Sustainability Report 2022/23

A circular business model

KMC
Ingredients to grow your business

“The potato itself has one of the lowest climate footprints among Danish crops. It delivers many calories per hectare and has a nutritionally rich and healthy profile. It is precisely for this reason that I sense political goodwill for our mission towards an even more plant-based future.”

— Jesper Burgaard, CEO at KMC

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Together, we create sustainable change

Letter to our stakeholders by Jesper Burgaard

The past fiscal year marks a milestone for KMC. In 2023, we celebrated our 90th anniversary, and it is no coincidence that we are now presenting the best financial results in the history of KMC. Experience and know-how are invaluable in creating a healthy and sustainable business.

United in sustainability

Since 1933, we have continuously managed to evolve along with our customers and have strengthened our position in an ever-changing market. Our owner-operated factories play an invaluable role in this development. This is partly because they invest firmly in green energy, reducing the CO_2 footprint of our products and future-proofing the business. Learn more about the work of the owner-operated factories on page 8.

New innovation center

We also invest in creating the best possible environment for our employees. Our new innovation center stands as a symbol of 90 years of accumulated knowledge about the properties of potatoes. With new laboratories, a new food innovation center, and a state-of-the-art pilot plant, we will soon offer our customers the best facilities in the world. This way, we can advise them even better on how potatoes as an ingredient can play a role in their products. Read more about how KMC will develop over the next ten years on page 6.

Political interest

Our customers are not the only ones who benefit greatly from a visit to KMC. Throughout the year, many politicians have visited us to learn more about the properties of potatoes and gain insight into our circular business model. The potato itself has one of the lowest climate footprints among Danish crops. They deliver many calories per hectare and have a nutritious and healthy profile. This is precisely why I sense political goodwill towards our mission for an even more plant-based future. Learn more about our specific green initiatives on page 26.

The potato must be protected with new technology

Our sustainable, yet vulnerable, tuber needs protection before it can make a difference. This means we must always be at the forefront of developing new varieties and in plant protection. In the KMC Group, we aim to halve our pesticide use by 2030. The gene-editing technology CrisprCAS, in particular, can be crucial. After three years of preliminary work in the laboratory, this year – as one of the first companies in Europe – we put CrisprCAS- bred potatoes in our outdoor trial fields. Recently the European Commission put forward a proposal to approve the technology. We welcome this, as new technologies are necessary to meet the challenges of the planet. Delve into our work with plant protection agents and plant breeding on page 28.

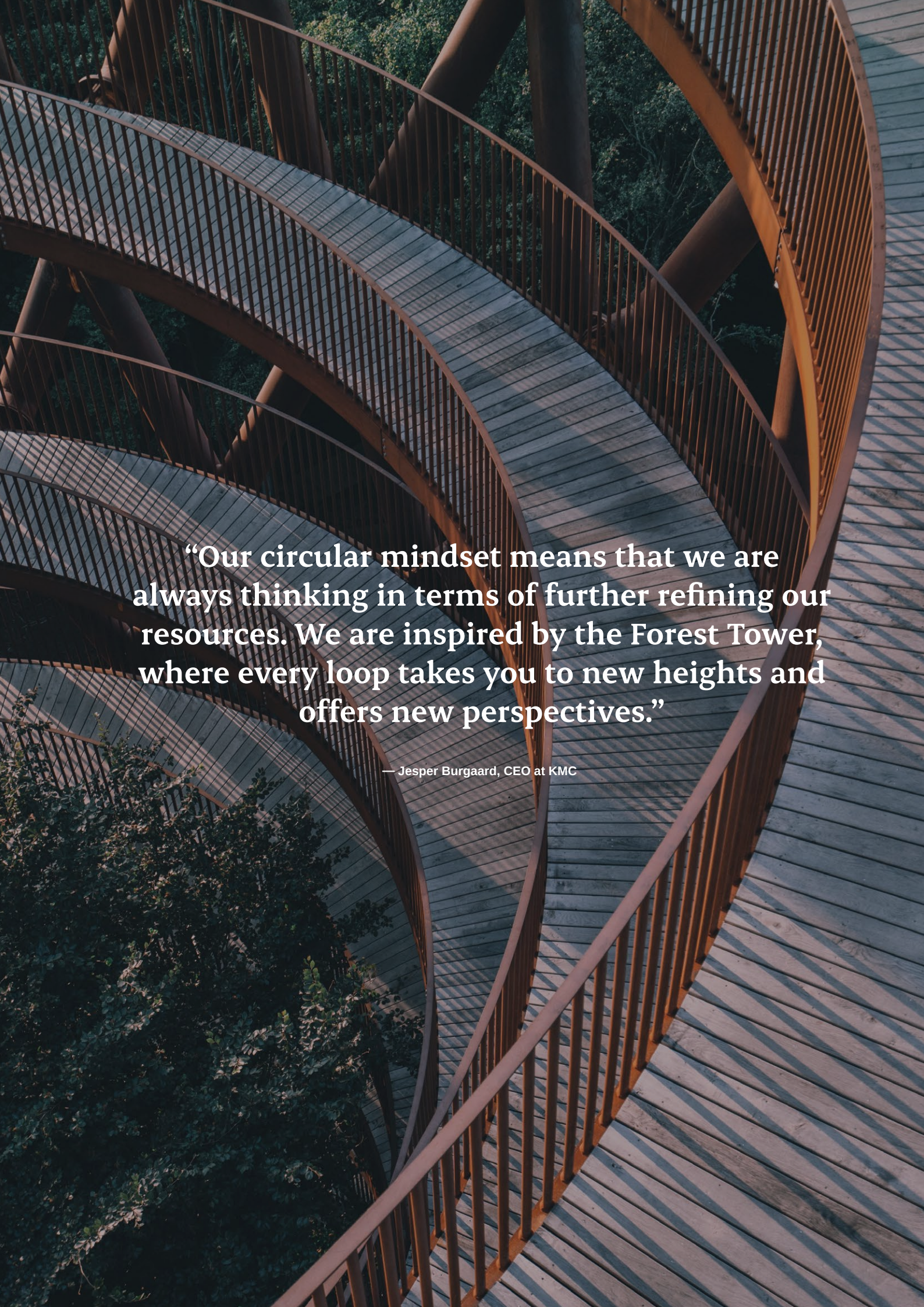
Climate-neutrality in 2050

In 2022/23, the KMC Group has purposefully replaced 34,773 tons of animal ingredients with potato-based alternatives. We are involved in major solar and wind projects, we take responsibility for our waste-water, and the pulp from our potatoes produces more biogas than we consume natural gas in our starch production. We are proud of these results. In the coming year, we must continue the concentrated effort to achieve our goal of being climate-neutral by 2050.

