

Avebe Magazine

- 
- **Back to Avebe, with confidence in the future**
Interview with Marcel Harren from Haselünne
 - **It's about salt reduction; water conservation is a consequence**
In conversation Kees van der Voort Maarschalk
 - ▶ **Collaboration + Resilience = Play to Win**
Interview with Ronny Pals



The *Play to Win* culture forms the foundation for executing our strategy.

There is a lot of movement in the potato sector. For the 2025 growing season, and for Avebe, the acreage of starch potatoes in the Netherlands is stabilising, while we are seeing growth in Germany. Looking ahead to the 2026 season, demand is expected to increase further. Outside our cooperative, the expansion of acreage in Scandinavia is particularly notable. Thanks to a good harvest, supply is plentiful, while demand remains steady. At the same time, the broader potato sector in Northwest Europe is currently facing extremely low prices, a significant surplus, and declining demand from the fries industry. These developments underscore how important it is for us as a cooperative to remain both steadfast and agile in a market that is changing ever more rapidly.

A key step in strengthening our position is the acquisition of Solan in Poland. With this acquisition, we accelerate our access to knowledge



and experience in processing potatoes into flakes and granules, and their sales. This expands our product portfolio and further supports Avebe's growth ambitions. Colleague Jur Leever shares more about this in this magazine.

Our strategy, Accelerate and Strengthen, provides direction and focus to everything we do: from developing new products to improving our processes and reinforcing our market position. We continue to focus on distinctive added value in specific markets, with attention to sustainability, innovation, and collaboration with our customers. We have achieved solid results in recent years and seem well on track for the coming years.

In this edition of the Avebe Magazine, you will read how we are putting this into practice. You will find stories about new product launches that respond to customer needs, innovations that strengthen our position in the chain, and the steps we are taking in the field of sustainability. As always, we also share a member's story.

The campaign for the 2025 harvest is now in full swing—in the Netherlands, Germany, and now also in Poland. Planting conditions and the growing season were generally favourable this year. The first deliveries to our factories show, on average, higher starch contents than in previous years. This offers prospects for a successful campaign.

Finally, a word to Team Avebe: Especially in these challenging circumstances, collaboration, entrepreneurship, and ownership are essential. Our Play to Win culture helps us to spot opportunities, make choices, and move forward with energy. Together, we are building a strong cooperative, with the earning power of our members as the highest priority.

I wish you much enjoyment and inspiration as you read this edition.

David Fousert
CEO Royal Avebe

Index

Colophon

The Avebe Magazine is a publication by Royal Avebe, created especially for our members and employees. The digital version of the magazine can be viewed at www.avebe.nl/over-ons/downloads.

Contact:
Communication@avebe.com

Photography:
Stella Dekker, Peter Tahl and Avebe

Copy:
Kim van den Bergh, Gisela Staal and Avebe

Design and layout:
Junction

Follow us on social media:
 Royal Avebe
 @Royal_Avebe
 Royal Avebe
 RoyalAvebe
 Royal Avebe



Foreword	2
Short News	8
Watch & Listen Tips	9
Recipe	14
Innovation	15
Avebe's in the picture	18
Then and Now	22

How do we know how many potatoes we can expect?

The potato campaign: planning and adjusting



The potato campaign is operating at full speed again. Royal Avebe's agri-team leads the campaign and works closely with growers, transporters, the sales department, and factory planning to ensure a smooth supply chain. But how do we know how many potatoes to expect? And who decides when they go to the factory? These choices are the result of meticulous planning, which begins in the spring and is continually refined throughout the campaign. Together, we take a structured approach to accurately forecast the expected starch yield.

Starting in spring

As soon as the growing season approaches, we begin preparations. We assess the number of active shares and ask our members how many tonnes of potato starch they wish to deliver (the A-volume). They also indicate the number of shares they are registering for, within the range of 3.8 to 5 tonnes of potato starch per share. We also ask for an indication of how many hectares they are dedicating to Avebe. At this stage, we estimate how much potato starch can be delivered.

After planting in the spring, members report the exact area and the number of hectares per variety. Using this data, the agri-team adjusts the initial planning. Meanwhile, we closely monitor the growing conditions.

