partner:*  
‘Because we have various career options



at Arvesta, we aim to also be there before people have taken their first steps into the labour market. Educational institutions, student associations, even radio stations can count on Arvesta to help bridge the gap between talent and work. For example, we gave guest lectures at Thomas More University College, and MNM came here for a day to broadcast live as part of MNM JumpJobs.’

### The Arvesta Way of Working

Arvesta's Way of Working is truly pioneering. From way before COVID, we have known about hybrid working and working from home or from one of our hubs. And we have been working on future-proof jobs even longer than that. Our Fit@Arvesta, for example, has earned us the Baanbrekende Werkgever [Pioneering Employer] 2023 certification as well as that of Best Workplace Transformation.

The HR initiatives and innovations at Arvesta are all data-driven. On the one

hand, we have the career data of 2,300 Experts in the field, and on the other hand, we regularly organise pulse-checks among our people. The goal? To keep our finger on the pulse so we can achieve even more engagement and motivation.



**Louise De Wulf**  
Talent Acquisition Lead



**Luna Daenen**  
HR Business Partner



100% consumer packaging bread and baking mixes packaged with recyclable monoplatic film by 2023



## AVEVE FLOWER PACKAGING AND PRODUCTION

### For ecology, against waste

#### Recyclable monoplatic packaging? Check.

In 2020, Arvesta had started to switch its consumer packaging for bread and baking mixes from the brands Aveve, Soezie, and Niamh to a 100% recyclable monoplatic. The transition was well thought-out. In order to prevent having to throw away old Aveve packaging after the rebranding – that would not have been very sustainable – the transition was implemented at the same pace as the rotation of products – a total more than 100 products. It is possible that both old and new packaging can still be found on the shelves in Aveve stores,

and it is conceivable that an “old” product, here or there, can still be found on the market, but the transition that started at the production level in 2020 has now been completed.

#### Dotting the i’s

Aveve Flour is now busy dotting the i’s. A small number of our products are adorned with stickers. In October 2022, we commissioned our label supplier to switch our stickers to 100% recyclable monoplatic film.

#### Toward (more) sustainable solutions with an inventory

The progress toward a (more) sustainable food chain marches on. We are well aware that plastic remains a contested issue when it comes to the pursuit of sustainability, but food waste is a definite taboo. That is why, today, we have opted for a plastic that is as thin as possible and recyclable and one that guarantees the quality and shelf life of the food products. It is also true that standing still is going backwards. Sustainability

requires and deserves our continued attention. Can we go from recyclable to recycled? (Where) can we reduce CO2 emissions? Where can we recycle by-products from packaging and production? The first bags produced after the switch of a production line can go to the livestock feed industry, for example, but, for food safety reasons, the 20 tonnes of flour that we suck up every year while cleaning aren’t given the “go ahead”. What are the options there? The search for solutions starts with making an inventory of the challenges. The magnitude of the impact and how far developed the alternatives are will then determine the sequence and speed with which they are addressed. *Stijn Donné, Director Aveve Flour:* ‘In doing so, we benefit from Arvesta’s initiatives, such as the efforts made to grow grain in a sustainable way and to focus on local grain, which is, in and of itself, more sustainable. There is local grain that is suitable for baking bread, and we will market this grain via the products from Aveve Retail and perhaps also externally. The market is certainly interested.’

A (more) sustainable food chain will be the sum of all the next steps that each party involved will ultimately take. Aveve Flour continues to take such steps.



**Stijn Donné**  
Director  
Aveve Flour

## AVEVE'S SUSTAINABILITY PLAN

# choosing biodiversity, animal welfare, and local delicacies



Sustainability is about believing in tomorrow. And so is Aveve's sustainability plan. With innovations and solutions for our Aveve stores and our Aveve products, we are making sustainable choices for ourselves, and we are making sustainable choices possible for our customers. That's what we care about, and that's what we act on. We Care, We Act.

### Choosing biodiversity

Aveve helps its customers make choices for a more biodiverse garden. How? In addition to traditional crop protection

products, Aveve emphasises natural plant protection with more than 26 products that preserve the biodiversity of gardens. What's more, Aveve offers its customers the opportunity to give their gardens a "biodiversity boost". It does this with an increasingly varied range of native flowers and flowering plants, such as those that attract bees and butterflies, with seeds from local horticulturists. With peat-free potting soil that has been developed to simultaneously enrich the soil as well as protect the valuable, yet scarce, peatland. With bee hotels, birdhouses and feeding tables, preferably made from ecological

and recycled materials, for more life in the garden. With suet cakes without a net. With practical tips on pavement reduction and green balconies and on how flower meadows are a much more interesting alternative than the perfectly mowed lawn.

### Choosing animal welfare

Aveve helps its customers pay attention to both the welfare and the ecological footprint of animals. How? By producing animal feed without artificial flavourings, colourings or preservatives. With the goal of using 100% certified soy in all our chicken feed by 2026. By supporting animal shelters and other organizations that help animals in need with free animal feed or supplies. With practical tips on how to keep pets happy and healthy. By offering pet food that is close to its expiry date via the food-waste prevention app Too Good To Go. (By the way, we also apply the "Too good to go" principle to plants, because wasting anything is at odds with sustainability.)

### Choosing local delicacies

Aveve helps its customers choose local food. How? By stimulating the cultivation of local, sustainable wheat for sustainable flour. This means a crop that requires less fertilization, one that has less impact on

biodiversity thanks to smart cultivation combinations and one that produces fewer CO2 emissions because we work with local farmers. And, for those farmers, we strive for a fair price.