In this report, you can read more about our goals and ambitions.

Enjoy!

Jesper Burgaard
CEO



“Our circular mindset means that we are always thinking in terms of further refining our resources. We are inspired by the Forest Tower, where every loop takes you to new heights and offers new perspectives.”

— Jesper Burgaard, CEO at KMC

KMC turns 90 – but where are we in 10 years?

With the celebration of KMC's 90th anniversary comes the next question: where is KMC heading in the next 10 years? KMC's CEO, Jesper Burgaard, shares his view on KMC's future development.

KMC's 90th anniversary is a testament to strength, innovation, and adaptability in a changing business environment. And with the celebration of the milestone comes a natural reflection on past achievements and a vigilant look into the future.

– We have been here for a long time and have big shoes to fill. But we are also here to improve and evolve. At the same time, we need to preserve the KMC culture and maintain our flat hierarchy, where everyone can see their own ideas flourish. That's how it's always been, and it's important to carry that into the future, says Jesper Burgaard, CEO at KMC.

From a Danish food producer to a global supplier of ingredients

What started as a small cooperative has become an international success story with more than 380 employees across the KMC Group.

Until 2012, KMC was constrained by EU quotas. But when the quotas were lifted, it sparked a significant development. Now the company was able to take advantage of the free market and utilize the ideal conditions for potato growers in Denmark – leading to an annual growth of 10 percent.

– Our partners thirst for knowledge, especially in relation to the plant-based agenda. They don't want a standard package. They want tailor-made solutions that strengthen their business. And that's what we offer now and in the future, says Jesper Burgaard.

Three trends for the next ten years

1. Security of supply
The market has faced several major challenges in recent years, including a pandemic, a supply chain crisis, and the consequences of the conflict in Ukraine. More crises cannot be ruled out in the future, which underscores the importance of supply security.

Over the next ten years, KMC expects to expand its position in the global market with supply security as a significant selling point. Denmark has an ideal climate for growing potatoes, and KMC controls the entire supply chain from seed potatoes to the sale of the finished ingredient.

– In a world filled with uncertainties, it will become even more important to ensure a stable supply of potato starch. Our production will remain in Denmark, and with our setup, we have full control of the value chain. This gives us unique opportunities to expand our raw material base while investing in innovation and increasing production capacity, says Jesper Burgaard.

1933

Employees
5

2. The plant-based revolution
Currently, Europe and the USA lead the plant-based movement, but other markets are following suit. KMC is continually adapting to this trend with the development of more green proteins. Not just in feed, but also in food.

– I am convinced that we will experience a revolution in green proteins. As a company, we are committed to the green transition and the reduction of our carbon footprint. The least we can do is to help our partners do the same, says Jesper Burgaard.

3. Reduced plant protection
The cultivation of potatoes accounts for 2% of Danish agricultural land. Nevertheless, the crop accounts for a larger share of the total use of plant protection products. This is largely because potatoes are more susceptible to diseases than other crops.

– Our potato production should be based on varieties that require significantly fewer pesticides. And the key here is new technology. We are currently working to ensure that CrisprCAS is allowed in the EU, says Jesper Burgaard.

The latest news in this regard is the European Commission's recent proposal to legalize the use of the technology.

KMC has been experimenting with CrisprCAS in the laboratory for years to be ready to fully exploit the technology.

So, where will KMC be in 10 years?

KMC's 90th anniversary has been celebrated appropriately throughout 2023. Focusing on learning from the past has its qualities, but foresight has always provided growth at KMC. Plant-based cheese, confectionery, and protein remain a central point on KMC's journey, and Jesper Burgaard has a good idea of how KMC as a company will develop over the next ten years:

– When we turn 100, we want to be recognized as the world leader in potato-based ingredients. We aim to be the preferred supplier – both in terms of knowledge and delivery. We achieve this by focusing on innovation and an equal weighting of native and refined potato starch, he concludes.

United in sustainability:

Owner factories invest in solar and wind

KMC's owner factories, AKD and AKK, play an indispensable role in our sustainable development. Most recently, the factories have increased their focus on green transition by preparing investments in new energy parks that will produce electricity via solar panels and wind turbines. The initiative is to ensure that we meet our goal of producing sustainably and contribute to reaching our reduction targets by 2030 as well as our long-term goal of climate neutrality by 2050.

Over the years, the two potato starch factories, AKK and AKD, have worked to extract all the valuable substances that the modest potato tuber contains. It is an important part of our work to get the most out of the potatoes with the lowest possible resource consumption and the smallest possible carbon footprint.

The KMC Group has a long tradition of wholeheartedly working for lower energy and water consumption and recycling as much of the energy and water as possible. In the past 10 years, investments in modern production technology and ongoing optimizations have reduced our CO_2 emissions by up to 70 percent per produced unit on some products, while our goal is 55 percent. But we do not intend to stop there.

"The reason we have engaged in solar cells is that we want to contribute to the green transition and achieve our 2030 target with a 55 percent reduction. This is our way of doing it"

— Martin Damgaard Ravnsbæk, Director of AKK

Aerial photo of the factory in Karup (AKK).

Aerial photo of the factory in Toftlund (AKD).

With a serious reduction target of 55 percent by 2030 and climate neutrality by 2050, it is important that we continuously work to produce as sustainably as possible.

Three new energy parks

In Karup and Toftlund, AKK and AKD, respectively, are in the preliminary phase of constructing three new energy parks, aimed at making the two factories' production CO_2-neutral in the long run.

AKD's board has decided to set up three wind turbines, a 10-hectare solar power plant south of the factory in Toftlund, and three wind turbines on their property at Hønning. The total electricity production from the two green energy sources is estimated at 52.6 million kWh. AKD's total energy consumption today is 54 million kWh.

In Karup, AKK is involved in two solar cell projects in collaboration with European Energy and Eurowind Energy, the largest of which is 280 hectares and is located on AKK's land in Uhre just outside Karup. This land is where the factory currently spreads its wash water. The plan is to continue this practice with the aim of growing grass between the solar cells, which can be harvested and used for biogas.

> **It is an important part of our work to get the most out of the potatoes with the lowest possible resource consumption and the smallest possible carbon footprint.**

– The reason we have engaged in solar cells is that we want to contribute to the green transition and achieve our 2030 target with a 55 percent reduction. This is our way of doing it, says the director of AKK, Martin Damgaard Ravnsbæk.

