How do we shape an innovative sustainable food service industry?
The MPULSE refrigerator guide
for more flavour and less waste

Door: 10°C–15°C
Foods that need little cooling and tolerate slight temperature variations
for example beverages, eggs, butter and sauces

8°C–10°C
Foods with a long shelf life that don’t need much cooling
for example open preserved foods (jams, gherkins, olives, etc.), hard cheeses and smoked sausage (release and maintain their flavour better when not stored at such cold temperatures), sliced tropical fruits like pineapples, mangoes or oranges (only for a short time; whole tropical fruits don’t belong in the refrigerator), leftovers (previously prepared, covered dishes)

5°C–7°C
Dairy products and alternative sources of protein
for example cheese, yogurt, plant-based meat substitutes

2°C–4°C
Easily perishable foods
for example fresh meat, fresh fish and fresh seafood, sausage

Crisper: 10°C–12°C
Fresh fruits and vegetables (separately, as ripe fruit causes vegetables to spoil more quickly)
for example carrots, broccoli and cauliflower, lettuce and fresh herbs, berries
Good to know: even apples belong here, where they maintain their crispness and vitamin content significantly longer. Vegetables with a high water content, like cucumbers and aubergines, stay fresh outside the refrigerator.

Together.
#NEWGATHER

Tear out this page and hang it on the fridge!
FUTURE

is what we make of it. It’s the responsibility that we take on today. It’s the path that we choose.

As a wholesaler, we have dedicated ourselves to accompanying an entire economic sector – the food service industry – into the future. It is beyond question that this future calls on us to conduct our business sustainably and to deal with resources in a thoughtful, foresighted manner. We, and many of our customers, are already doing this today – as can be seen in the stories in this issue of M PULSE. They show that it takes ideas and solutions, and above all inspiration and courage, to make sustainability a success.

Our customers are our inspiration. People like Michael Wankerl, with his thoroughly local and natural cuisine. Or our suppliers, such as the producers of the ‘mountain-grown shrimp’. This is how innovation and sustainability go hand in hand.

Together with you, with our customers and our suppliers and with our over 97,000 METRO colleagues worldwide, we are working today to create the food service industry of tomorrow. You can see what it looks like in the following pages.
Is sustainability a utopian ideal?

Why sustainability is so difficult - and why it's worth working towards nonetheless.

A guest contribution from Prof. Dr Christian Berg
When my grandmother was born, there weren’t even 2 billion people on the planet. Today there are almost 8 billion of us. In the same period, resource consumption has increased eightfold and energy consumption tenfold. We have been debating for decades about sustainability and ‘the limits to growth’, as the title of the first report to the Club of Rome from 1972 formulated it. In Rio in 1992, the world community agreed on the goal of sustainable development, and in 2015, on the 17 UN Sustainable Development Goals that are to be reached by 2030. Still, there is no trend reversal in sight. Climate change, the felling of the rainforests and the extinction of species proceed unchecked.

Why is this? And what can be done about it? Unfortunately, there isn’t just one reason for this, but a plethora of very different reasons. These include, among others, the fact that prices don’t reflect the environmental costs associated with the respective products; that there is no effective global regulatory framework for meeting global challenges; that we have massive social differences in the world – those who can’t even feed their children today can’t think about future generations; and that all of us are often too comfortable and don’t actually do what we believe is right.

Thus, there are many such ‘sustainability barriers’. If we want to achieve more sustainability, we would do well to dismantle these barriers step by step. We know from history that major social upheavals have multiple causes. History can never be explained monocularly. The goal, then, must be to remove as many barriers to sustainability as possible so that change can happen.

The problem, however, is that changes are needed simultaneously at many points, but there is no global helmsman. Change can’t come by decree, from the top down. It depends on the interplay of a multitude of actors. And every actor has to participate: governments, corporations, NGOs, all of us.

To support these various players in the concrete actions they take, I have formulated principles of sustainable action based on my research. These principles concern diverse areas of life—including our treatment of the natural world, our coexistence as human beings, our relationship with ourselves and our dealings with systems. Some principles are directed at individual groups of actors. The ‘polluter-pays principle’, for instance, addresses government. It says that whoever causes damage is also responsible for its redress – the idea behind the carbon tax. Other principles are directed at all groups of actors. For example, every one of us can contribute to decarbonisation, or the avoidance of fossil energy sources – through choices in how we travel, where we get our electricity, how we holiday, where we invest our money and, of course, how we consume goods and services.