From field to data: insights from the trial harvest

Every growing season presents its own challenges. A cold, wet spring or prolonged drought affects growth and starch content. On 1 July, we conduct the first trial harvest to measure starch yield. On about 100 plots from growers in study groups, a small section of the field is harvested. Two samples are taken during this test, which are then sent to the analysis centre. There, the samples are weighed and analysed. The results are compared with previous years to gain insights into growing conditions and crop development.



From the end of July, Averis harvests various varieties every 21 days to monitor the growth curve. This provides valuable information about the development of new and existing varieties. What is the quality? How do they compare to each other and previous years? The insights from the trial harvest and growth curve help us further refine planning and determine the optimal start of the campaign.

The first deliveries

From mid-August, we process the first potatoes. This is always an exciting moment. What is the quality like? How is the factory start-up going? And what is the starch content? The first yields give us a good indication of the season. We closely track progress and aftergrowth. On 1 September, we conduct a second trial harvest on the study group plots and organise the Avebe trial harvest — a representative sample of the cultivated varieties across the entire working area. With this data, we fine-tune our harvest expectations. Two weeks later, we repeat this to verify results and assess aftergrowth. Shortly before the fields are harvested, a third trial harvest is performed in the study groups.

Taking stock: what can we still expect?

In November, when most of the potatoes have been harvested, we carry out the autumn inventory. Growers indicate what they still expect to deliver. This is a crucial moment for our planning. From this point, we determine, for example, how long the factories will keep running and how much C-volume potatoes — those above 5 tonnes of starch per share — we can accept.

The more accurate the numbers, the better our predictions. We also consider production planning, sales, market conditions, silo storage capacity, and harvest risks, such as plots that could not be harvested due to heavy rainfall. All of this aims to make the potato campaign as efficient and successful as possible. This way, Avebe gets the most out of the harvest and we optimally serve our members and customers.





Trade shows and conferences

From Nuremberg to Bangkok – sharing our innovations worldwide

Over the past few months, Avebe has been present at international trade fairs and conferences, from Nuremberg to Chicago. These events are where we quite literally put our innovative ingredients on the map. Whether independently or in collaboration with distributors, our goal remains the same: to listen, connect, and demonstrate how our solutions create value for customers.

At the European Coatings Show in Nuremberg, we showcased our starch-based solutions for construction products. From plaster with consistent quality to tile adhesives with improved anti-slip properties – our ingredients make a real difference.

At IFT First in Chicago, the spotlight was on plant-based food innovations. Visitors sampled gluten-free sandwiches with cheese and mortadella, egg-free cupcakes, and plant-based meatballs – all freshly prepared during live cooking sessions.

Whether it's a confectionery fair where we launch a new product, or a packaging event highlighting our sustainable, biodegradable solutions: we make innovation tangible.

In the coming months, we'll be attending Food Ingredients Europe in Paris, continuing to demonstrate the power of Avebe and the potato in a wide range of applications.



Aftermovie 70 years of Averis

Curious how we celebrated 70 years of Averis during the Starch Potato Days?



Watch the aftermovie

Agro

Celebration at Avebe: Averis turns 70

This year, Averis celebrates its 70th anniversary – and we marked the occasion in style. During the Starch Potato Days this summer, over 500 members and colleagues visited our site in Valthermond for a unique behind-the-scenes look at our breeding activities.

A particularly heart-warming moment was the visit of Mr Bartelds, aged 105. His family has been involved in seedling propagation for generations and shares a deep connection with both Averis and Avebe. A valuable encounter during a festive milestone!



Agro



Kitchen Table Talks

Every year, Avebe organises its Kitchen Table Talks – a key moment for dialogue between us and our growers. Board members, the supervisory board and Avebe members meet on the farm, sometimes quite literally at the kitchen table. A wide range of topics are discussed, from harvest conditions to the impact of legislation and regulations.

From starch to innovation

Working together on the future of food

At Avebe, we're fully committed to sustainable innovation – often in collaboration with partners. Together with TNO and Wageningen University & Research, we're working on sustainable solutions to tackle the looming global food shortage caused by population growth. One such solution? Plant-based meat alternatives made from potato starch, combined with 3D food printing. Our colleague Annet Vrieling-Smit is enthusiastic: "3D food printing is a fantastic technique! In six to ten years, I hope we'll see many more plant-based options on supermarket shelves – maybe even in surprising shapes, but just as tasty." Curious about our approach? Scan the QR code, watch the video and read the full article on our campaign page.

Want to learn more about the Avebe-TNO collaboration? Scan the QR code to watch the video.