The goal of being self-sufficient in energy – and then some

It is not new that both the market and customers increasingly demand that producers' energy sources be sustainable. Therefore we at KMC are proud that our two owner factories are now taking the step further towards making themselves independent of natural gas and fossil fuels. Besides meeting the government's climate goal of reducing Denmark's greenhouse gas emissions by 70 percent by 2030, the intention with the transition to solar and wind energy is to make the factories self-sufficient in energy.

– Considering both the climate effort, supply security, and energy prices, it is an obvious solution to replace fossil energy sources such as natural gas and oil with locally produced wind and solar energy, AKD writes in its plan for Energy Park Toftlund.

For the benefit of the local community

The green projects are not just a matter of the factories' emissions. They also benefit the local communities around the factories.

The wind turbines and solar power plant at Toftlund are to supply electricity to AKD via a direct line, while in periods with surplus electricity, it will be sold to the power grid. Therefore, the goal is that Toftlund district heating or local citizens can buy shares and thus take an economic part in the green transition. Another gain from establishing Energy Park Toftlund is securing local jobs, which speaks to an even larger and collectively sustainable mindset.

We look forward to following the three energy projects over the next few years.

How we use the potato

Although KMC celebrates its 90th birthday this year, the philosophy remains the same as always: Simple common sense is the starting point for greener food production for the benefit of everyone. Therefore, we also continue undaunted to find and explore new, value-creating ways to use the potato. From juice and starch to protein and fiber.

18-20%

Potato starch

Potato starch was the first product in our portfolio, and to this day it is still our most important product. Potato starch is used in the food industry for products such as pasta, snacks, sauces, and alternative dairy products. The refined potato starch is used to replace or reduce animal ingredients such as casein in cheese, gelatin in gummy candies, and eggs in mayonnaise.

1-2%

Potato fibers

Potato fibers are used in food production, as they bind water effectively and have good digestive properties.

1-2%

Potato protein

The potato protein has a unique composition of amino acids that are extremely beneficial for both humans and animals. The protein is often used in animal feed, but the nutritional benefits have made potato protein very attractive in the food industry. Here, it is used, among other things, to help people with small appetites, vegetarians, vegans, and people who exercise a lot to get enough protein, while it is also being tested at the moment in plant-based meat alternatives.

73-78%

Potato juice and cell walls

Potato juice, also called protamylasse in concentrated form, is recycled and used as fertilizer for the next year's potato crops. The cell walls, also called pulp, are used for animal feed or biogas production.

KMC believes in the future: New innovation center on the way

As an important part of KMC's strategy plan; Ingredients tomorrow, KMC is expanding with an ambitious innovation center, which will be completed in 2024.

With rapid development in the market for plant-based foods, a company might allow itself to loosen the reins of development a bit, but KMC has chosen the opposite strategy; We have chosen to expand the headquarters in Brande with an ambitious and state-of-the-art innovation center. And the explanation is simple:

– We have been so successful that we have outgrown our current premises. So, we had the choice between slowing down or getting a bigger funnel, so to speak. We are going with the latter option because we believe we can go even further. With the innovation center, we can increase the refinement level of our products, and we can accelerate the speed of our development, says Hugo Nielsen, CCO at KMC.

Trust in innovation

There are high hopes for the innovation center on Herningvej, even before it is completed, and there is great trust and support from the owners, who have backed the vision from the start:

– The timing of the decision to build the innovation center says a lot about our ownership circle. Two weeks after Russia entered Ukraine, when the world was characterized by chaos and high degrees of uncertainty, we received the first approval for the project. That symbolizes a huge vote of confidence from the owners in us and our strategy, and we take that very seriously, says Hugo Nielsen.

Customers' needs become visible

When the center opens its doors during 2024, it will have space for both development and customers, which pleases Application Director Thomas Hannibal, who highlights the great synergy effects that can be reaped:

– It's a huge advantage that our customers will be able to develop in a place where the customer experience is part of the design, and where the environment right from the start signals that this is where we develop and test together.

– It's important to be allowed to test and try out whether a seemingly crazy idea might be feasible. The center enables us to reach incredibly far in our development in a very short time, partly because there is no daily operation and production to consider, and partly because we at KMC offer the whole package where we, as specialists, stand ready with knowledge, input, and assistance. In an innovation center like this, the customers' needs become visible, and we can more easily succeed together.

Besides the many extra square meters that give the development and employees better conditions, KMC has also placed great emphasis on both the location and design of the innovation center, again with optimization in mind, says Hugo Nielsen:

– The physical environment is designed to ensure a milieu that facilitates knowledge sharing. In very practical terms, it's important that we have researchers walking next to the product managers, who again walk right next to those who will apply them in the industry. It might sound simple, but it works.

World-class pilot facilities

In the innovation center, the functions of Technical Sales, specialists, R&D, and Agro will be brought together. The departments will have a much larger interface than before, and knowledge sharing will thus be possible to a much greater extent than before. At the same time, the center will house another major investment, namely a large pilot hall for the assembly and development of activities, which according to Thomas Hannibal will require a crucial process:

– Having the space and equipment to simulate the processes that take place in the factories and to test and explore new exciting technologies means that we can specialize and design towards the needed industry properties. The innovation center is indeed a significant step forward.

The innovation center is expected to be completed by the spring of 2024.

90 years of collaboration with AKK and AKD

At KMC's owner factories, AKK and AKD, continuous efforts are made to extract all the valuable elements from the humble potato tuber.

For 90 years, KMC has continually adapted to the needs of our customers and strengthened our position in an ever-changing market. But we haven't done it alone. KMC's owner factories, AKD and AKK, play a crucial role in our sustainable development.

Initially, the factories' primary purpose was to produce a single product: potato starch. Since potatoes contain about 20 percent starch on average, it meant that 80 percent of the raw material was never utilized.