When it comes to diet, I suggest a principle of my own. The more local, seasonal and plant-based our diet is, the more we can reduce our ecological footprint. Local, because this spares the environment the burden of long transport routes. Seasonal, because this saves the need for long-term cold storage. And plant-based, because the production and use of meat and fish as food sources has a high environmental impact. This doesn’t mean we must all immediately become vegetarians – but for health reasons alone, the German Nutrition Society (DGE) recommends eating only about 50 g of meat per day, a third of what we consume on average.

Moreover, there is a general benefit to dealing mindfully with food. Those who have ever fasted for a few days will have rubbed their eyes in disbelief about how thoughtless we often are in our eating habits. When was the last time I just ate – and thoroughly enjoyed what I was eating? Without distraction? Without watching television, talking to someone on the phone, or perhaps even working? Am I conscious of the value of what I eat? Of how much work and effort has gone into it by the time it gets to my plate? And in the case of meat or fish, of the fact that animals had to give their lives so that I can enjoy it? Less can be more. It isn’t about prohibitions – it’s about quality of life.

Is sustainability a utopian ideal, then? That depends. The historian Thomas Nipperdey understood a utopia to be ‘a world which is right’; one ‘ordered in such a way that man’s life succeeds in it.’ A world in which life succeeds – a notion no less relevant in Grandmother’s time than today. Who wouldn’t want that? In this sense, sustainability can indeed be described as a utopia. One that can come true. Whether that happens is up to us.
On a growth course: chicken meat based on plants

Rich in protein and fibre, genetically unmodified, and low in cholesterol and carbohydrates – these are a few of the advantages of the chicken meat substitute products from the food tech start-up Next Gen, founded in Singapore in October 2020. To finance the new products, which go by the name Tindle, Next Gen raised funds of over $10 million – the world’s biggest early-stage financing ever for plant-based food technology. Next Gen plans to use the money to expand into other Asian countries, Europe and the USA, and to develop further products. Among their investors is NX-Food, METRO’s innovation hub. Since the launch of the Tindle products in March, the METRO subsidiary Classic Fine Foods is additionally supplying selected restaurants in Singapore as an official sales partner.

For more on the topic of meat substitute products, see page 20.

Industry debut in reusable packaging

In autumn 2021, METRO France will team up with the Loop initiative to launch a deposit service for reusable packaging – the first of its kind in the wholesale sector. A pilot version of the service is to be introduced in 10 stores with over 100,000 customers in the Ile-de-France region. The principle: customers buy products like oils, sauces, seasonings and creams in environmentally friendly, reusable packaging. They are refunded the deposit amount upon returning the packaging, which can then be refilled by the participating producers. In this way, METRO is contributing to creating a sustainable closed-loop economy.

Sustainability in Food Service Distribution

What impact does the fast-growing Food Service Distribution (FSD) business model have on the environment and on society? To find out, METRO measured the economic, ecological and social added value of its delivery business – in comparison to bricks-and-mortar retail. The result: the FSD business shows a positive balance in all 3 areas. The direct delivery of goods saves customers time, and the shortened transport routes reduce CO₂ emissions as well as food waste. Translated into monetary terms: with respect to environmental and social impacts, the delivery business generates an advantage of €68 per €1,000 in sales – and rising.

Transparency, from the farm to your plate

Where does my food come from, what ingredients does it contain and how was the product processed? With the sustainable service Pro Trace, METRO France is creating transparency along the entire value chain. Using a QR code on the packaging, customers can trace the path of the product and obtain information on its origin, animal farming, animal feed, nutrition facts and certificates. Pro Trace was launched in France in late 2020 with tracing options for fresh salmon fillets, and the service is now also available for METRO Chef Farmhouse Chicken – with further products to follow. Other METRO countries are already using the traceability solution as well.
The proprietor of Gerüchteküche in Graz, Austria, dries celeriac, stews it in the oven or serves it raw in wafer-thin slices. ‘The root – not the stalks,’ he clarifies. ‘It has its own unique saltiness and such a strong flavour that you hardly need to season it.’ Wankerl’s bookcase groans under the weight of tomes full of formulas and amino acid compounds. To make the most of a root vegetable’s flavour, you need to study cooking and fermenting processes and experiment with temperature to change the sugar content, and with that, the taste experience and texture.