In conversation with founder Chris Bryson

Innovative plant-based salmon from Canada

PerfectaSOL® from Royal Avebe is an essential ingredient in the plant-based salmon developed by New School Foods – an innovative company setting a new standard for plant-based seafood. Their salmon is now available in North America, and the Toronto-based start-up is ready to expand to Europe. Founder Chris Bryson shares insights into their groundbreaking technology and the role of Avebe's PerfectaSOL®.

Starting the company

New School Foods was born out of a drive for sustainable food production. The company's mission is to change consumer behaviour. Chris explains: "We aim to create plant-based products that look appealing and are easy to use. Traditional methods often result in products that appear pre-cooked. While that works for minced alternatives like burgers, it falls short when producing whole cuts of plant-based fish or meat."

A newly developed production process

Chris realised that new technology was needed. He funded academic research into better ways of creating muscle fibres using plant-based ingredients. "Four years later, when we saw the potential, we decided to launch the company. We developed a production process that preserves the original cooking experience," Chris explains.



MEMBER STORY

Through techniques such as targeted freezing, the company can replicate the texture of whole muscle cuts, mimicking the experience of cooking and eating traditional fish and meat. Avebe's potato protein creates the distinctive white lines in New School Foods' plant-based salmon – and offers even more benefits. "With other proteins, you often get darker colours, so the lighter shade is a real advantage. The thickening and solubility properties of Avebe's PerfectaSOL® are also excellent," says Chris.



"We're genuinely impressed by Avebe's products."

A sustainable supply chain

Sustainability is central to the production process. New School Foods reduces waste by transforming by-products into new items, such as smoked salmon flakes. Avebe's potatoes also help lower the carbon footprint, thanks to their lower CO₂ emissions compared to other crops. "In a traditional butcher's shop, nothing goes to waste. We apply the same philosophy to our products," Chris notes.

Global growth

The plant-based salmon hasn't gone unnoticed. In 2024, an international retail chain invested in New School Foods, opening up exciting opportunities for the start-up. Chris expects to enter the US market in Q2 this year and expand their product range.

"The same technology we use to create muscle fibres for plant-based salmon can be applied to plant-based steak, ribs and other meat varieties."

Interview with Stefan Wessel about a breakthrough innovation for candy manufacturers

More value for our customers through shorter drying times in confectionery

Anyone who thinks making sweets is child's play is mistaken. Behind a classic wine gum lies a complex process of mixing, moulding – and above all, waiting. The candy needs to dry for two full days at a specific humidity and a temperature of 50°C. “Production capacity is often limited by the size of the drying rooms,” explains application specialist Stefan Wessel. “Time, space and energy are scarce resources. That's why customers regularly ask us how to shorten the drying time. We're always happy to help and look for a solution.”



Customer needs come first

At Avebe's laboratory, we test on a small scale what manufacturers produce on a large scale, Stefan explains. “To make a wine gum, for example, you need to heat sugar and starch. Within Avebe's portfolio, there are 10 to 15 types of starch suitable for confectionery. Depending on the customer's needs, we select a starch that matches the desired texture and elasticity. We also experiment with high or low concentrations – and now with long or short drying times. We keep testing different variables until the result meets expectations.”

Shorter drying time for gummy sweets

In response to customer demand for greater production efficiency, our product development team explored various starch types that could reduce drying time. The result: a clean label starch – meaning it contains no E-numbers. This product was introduced earlier this year at ISM ProSweets in Cologne and the IFT (Institute of Food

PRODUCT APPLICATION

Technologists) in the US, where it received very positive feedback. We're already in discussions with several customers.

Liquid and easy to mould

“This particular starch not only shortens drying time,” Stefan explains, “it also keeps the product liquid for longer, making it easier to pour into starch moulds. After drying, the gummies are removed from the mould.”

Texture and airiness in sweets

“Other customer requests often relate to texture,” says Stefan. “In technical terms, we talk about long or short structure. A long structure means the sweet is stretchy. A short structure results in firmer chewy sweets – like classic wine gums. Manufacturers also want to control density, and that's where our proteins come in. The lower the density, the lighter the foam,” Stefan explains.

“Depending on the customer's needs, we select a starch that matches the desired firmness or softness, or a specific level of elasticity.”