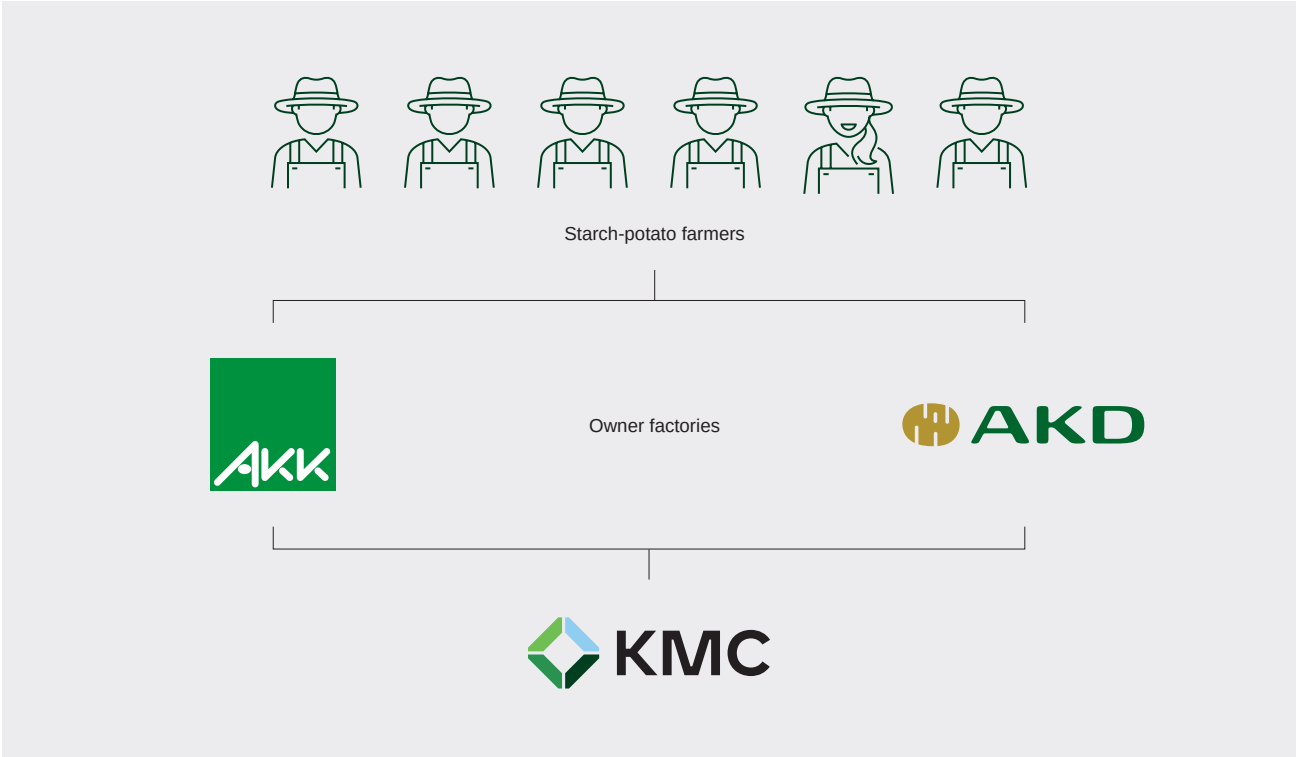
Today, there is practically no waste from the factories' production. The entire raw material is transformed into valuable products. This development is a success story that benefits the climate, the environment, and the economy.

Did you know that...?

Approximately 70% of all potatoes grown in Denmark are turned into potato starch.

The largest silos at AKK and AKD are 53 meters tall and can hold 65,000 tons of potato starch.

The KMC Group



Excerpt from the Management Report

KMC's focus on high-value ingredient solutions has once again set new records and contributed significantly to this year's results.

KMC Granules' powder production has continued its strong performance in recent years. The production capacity is optimized and fully utilized. Furthermore, market conditions have developed positively, allowing for an increase in the settlement price for powder potatoes.

The owner factories' investments in modern production facilities and potato farmers' ability and willingness to adapt production to market conditions demonstrate the strength of KMC Group's value chain.

In the fiscal year, we have invested a total of DKK 77 million, of which ongoing investment in the new innovation center constitutes the most significant part. The innovation center is expected to be completed by spring 2024.

Expectations for the future

We expect a market situation where the demand for the company's products will continue to be high. However, it will require hard work to maintain our current market position. The initial predictions for the 2023 campaign show good results.

Economically, KMC expects a revenue increase of between 7% and 12% in 2023/24. If costs are maintained at the expected level, we anticipate earnings at a level that will continue to be attractive for potato farmers to grow starch and powder potatoes.

"In recent years, the consumption of plant-based foods has increased and developed into a megatrend in the Western world, orienting itself towards new types of meals and principles where climate responsibility is central. These elements fit well into our product range, which we constantly adapt to the demands, desires, and expectations of our customers and the market."

— Niels Jørgen Villesen, CFO/COO at KMC

Net revenue

3,374

The net revenue for the year ended at DKK 3,374 billion, which is 45 percent higher than in 2021/22.

Annual result

351

The annual result after-tax amounts to DKK 351 million, which is DKK 214 million more than the result of the previous fiscal year.

Number of employees

246

Since 2021/2022, the average number of full-time employees at KMC has increased from 239 to 246.

KMC takes responsibility for our own water

In the past year, we have expanded our water treatment capacity. With the new expansion of our treatment plant, KMC now purifies all water from the derivative factory independently. Previously, municipal treatment plants assisted with this process. The new expansion means that the treatment plant can handle up to 500,000 cubic meters of water. It also means that the facility will be able to handle water from the upcoming expansion of the derivative factory.

Our 5 CSR goals

Within the framework of global goals, we work on these five objectives. We follow up on the progress annually.

Goal 1: Replace animal ingredients with plant-based ingredients

Long-term goal:
We aim to replace **57,000 tons** of animal ingredients with plant-based alternatives in selected food systems by **2026/27**.

Status of the goal:
In **2022/23**, we have replaced a total of **34,773 tons** of animal ingredients in 60 different countries.

Goal 2: Increase the use of Danish-produced feed protein over imported alternatives

Long-term goal:
We aim to implement at least **10,000 tons** of potato protein in Danish animal feed by **2024/25**.

Status of the goal:
In **2022/23**, we have implemented **4,000 tons** of potato protein in Danish animal feed.

Goal 3: Reduction of plant protection products

Short-term goal:
We aim to minimize the use of plant protection as much as possible through advising the growers. Depending on the weather, the goal is to reduce it by **10-30%** each year.

Status of the goal:
In **2022/23**, we did not recommend a reduction in pesticide use as we have in previous years. The reason is that in **2022/23**, we lost access to two effective fungicides against potato blight. The fungicides available today are less effective, so we have not been able to recommend a reduction in dosage.

Long-term goal:
We aim to increase the development of new varieties with higher resistance to primarily leaf spot and blight. The goal is at least **10,000** new crossings per year by **2024/25**.

Status of the goal:
In **2022/23**, we made **12,000** new crossings focusing on higher disease resistance.