With the "Landelijk Lekkers [Rural goodies]" range, we promote traditional products. We put regional specialities in the spotlight. And in the stores and on the Aveve website, we constantly share new tips about nutrition and health.



**Peter De Mey**

Marketing & Category  
Management Director  
Aveve









# LOOKING FORWARD

It is Arvesta's dream to be the highest performing, customer-oriented, agricultural expert in Europe by 2025. An ambitious goal which we will continue to pursue consistently and with a lot of hard work. After starting the Stronger Together transformation journey in 2017, today we find ourselves in the next phase of our journey, The Next Level. We have come a long way, with all the necessary challenges, but also with the subsequent results – after all, we have continued to grow for six years in a row now.

In the meantime, we continue to look ahead and refuse to stand still. On the contrary... We will continue to function as pioneers in facing the challenges of today. For example, Arvesta's leadership team will help to further concretise the various ESG targets and priorities and further refine them into action plans that we can closely monitor and follow up with our national and international teams. We will continue to create awareness and engagement amongst our employees. We will comply with the new targets and ambitions within the framework of the Corporate Sustainability Reporting Directive (CSRD). And we will do all this together with, and thanks to, the combined forces of our 2,300 Experts in the field.

We are here to stay!

The Leadership Team

## APPENDIX: INDICATOR DEFINITIONS / SCOPE / EXTRA INFORMATION

### 1. Sustainable soy

#### DEFINITION

Share of the total mass of conventional soy meal purchased by Arvesta's Belgian entities that is sustainable, either because sustainable soy certificates were purchased or because the soy was grown in North America.

#### SCOPE

Conventional soybean meal for all of Arvesta's Belgian brands and entities.

#### EXTRA INFORMATION

Certificates purchased: CRS - Certified Responsible Soya credits, RTRS credits, SFAP NC / Argentine sustainable soy credits.

### 2. Water savings

#### DEFINITION

Annual water savings by farmers and horticulturists thanks to innovative developments by Arvesta.

#### SCOPE

All of Arvesta's innovations that result in the saving of water within the value chain. Currently, the most significant water savings are achieved through Hortiplan's Mobile Gully Systems (MGS) and Van der Hoeven's greenhouse systems.

#### EXTRA INFORMATION

Water savings are calculated by considering the difference between the actual expected consumption (thanks to the innovation) and a reference consumption (without Arvesta's innovation). In doing so, the following assumptions were made:

#### 1. Hortiplan:

- MGS water consumption is 500 litres/m<sup>2</sup>, based on studies by the Department of Agriculture & Fisheries and the ILVO. Based on our expertise, this estimate is conservative.
- An MGS provides for water savings of 89%. This is the average water savings reported by 6 growers working with MGS (min = 80%; max = 95%).

#### 2. Van der Hoeven:

- Actual water use and reference use were calculated based on the academic literature. The calculated water savings takes into account the crop, the climate, the type of greenhouse system, and the water source used.

### 3. Livestock feed with a positive impact on methane emissions

#### DEFINITION

Share of Arvesta's cattle customers in Belgium that buy methane-reducing feed or additives.

#### SCOPE

All cattle customers in Belgium.

### 4. Reduction of CO<sub>2</sub>e

#### DEFINITION

Reduction of greenhouse gas emissions within Scopes 1, 2, and 3 relative to 2020 as the base year, in conformity with the GHG protocol.

#### SCOPE

Scopes 1, 2, and 3 emissions from Arvesta, in conformity with the GHG protocol.

### 5. Antibiotic-free feed

#### DEFINITION

Share of the total mass of livestock feed for piglets, fattening pigs, and sows that does not contain antibiotics.

#### SCOPE

Piglet and pig feeds from Aveve, Dumoulin SA, and Dumoulin NV.

### 6. Transport by water

#### DEFINITION

Share of the total mass of materials imported in bulk to the waterfront locations of the Animal Nutrition BU and the Agri & Horti BU that arrive by barge.

#### SCOPE

All incoming bulk products imported to waterfront locations for all brands within the Animal Nutrition BU and the Agri & Horti BU. BU Retail is not taken into consideration here.

### 7. Hybrid or electric vehicle fleet

#### DEFINITION

Share of hybrid or electric company vehicles in Arvesta's fleet, excluding temporary cars for newcomers.

#### SCOPE

Company cars of all Arvesta employees. Light trucks and temporary cars for newcomers are not taken into consideration here.

### 8. Aim for zero accidents at work

#### DEFINITION

The number of occupational accidents resulting in absence from work per year involving Arvesta's permanent staff and job students.

#### SCOPE

All Arvesta employees and job students.

### 9. Fit@Arvesta

#### DEFINITION

Percentage of Arvesta permanent employees, job students, and contractors who have registered on the Fit@Arvesta platform.

#### SCOPE

All Arvesta employees (permanent personnel, job students, and contractors).

### 10. Recyclable packaging

#### DEFINITION

Share of stock-keeping units (SKU) produced by Aveve for flour, bread, pasta, and baking mixes with recyclable packaging (recyclable mono-plastic packaging (RMP) or recyclable paper packaging), including all labels and stickers attached to the products.

#### SCOPE

Flour, bread, pasta, and baking mixes from the Aveve, Niamh, Soezie, Belcampi, and Private Label brands.

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