Always in stock at home

Stefan's favourite sweets at home combine two elements: a wine gum with liquorice flavour, where potato starch provides firmness, and a banana-flavoured foam sweet, where potato protein adds airiness. “That's the first candy to disappear at our house. It's light and chewy – and the liquorice-banana combo is a real hit.”

Further reducing drying time?

“We're constantly innovating. In future, we aim to reduce drying time even more. That would allow the use of reusable moulds made of plastic or metal,” Stefan says. He adds that the modified starch is also a vegan alternative to gelatine. And the shorter drying time saves customers energy, time and space. Innovations like these help Avebe maintain its strong market position!

“That candy is always the first to go at our house. It's light, chewy – and the liquorice-banana combo is a real favourite.”



Custard, just like grandma used to make

The days are getting shorter and the cold is slowly creeping in. After a long day at work, you crave something warm and comforting. Maybe something that takes you back – like coming home after playing outside and being handed a bowl of warm vanilla custard by grandma.

In this edition, we’re recreating that cosy memory in a bowl. Not custard from a carton, but homemade custard. Using potato starch as a thickener – a nod to the product we work with every day.

Homemade vanilla custard (serves approx. 4)

- ▶ 1 litre whole milk
- ▶ 1 vanilla pod (or 1 tsp vanilla extract if unavailable)
- ▶ 50 grams sugar
- ▶ 40 grams potato starch
- ▶ 2–3 egg yolks (optional, but adds a lovely golden colour)

How to make it

- ▶ Heat most of the milk in a saucepan over medium heat, leaving a small amount aside for mixing later. Split the vanilla pod and scrape out the seeds. Add both the seeds and pod to the milk. Reduce the heat and let it infuse gently for 10–15 minutes (do not boil).
- ▶ In a bowl, mix the potato starch with the reserved cold milk until smooth.
- ▶ Add the sugar and, if using, the egg yolks. Whisk until well combined.
- ▶ Remove the vanilla pod from the warm milk and pour a little of the milk into the starch mixture to temper it. Want extra flavour? Leave the pod in until serving!
- ▶ Pour everything back into the pan and heat gently while stirring until the custard begins to thicken – about 5 minutes. Do not boil.
- ▶ Once thickened, remove from heat. Let it cool slightly, then pour into bowls or a large dish.
- ▶ Enjoy warm, or cover and chill in the fridge (tip: place cling film directly on the surface to prevent a skin forming).

Serve with a generous dollop of whipped cream, a sprinkle of cinnamon or a splash of berry syrup for that truly old-fashioned feel. Enjoy!

RECIPE



Sharing your receipt?

We’d love to hear from you! Do you have a recipe using potato starch or potato protein that you’d like to share in the next edition? Send it to communication@avebe.com – and who knows, your recipe might be featured!

INNOVATION

Ever wondered how your coffee packaging stays sealed?

You’re making your first cup of coffee in the morning. You grab a fresh pack, tear it open, scoop the ground beans into your filter or pour the whole beans into your machine... and everything is still neatly contained. No burst packaging, no loose grounds in the cupboard. It seems obvious – but behind that sturdy seal lies clever technology. The secret? The glue is made from potato starch.

PerfectaCOL® GM is a natural adhesive that keeps packaging and boxes tightly sealed, blocks grease, and is biodegradable. It’s used in packaging for products like breakfast cereals, coffee and sweets. It’s food-safe, runs smoothly on production lines, and helps reduce CO₂ emissions. A smart solution for anyone looking to package sustainably – without compromising on quality.



We’ve made great progress with PerfectaCOL® GM recently. From coverage in trade media to conversations with major packaging companies and growing market interest – all thanks to collaboration across the board: from field to packaging.

Want to learn more about PerfectaCOL® GM? Check it out here:

- ▶ We published a whitepaper where colleagues from R&D, Sales and Marketing clearly outline the benefits – from improved processing on the production line to a more sustainable end product.
- ▶ Expert Colin Brown shared his insights in a blog post on avebe.com, explaining why natural ingredients like potato starch are the future.
- ▶ We’ve regularly highlighted this great product on Avebe’s LinkedIn page.
- ▶ We launched a paid campaign via Packaging Insights and showcased PerfectaCOL® GM at the Specialty Paper Packaging Europe event – both excellent for valuable exposure.