Goal 4: Well-being, safety, and diversity

Long-term goal:
By **2024/25**, we aim for the following:

- **16%** women in KMC's Board of Directors
- **25%** women in KMC's International Management Committee
- **40/60%** gender distribution (f/m)
- Max. **15%** staff turnover
- Max. **2%** absenteeism.

Status of the goal:
In **2022/23**, the status is as follows:

- **0%** women in KMC's Board of Directors
- **24%** women in KMC's International Management Committee
- **39/61%** gender distribution (f/m)
- **21.7%** staff turnover
- **3.85%** absenteeism.

Goal 5: Reduce climate impact and increase wastewater treatment

Long-term goal 1:
The goal is to reduce the climate impact per ton of native starch by **55%** by **2030** compared to the base year 2015/16.

Status of the goal:
In **2021/22***, we reduced the climate impact by **27.3%** compared to 2015/16.

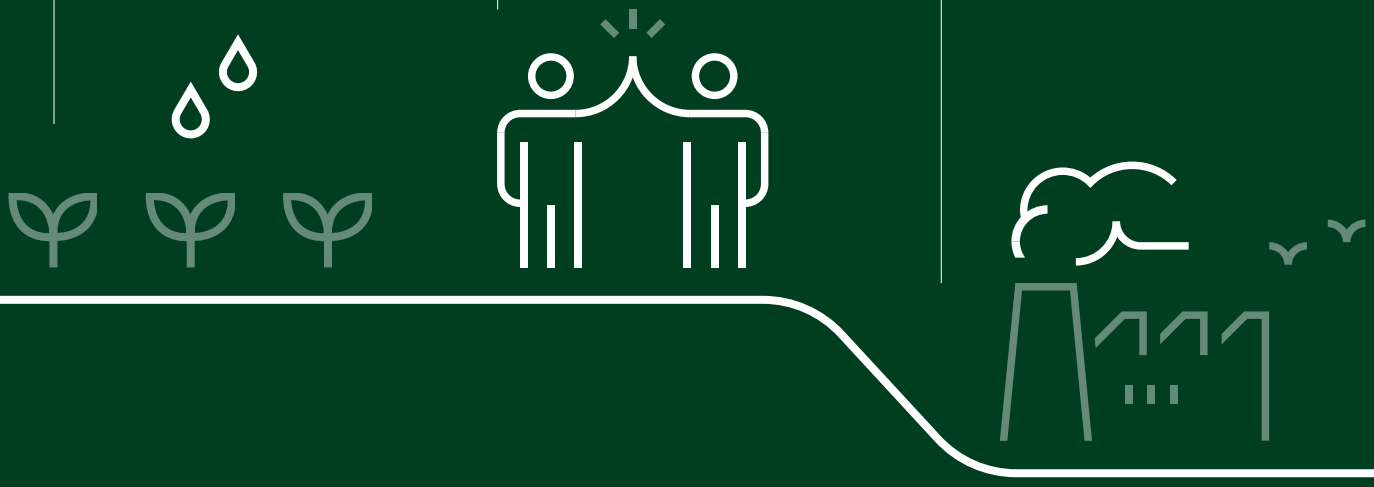
Long-term goal 2:
The goal is to reduce the climate impact per ton of flakes/granules by **30%** by **2030** compared to the base year 2015/16.

Status of the goal:
In **2021/22***, we reduced the climate impact by **19.6%** compared to 2015/16.

Long-term goal 3:
The goal is to clean **100%** of the wastewater at our own treatment plant by **2024/25**.

Status of the goal:
In **2022/23**, we cleaned **90%** of the wastewater at our own treatment plant. The remaining 10% not cleaned at our plant was treated at an external treatment plant.

*Updated climate calculations for 2022/23 are not yet available.



We still eat too little plant-based food, but the development continues

With Anna Bak Jäpelt, Sustainability Manager and Project Manager at the think tank Frej

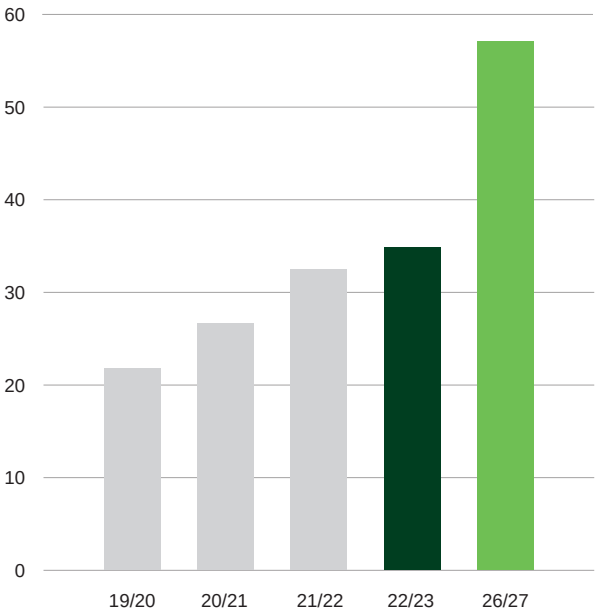
KMC Goal 1: Replace animal ingredients with plant-based ingredients

SDG Goal 12: Responsible consumption and production

The consumption of plant-based food is growing. In 2022/23, KMC replaced 34,773 tons of animal ingredients – an increase of about seven percent compared to the previous year. However, factors such as culture, habits, and wealth significantly influence the rate of consumption increase and the reasons behind it.

The big question is, of course, how the spread of plant-based foods fares in a year with high inflation. According to Anna Bak Jäpelt, Sustainability Manager and Project Manager at the Danish think tank Frej, there is a continuous steady development:

Potato-based ingredients replacing animal ingredients (in 1,000 tons)



– It's certainly not slowing down. But it could definitely go faster. The 2015 Paris Agreement secures progress because many companies increasingly see it as a sensible investment, especially with climate and biodiversity in mind. These are the two absolute drivers in promoting this development.

In Denmark, several canteens, for example, have stopped serving beef after Denmark's Green Think Tank Concito published their latest report showing Denmark's global consumption emissions. And this, according to Anna Bak Jäpelt, affects the entire consumer chain:

– It also trickles down to the individual consumer who buys food in that canteen. At the same time, it shows that professional kitchens have a lot to say and that their demand affects the supply, she says.

More flexitarians

Generally, consumers' attitudes towards 'green meals' have changed significantly. A survey from COOP shows that 'climate' has overtaken 'health' as the most important reason for Danes to choose to eat less meat.