Scan the QR code to learn more about PerfectaSOL®

Interview with Marcel Harren from Haselünne

Back to Avebe, with confidence in the future

Marcel Harren from Haselünne grew up with Avebe. As a child, he watched his father deliver potatoes to the cooperative – something he’s done since 1986. Today, Marcel runs the family farm himself, with a fresh perspective and clear choices. After a brief detour into other potato varieties, he’s now fully committed to starch potatoes and Avebe. Why? Because it works: reliable, efficient and future-oriented.

On his farm in the village of Lotten – where the soil is sandy and the potatoes are strong – Marcel combines calf rearing, beef cattle and a small horse breeding operation with arable farming. Maize, grain and of course starch potatoes are part of his daily routine. When Marcel talks about his farm, he does so with passion, pragmatism and a good dose of humour. “I studied agriculture in Osnabrück, but really, I live it,” he says with a smile.

A brief detour

Marcel once paused part of his shares to experiment with French fry and table potatoes. But he never fully left Avebe – most of his acreage remained with the cooperative. “You might not always get the highest price, but even in tough years, the potatoes are collected at a fair price. That’s reliability.”

What convinced him to fully return? The benefits of the cooperative. “The transport arranged by the factory is worth its weight in gold. I don’t need to invest in machinery or plan logistics – it saves time and money.”

Opportunities for new growers

For farmers considering starch potatoes, Marcel sees clear advantages: “You don’t need specialised equipment, so it’s easy to get started.” And the logistics are well organised: “As an Avebe member, you know at least a week in advance when to deliver, so you can plan harvesting efficiently.”



MEMBER STORY

Cross-border cooperation

As a former member of the Avebe Youth Council, Marcel also got to know the international side of the cooperative. “Sure, things work a bit differently in the Netherlands, but especially near the German-Dutch border, cooperation is strong.” Language barriers exist, but many Dutch growers speak German. “You can always learn from each other.”

Sustainability and realism

“Sustainability matters. The more sustainable your production, the better your sales,” Marcel says. But he remains realistic: “In years when potatoes are scarce and expensive, one thing matters most: the product.” Innovations like hoeing robots or spot spraying are technologies of the future. “They’re still pricey now, but they have real potential.”

“Avebe is a cooperative that thinks with you. You know where you stand. And you feel part of something bigger – that gives you confidence.”

Variety choices with an eye on the future

Marcel recently started propagating seed potatoes – a strategic move. “That way, even in scarce years, I’m assured of enough starting material.” Through land swaps with other farmers on fields where potatoes have never been grown, this works well. He sees the varieties from Averis as a major advantage: “As cooperative members, we help fund Averis, so it makes sense that we get preferred access.” He’s especially enthusiastic about the improved resistance to phytophthora in the Aveline variety.

Just start and grow

What would Marcel say to other farmers considering joining Avebe? “It’s easy to get started. You don’t need major investments, prices are stable, and the varieties are easy to grow.” And he concludes: “You’re never right at the top, but also never at the bottom. That’s Avebe’s strength.”

Avebe'ers in the picture

New faces at Avebe



Marcel Biesheuvel

“Since June 2025, I’ve been Manager QESH for the Gasselternijveen and Ter Apelkanaal sites. It’s a great role where I support the organisation in further improvements around quality, environment, and personal, process and food safety. I grew up on an arable farm where potatoes played a central role, and later developed my career in the chemical and gas industries. In my first few months, I’ve noticed how well my background and experience align with Avebe – a company where entrepreneurship, innovation, sustainability and safety truly matter.”

Saskia de Groot

“As CHRO (responsible for HR), I joined Avebe on 1 June. What struck me immediately was the strong sense of commitment among colleagues – many of whom have been with Avebe for years. It’s inspiring to see how knowledge and experience are passed down from generation to generation. We’re in the middle of a transformation that sometimes requires different competencies. That’s not always easy, but I’m confident we can do this together. By staying true to our Accelerate and Strengthen strategy and the Play to Win competencies, we stay focused and adapt to change. Together, we’re well on our way to making Avebe even more successful!”



IN THE PICTURE



Birgitta Wiersma

“New to Avebe? Not really – I’ve been around since 2023. What started as an internship at the Innovation Centre turned into a job. During my internship, I researched the effect of PerfectaMAR® on surimi and, for my graduation project, analysed structural changes in potato protein using an FTIR spectrometer. These experiences deepened my interest in analytical techniques. Since January 2025, I’ve been working as an Analyst in the Structure & Function team. I develop, optimise and carry out analyses to support MIT projects. The variety of projects and collaboration with colleagues make my work especially enjoyable. I’m happy to contribute!”