This is reflected in the fact that we are seeing a significant increase in flexitarians among Danes and in the West in general. In 2017, 12% of 18–34-year-olds said they follow a flexitarian lifestyle, and today it is up to a third within the same group who call themselves flexitarian.

34,773

KMC replaced 34,773 tons of animal ingredients in 22/23. This is an increase of just over seven percent compared to the previous year.

Economically, significant growth has been predicted for plant-based diets despite the fact that COVID-19 and inflation have slowed down the development. In a report from Credit Suisse, the potential size of the global plant-based food market has been calculated. By 2030, the market is expected to grow to a value of 143 billion USD. This figure will rise tenfold to 14 trillion USD by 2050.

– Plant-based diets are not just a trend; they're a megatrend. More and more plant-based products are finding their way onto supermarket shelves, says Anna Bak Jäpelt.

Plant-based convenience products are gaining popularity

Plant-based replacement and convenience products are increasingly occupying shelf space in supermarkets. These replacement products are primarily made of extruded proteins with similar properties to animal products. However, it's not just vegetarians and vegans who are choosing these products, explains Anna Bak Jäpelt:

– Plant-based convenience products are a way to encourage people considering a flexitarian diet to try it, as it resembles the diet they are already used to, and it doesn't require much change. Every third dinner for an average Dane is prepared in 15 minutes, so replacement products are popular because they fit into meals we already know and don't require much preparation time.

Companies must lead the way

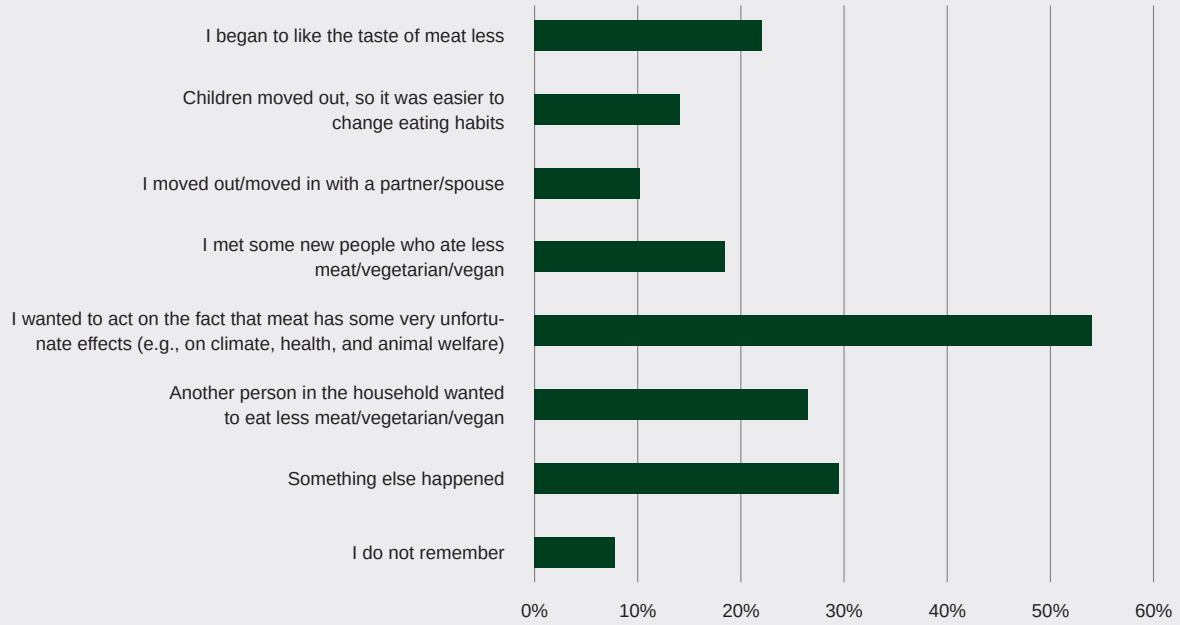
Looking ahead at plant-based foods, Anna Bak Jäpelt offers some specific suggestions for increasing the presence of plant-based foods on shelves and in Danish homes:

– First, we need to ensure that plant-based foods are integrated into public nutrition services; in hospitals, daycares, and canteens, as well as in private kitchens and canteens. This also includes extensive retraining of professional food staff.

Large production companies also have a significant role to play as they have the means to invest in the right machinery and facilities. This way, they can guide individual farmers and show how they can be part of future plant-based production.

– Additionally, supermarkets and retail should make an effort. One approach is to avoid special offers on animal products and place climate-friendly products in prominent positions or alongside animal products, so consumers do not have to search for them in stores. This makes it easier for consumers to choose plant-based options, she says.

Reasons for Danes' reduction of meat



Source: Concito

At KMC, we believe the future is plant-based and climate-friendly. Our contribution lies in helping innovative food manufacturers make their products greener. And by becoming increasingly sustainable ourselves.

Market downturn affects sales but not ambitions

KMC Goal 2: Increase the use of Danish-produced feed protein over imported alternatives

SDG Goal 15: Life on land

Even though there has been no increase in the sale of feed protein, the goal of delivering 10,000 tons of potato protein to Danish agriculture by 2024/25 remains intact.

Potato protein is a key ingredient in increasing the use of domestically produced feed protein over imported ones. In 2022/23, KMC delivered 4,000 tons of potato protein to Danish agriculture, and although this marks a decrease for the second consecutive year, there is optimism about reaching the 10,000-ton goal by 2024/25.

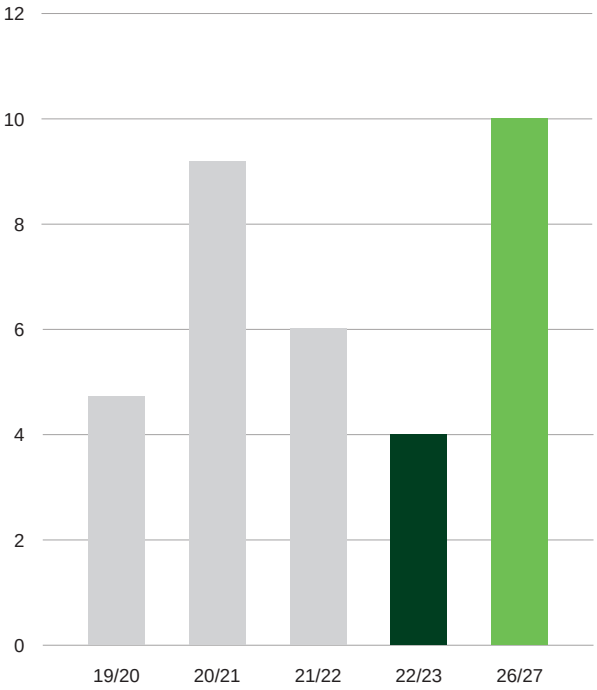
The decline is partly due to an imbalance between supply and demand and a reduction in pig production, which has led to a decreased need for pig feed. Consequently, a higher market share is now required. Fortunately, we have ongoing projects that already show potential for increasing sales.