“By staying true to our Accelerate and Strengthen strategy and the Play to Win competencies, we stay focused and adapt to change.”

Roelinde Jager

“As chair of Avebe’s Youth Council, I’ve been actively involved since this spring. My parents run an arable farm with broiler chickens, so I grew up with Avebe. I now work part-time at the family farm and at an accountancy firm. As chair, I organise excursions and events like the Youth Day, meet young growers and join meetings with other chairs. It’s a great learning experience! There’s sometimes criticism of Avebe, but after a growing season like 2024, you see how valuable a reliable partner is. That’s why I’m committed to an Avebe that continues to create more value from starch potatoes and stays strong in the field.”



Interview with Ronny Pals, Site Director at Avebe

Collaboration + Resilience = *Play to Win*

To strengthen Avebe, one of our production sites has undergone a transformation. The line is now used more efficiently, and product changes happen faster – maximising output. The direct trigger for the factory rebuild came from an external supplier, explains Ronny Pals: “We outsourced the production of derivatives, but contamination in the product caused major pressure. At the same time, Avebe’s bulk segment was declining. That combination led us to bring external production in-house.”

Better utilisation and full control

“Today, the line capacity at this Avebe site is not only better utilised, but the quality of the end product is also more secure,” says Ronny. “We’re using our own lines more effectively and keeping full control. Plus, we’re investing in our own people at our own site – which boosts motivation and team spirit.”

Adapting the production line

Operators, quality staff, project managers and colleagues from Commerce and Innovations worked closely together to technically adapt the line. Processes were expanded, safety protocols updated, and control functions adjusted. “Thanks to



that joint effort and flexibility, this project is a great example of how collaboration makes the difference,” Ronny says.

Solving puzzles under pressure

“There was enormous time pressure and many pieces of the puzzle to solve,” Ronny continues. “That we succeeded is a true example of Play to Win. To me, that means staying connected across disciplines in a high-impact project. It’s about taking responsibility and thinking outside the box to achieve results together. In a very short time, we implemented new standards, made investments, trained people and developed measurement methods. We can be genuinely proud of that.”

“There was enormous time pressure and many pieces of the puzzle to solve, that we succeeded is a true example of *Play to Win*.”

Change in a 100-year history

Change often meets resistance – especially at a site with over 100 years of history and more than 180 colleagues working in five shifts. But the opposite was true, says Ronny: “Colleagues understood this step was needed to future-proof the site. There was little resistance. We’ve safeguarded jobs, increased line capacity and improved reliability. It’s a major step in strengthening Avebe.”

Solving the smaller puzzles too

“We also had to adjust to smaller changes,” Ronny adds. “The biggest shift was the extra time needed for hygiene measures. A support team of technologists and quality staff was ready to help. Through open communication, update sessions and being present on the shop floor, we tackled it. You only understand what a colleague faces if you see it for yourself.”

What is Play to Win?

At Avebe, Play to Win is a way of working built on three core values: cooperation, responsibility and development. It runs throughout the entire chain. Key process steps include: reflect, innovate, change, realize and connect.

A positive boost

This strategic shift has had a positive impact, Ronny concludes. “The workplace is cleaner, and we’ve worked hard to improve both the factory and the people. That effort shows: people are more engaged, take more ownership and enjoy their work more. We’ve made a real quality leap – for the product and for the team.”



FROM THE PAST TO THE PRESENT

In the past, heat went to waste – now we seize every opportunity in Dallmin

At Avebe’s German site in Dallmin, the way we manage heat has changed significantly over the past five years. Where hot air and water used to be lost, that energy is now cleverly reused. Axel Müller, process technologist and proud Avebe employee for 45 years, knows the system inside out. He shares the story with pride: “We didn’t want to waste that heat any longer. And thanks to teamwork, we succeeded.”

▶ The numbers speak for themselves

- Annual gas savings: approx. 1 million kWh
- Equivalent CO₂ reduction: 200 tonnes
- Payback period: around 4.4 years

From efficient to conscious

It all started in 2020, when Avebe began building the new Protamyl installation for producing protein for animal feed. The process generates hot fruit water. “That heat used to go unused, and we wanted to change that,” Axel explains. “Not because we weren’t doing things well, but because the technology and insights simply weren’t there yet.” Today, the heat is reused for the Protamyl dryer and to preheat wastewater during winter – helping microorganisms in the water treatment process do their job more effectively.