Development in feed protein sales

Using potato protein in animal feed is not new. It has been extensively used for piglets, despite strict requirements for protein values and dosage. New studies show that we can actually use an even larger portion of protein production in this segment, while keeping the well-being of piglets in mind.

It has been proven that the substances concentrated in the protein are harmless to the animals' health. Therefore, we can replace even more imported protein – mainly soy – with local potato protein without compromising feed quality.

Development in feed protein sales (in 1,000 tons)



4,000+

In 2022/23, we implemented 4,000 tons of potato protein in Danish animal feed. The decrease is attributed to a decline in Danish pig production.

Although this marks a decrease for the second consecutive year, there is optimism about reaching the 10,000-ton goal by 2024/25.

Did you know that...

PotaPro 1500 is carefully dried potato protein extracted from potato juice. With its completely unique composition of essential amino acids, PotaPro 1500 is ideal for piglet feed.

Zinc is out, enter PotaPro 1500

In 2022, the use of medicinal zinc in piglet feed was banned. As a result, several manufacturers have been looking for alternatives to this banned mineral – here, PotaPro 1500 can be an option. It's not a 1:1 replacement for zinc but it can play a part in the solution when pigs have to do without the high level of medicinal zinc.

Data from KMC shows that PotaPro 1500 has a positive effect on piglets. With its low pH value, it helps pigs better absorb and utilize the protein in the feed, leading to more sustainable feed usage and thus more sustainable pig production.

Continued development

The latest data and projects paint a brighter picture of how we will increase our market shares in the coming year. Although these projects are well underway, we are still far from our goal, and therefore we continue our relentless development work.

We are exploring alternative uses for potato-based ingredients and are keenly following the work at several universities where potato-based ingredients are being studied.

It's not just about achieving our goals but ensuring the sustainable development of agriculture.

”Our new Code of Conduct is a set of ethical rules within environment, culture, business ethics, and food safety. It defines how we want to be and be perceived as a company, and how our employees should act on behalf of the company, so we can continue to run a sustainable business.”

— Heidi Bretthauer, Quality and Sustainability Director at KMC

The potatoes' green goals

This year, the KMC Group has set several ambitious climate goals and new initiatives to monitor and reduce our carbon footprint in the future.

KMC Goal 5: Reduce climate impact and increase wastewater treatment

SDG Goal 12: Responsible consumption and production

As one of Europe's largest potato starch producers, the KMC Group has a vision and a responsibility to create a more sustainable future. Therefore, we have set ambitious targets for our carbon footprint this year and initiated additional measures to monitor it. Like the EU and Denmark, our overarching goal is clear: we aim to achieve carbon neutrality by 2050. We also intend to reduce the climate impact per ton of native starch by 55 percent by 2030 in scopes 1 and 2 and reduce the climate impact per ton of flakes/granules by 30 percent by 2030 in scopes 1 and 2.

As a new initiative, we have prepared climate reports that calculate our carbon footprint across scopes 1, 2, and 3. We have also developed a baseline report to monitor progress since the reference year 2015/16. Last but not least, we are compiling all our initiatives in a Decarbonisation Roadmap report that charts the way forward.

This allows us to continuously monitor how far we are from our goals and how we can achieve them. We strive to reduce energy consumption per produced unit as much as possible, considering environmental and climate perspectives. However, it remains important that we comply with authorities' and customers' quality requirements while considering the company's ongoing competitiveness.

Positive trends

We are already well on our way towards our goals and feel positive support from growers, customers, and consumers who increasingly want to make climate-conscious choices. The largest emissions in the KMC Group occur at the grower level, but starch production itself is also very energy-intensive, requiring significant efforts to reduce our emissions.

We are already well on our way towards our goals and feel positive support from growers, customers, and consumers who increasingly want to make climate-conscious choices.

Over the years, we have actively worked on energy and resource optimization to make our ingredients as sustainable as possible, and this work continues. The latest calculations from 2021/22 show significant progress. Since the reference year 2015/16, the carbon footprint has been reduced by 27.3 percent per ton of native starch and 19.6 percent per ton of flakes/granules in scopes 1 and 2. Calculations for 22/23 are not yet available.

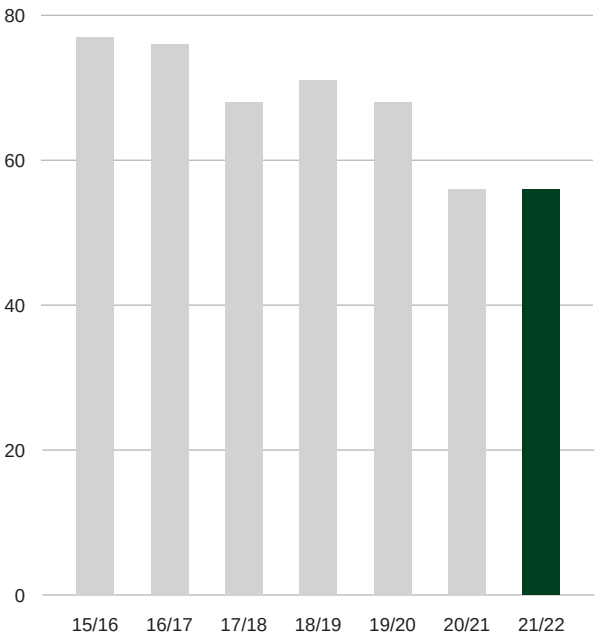
Despite increased volumes since 2009 and thus increased emissions, our work significantly contributes to the decarbonization of the starch sector's various customers. In the future, KMC will explore different technological options and practices to help us with our reductions and achieve our goals.