From production-focused to circular thinking

In the past, the focus was mainly on keeping production running smoothly. Now, we look beyond that – towards circular use of by-products. Heat is no longer seen as waste, but as a valuable resource. This shift reflects a broader mindset: from efficiency to sustainability.



THEN AND NOW

“In Dallmin, heat is no longer a by-product – it’s a valuable resource.”

Continuous optimisation

Even with these applications, excess heat remained. In 2023, the team explored whether the warm air from the starch dryers could also be reused. One dryer was suitable – it already had a dummy installed, leaving space for a heat exchanger. After technical calculations, subsidy applications and investment approval, things moved quickly. Before summer 2025, everything was installed: pipes, connectors and the heat exchanger.

“We’re currently at about 80% of the expected efficiency,” says Axel. “But that will increase from October as temperatures drop.” What surprised him most? How accurate the calculations were, despite the complexity of the process. “In a factory like this, temperatures, flows and volumes are constantly changing. Yet the measurements were spot on – that really impressed me.”

Teamwork as the key to success

Although external companies supplied



the heat exchanger and piping, most of the work was done by Avebe’s internal team. Axel is visibly proud: “I want to thank our team in Dallmin – electrical, maintenance, production – they made sure everything was smoothly integrated. Purchasing, especially Sandra von Lentzke, and our investment projects department also did a fantastic job. It was true teamwork.”

From waste to responsibility

In Dallmin, heat is no longer a by-

product – it’s a valuable resource. This project shows what’s possible when technical innovation, sustainable thinking and collaboration come together. We save energy and take responsibility for what we give back to the environment. A great example of how things used to be – and how we’re doing them better now. Despite the success, Axel Müller remains modest: “It was a lot of work, but it was worth it.”

In conversation with Science Director Kees van der Voort Maarschalk

It's about salt reduction, water saving is a consequence

The conversation has barely begun when Kees says, “The then Sustainability Director was practically climbing the walls when I told him we were stopping water saving. He thought he was getting the assignment back, but that wasn’t the case. We had to reformulate the task.”

Reformulating the water saving assignment

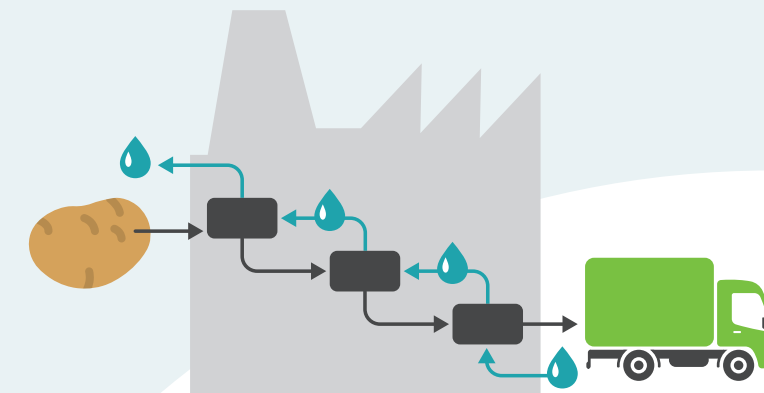
What an opener. Kees is a technologist and not afraid to speak his mind. Of course, Kees immediately adds nuance to his comment. He explains how the water saving task was actually formulated: “Organise the factory processes in such a way that the water treatment plant is burdened as little as possible with salts. Reducing salts is the way to decrease our water demand.”

No more reusing

Prior to the interview, Kees explained the project over two A4 pages and three images. He describes how, in processing plants like Avebe’s, water saving mainly means reuse. Here’s how it works: the water already used in the production process is treated to be suitable for reuse. This can happen several times. However, after purification, salts such as chlorides and sulphates remain. As a result, their concentrations increase. The problem shifts, Kees says: “Reusing even more isn’t possible beyond a certain point. The quality of the wastewater stream simply no longer meets the requirements.”



“Each year, we discharge over 500 tonnes less chloride and 250 tonnes less sulphate into surface water.”