Roadmap Report showing the way

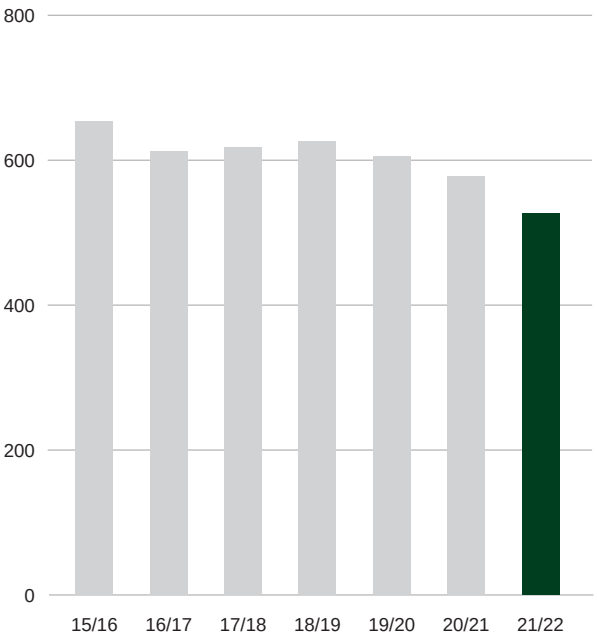
Alongside the completion of this sustainability report, we have finished the KMC Group's Decarbonisation Roadmap. The roadmap outlines various measures we have implemented to reach our 2030 reduction goals. It will be updated every few years as we develop new projects, measures, and goals, and we will continuously report on our progress.

All reports and calculations are developed in collaboration with the consultancy Better Green to ensure compliance with all international requirements for measurement and documentation. With these initiatives and measures, we aim to move ourselves and the rest of the industry towards a greener future.

Climate footprint: Potato starch (2015-2022)



Climate footprint: Powder and flakes (2015-2022)



Source: KMC's baseline report – scopes 1 and 2. (Figures for 22/23 are not yet available).

Groundbreaking technology can reduce the use of plant protection

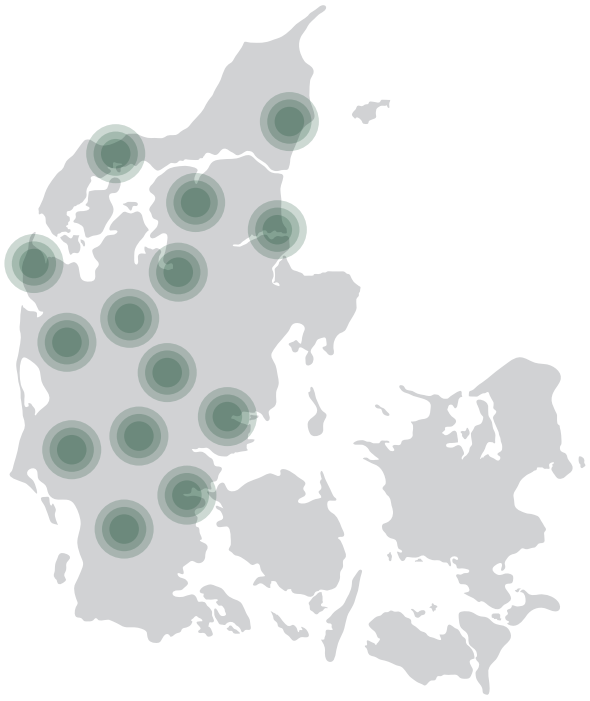
KMC goal 3:
Reduction of plant protection products

SDG goal 15:
Life on land

Potatoes – and vegetables in general – are more susceptible to diseases than other types of crops. During a season, there is a need for intensive spraying – especially against fungal diseases that can potentially destroy a field in just a few days. KMC is working on several fronts to reduce the use of plant protection.

In 2023, a significant development occurred when the European Commission presented a proposal to allow crops produced using CrisprCAS.

Each of the green circles illustrate our setup with local weather stations and associated possibilities for tailored spray recommendations.



The technology can be used to create controlled but entirely natural mutations in the plant's DNA, which are expected to make the plants more resistant to diseases.

2023 was also the year we planted the first CrisprCAS potatoes in our trial field. The process has meant that we have learned much more about the possibilities of the technology and are ready to start if the European Commission's proposal is adopted. If successful, this maneuver could potentially halve the use of plant protection products – and cut away many years of the work of developing a new variety.

We are also working on the following initiatives in this area:

Initiative 1: Late blight warning

Fungal diseases like late blight and leaf spot are very dependent on weather conditions – dry, warm summers inhibit the diseases, while moist weather with temperatures between 18-22 °C creates favorable conditions for their spread. Therefore, we work intensively to advise farmers on their use of plant protection.

Calender year	Recommended reduction
2023	0%
2022	14.1%
2021	18.8%
2020	15.3%
2019	10.3%

During the growing season from June 1 to September 15, KMC advises potato growers via a dedicated website twice a week based on local weather information. This way, growers always have up-to-date knowledge of exactly how much plant protection to use to prevent late blight. The website receives over 20,000 visitors over the season.

In the summer of 2023, we did not recommend reducing the use of plant protection products. The reason is that in 2022/2023, we lost access to two effective fungicides against potato blight. The fungicides available today are less effective. Therefore, we have not been able to recommend a reduction in dosage. This emphasizes the importance of allowing new breeding technologies like CrisprCAS and other mutagenesis techniques to reduce the use of plant protection.

Did you know that...

For the past three years, KMC has been collaborating with Aalborg University and the University of Copenhagen to explore the possibilities of CrisprCAS technology in the laboratory?

Financial year	Number of clones
2019/20	3,200
2020/21	7,500
2021/22	14,000
2022/23	12,000
2024/25, goal	10,000

Initiative 2: New varieties

We can also reduce the need for spraying by developing new varieties that are more resistant to diseases. This method has been around as long as potatoes have been cultivated. The challenge is that it can take up to 12 years to achieve this goal – without any guarantee that the more fungus-resistant potato variety will also perform well in other necessary parameters, such as starch content.

KMC is focused on developing a new resistant variety for cultivation. This requires many genetic combinations. Therefore, we are pleased that we have already exceeded our target for the number of clones. In the fiscal year 2022/2023, we created 12,000 clones, which is 2,000 more than the target set for 2024/2025. We also expect to work with this high number of clones in the coming years.

12,000+

In 2022/23, KMC created more than 12,000 new clones, which is 20 percent more than the set target for 2024/25.

Drone photo from one of KMC's trial fields in Arnborg.

At KMC, we believe the future is **plant-based and climate-friendly**.
Our contribution lies in helping innovative food manufacturers make their products greener. And by becoming increasingly sustainable ourselves.

KMC is your preferred partner because we use our **extensive know-how** to provide solutions that develop your business and optimize every single production – from ingredient to implementation.

Because our **Danish roots** guarantee high quality and food safety.
And because our team of experts stays on until your solution works.

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