Freshwater of sufficient quality

It’s no secret that, in the Netherlands, the quality of surface water is deteriorating. In dry summers, you see salt concentrations rising. Kees says, “If we want to ensure sufficient quality freshwater now and in the future, we need to focus on those salt levels.” Kees explains the shift in assignment as follows: “We ‘borrow’ water from the environment. The amount of water we take in is almost equal to the amount we return. Like many other factories, we also add salts, sometimes disguised as acids or bases, during the production process. These salts eventually end up in surface water. But with this project, Avebe is taking responsibility and reducing those salts as much as possible.”

The result? Less chloride and less sulphate

After Kees’s opening remark, the urgency was recognised and the team was given a mandate to work on a solution. Kees explains, “The team not only understands what needs to be done, but also why. Colleagues have gained insights and created solutions. Avebe allowed us space

to manoeuvre and together we’ve truly made an impact. Each year, we discharge over 500 tonnes less chloride and 250 tonnes less sulphate into surface water. As a result, we ‘borrow’ almost 2 million cubic metres less water from the environment annually.”

How was this impact achieved?

The next question, of course, is: how did you manage that? Kees answers, “We simply no longer purchase those chlorides and sulphates. We don’t use them in the process anymore, so they don’t end up in surface water. We focus on the source of the problem. It’s water saving through salt reduction.” That may sound like a simple answer, but it’s not. Kees says, “Using fewer chemicals creates a technical challenge: the process must remain robust. By robust, I mean controlling the process with consistently good product quality, despite the adjustments. In our business processes, we are now sailing much closer to the wind. That can be a bit tense, but we safeguard the quality of our end product by continuous monitoring.”

It's like a dance to see what works best

Line technologist Heleen on the adjustments: “This change is all about maintaining a stable and reliable process, while we no longer use certain substances. The process is still very much in development and we coordinate a lot with each other. Sometimes it feels like a dance to find what works best. Everyone learns from each other: operators, technologists and product managers. Externally, nothing has changed, while behind the scenes clever adjustments have been made through close collaboration. Moreover, the process is now easier to follow and the work on the shop floor has become clearer and calmer. The fact that this project has succeeded makes me proud. We now work more sustainably with less burden on surface water.”

Focus on the outflow

Kees has taken a stand: “We borrow water and want to return it in the best way possible. Of course, we realise there's a certain risk regarding the quality of our production process. By keeping a close eye, we prevent problems. We purchase fewer chemicals that lead to salts. The cost savings are a nice bonus, but the real benefit is in preserving the quality of our surface water.”

“The cost savings are a nice bonus, but the real benefit is in preserving the quality of our surface water.”



NEW PROJECT

More value from the potato

Avebe expands with Solan

The acquisition of Solan in Poland marks a key milestone in Avebe's strategic direction. “With this step, we're not only strengthening our market position, but also broadening our product portfolio and agro footprint,” says Jur Leever, who led the acquisition from start to finish. “It's an investment in Avebe's future.”

New products, new opportunities

Solan produces flakes and granules – potato products made from the whole potato, unlike starch. “With starch, you extract a component from the potato. With flakes and granules, you keep the potato intact. That means you retain the potato flavour – exactly what you taste in mashed potatoes or snacks,” Jur explains.

For customers, this means Avebe is evolving into a one-stop shop for potato-based products. “In addition to potato starch, protein and fibres, we can now also offer flakes and granules. This makes our offering broader and more complete. We're responding to growing customer demand, and with Solan, we're also strengthening our innovation base and accelerating the development of sustainable, flavourful potato solutions.”

More value for members and the cooperative

“In the short term, our members will see a modest contribution to their potato payment. But the real value lies in the long term. They're part of a cooperative that knows how to extract more value from the potato. And by processing potatoes from Poland, we're spreading risk – both in terms of products and regions.”

The acquisition also brings change for the Avebe team. “Depending on your role, you'll notice we're developing new products, entering new markets, and becoming even more visible in consumers' daily lives. Yes, sometimes that's on the sofa with a bag of crisps on a Friday night,” Jur laughs. “But with the awareness that we're contributing to a healthier and more sustainable future.”

A new chapter in the Avebe story

What makes this acquisition especially remarkable is how Avebe approached it. “We worked under pressure with a small, multidisciplinary team. HR, Legal, Commerce, Agro, Operations, Communication – every discipline came together.” Jur adds with pride: “I see it as a great adventure – a journey of discovery. It's an honour to contribute to such a strategic project. And exciting to write a new chapter in the Avebe story.”