Michael Wankerl’s restaurant is located in the university district of Graz. It has been awarded 2 Gault & Millau toques. Gerüchteküche offers a small lunch and 4-, 5- or 6-course dinners – and guests don’t find out what they will be eating until it’s on the plate in front of them. Their allergies and culinary aversions are taken into account, but otherwise, the diners eat what they are served – and they love it. ‘We don’t cook based on a menu, so we don’t throw anything away,’ Wankerl says. ‘If I have celeriac one day and run out of it, but I’ve bought parsnips that morning, then there’ll be a parsnip course.’ Wankerl makes use of the whole plant: roots, fruits, flowers, greens. He almost never peels anything, but when he does, he uses the peelings, too. He pickles, he ferments. ‘Those aren’t quite the same,’ he says. ‘You can pickle things in various liquids. Fermentation is always controlled spoiling,’ he laughs. ‘Or to put it another way: a lactic-acid-based metabolic process.’ Wankerl only uses a food when it is in season locally – or months later, preserved. He has made umeboshi, a salted, dried and subsequently rehydrated plum used in Asian cuisines. ‘It tastes sweet, sour, salty and umami,’ he explains. Umami, borrowed from Japanese, essentially means ‘delicious’. It is its own distinct flavour category, often described as ‘savoury’ or ‘meaty’. Currently Wankerl is having a go at soy sauce. ‘It’s a bit tricky,’ he says. He also makes his own miso pastes. ‘They take at least 3 months. We make them from buckwheat and emmer wheat, or from lentils or butter beans.’ The pastes are used as a seasoning. ‘We cook with about 80% plant-based ingredients. The miso pastes are great at coaxing the different aromas out of the various vegetables.’

Celeriac: when Michael Wankerl cooks with this root vegetable, you won’t find many other things on your plate. If that sounds like a dreary meal, you’ll be surprised to discover it’s anything but.
The 20% animal-based ingredients in Wankerl’s dishes are almost exclusively eggs and dairy products in desserts. He is uncompromising in his ‘buy local’ stance here, as well. He buys cream, milk and yogurt only in glass containers from an organic farm. ‘On average, they’re 15% to 20% more expensive than the conventional stuff,’ he says. ‘But we also use the products differently, so that in the end, it’s not just sustainable but also economical. I could buy a plastic bag of carrots for €1 – but I buy them open at the local market for €1.50. They still have the greens on top, and I use those to make pesto. This approach to cooking seems more expensive at first glance, but you’ve got to be creative.’ Wankerl has adapted his style of cooking to match his convictions and his own standards of sustainability. Originally, he cooked very differently: ‘I mean, I worked in big hotels and restaurants for years!’ It was his family that inspired him to change. ‘My wife studied in the construction field, and she’s really borne fruit!’ His family inspiration also intensively with sustainability in that sector – a lot of that has rubbed off on me,’ he says. ‘My stepson is a competitive swimmer, and we were faced with the challenge of feeding a kid who needs 5,000 to 6,000 calories a day! In a healthy and balanced diet, no less. When you do such a deep dive into every aspect of nutrition, at some point you have no other option but to make a change. Because you can’t avoid thinking about what sort of legacy you want to leave for your children. All I can say is I’m still having a blast working this way!’

The chef loves root vegetables – especially Japanese artichokes. ‘Looks like maggots,’ he says, again laughing. ‘But it tastes a bit like salsify. You can roast it or eat it raw.’ He and his wife go out into the woods almost every weekend. ‘We gather herbs, wild garlic, spruce tips and capers, and we dig up the roots of sorrel and evening primrose – then we make dishes with the fresh ingredients, or we preserve them.’ He recently got a call from a friend who found something unfamiliar growing in his garden. Wankerl came and dug it up. When he’s not out foraging himself, he knows ‘2 dear guests who are always out in the woods foraging. Anyway.’ They supply him with mushrooms and herbs, for example.

Wankerl says many people have no idea what treats are growing in their backyards – or in Austria as a whole, for that matter. ‘There are around 2,000 species of plants that grow here,’ he says. ‘About 20 of them are poisonous, and only 5 are deadly. The amount of edible plants growing here is just enormous!’ His wife always jokes that he will die from eating something poisonous, Wankerl adds with a chuckle. ‘Because whenever we go anywhere, I’m always plucking leaves off some plant and chew- ing on them to see how they taste, whether or not they’re bitter, and trying to figure out what I could do with them.’ But people are beginning to learn, and slowly but surely, they are coming to appreciate the natural world around them – and the dishes it inspires. ‘When our guests came back to the restaurant after the first shutdown,’ he says, ‘they were incredibly motivated and curious – everything we had invested in our way of working with different ingredients at Gerüchteküche had really borne fruit!’

Whatever this top chef with a touch of the enfant terrible can’t source from local farmers or forage, pick and harvest himself, he buys at METRO. Wankerl’s sales force manager is an old friend and colleague: ‘The first time we got in touch, I said, “Look, here’s what I want to do.” Initially, we weren’t sure if it was conventional stuff, but METRO then shared basic understanding of the platform DISH also grew out of this fundamental understanding, as well as the desire to provide foodservice professionals with the best possible support in their day-to-day work and give them more time to concentrate on the essentials: their cooking and their guests. Wankerl uses the tools DISH Reservation and, for his takeaway business, DISH Order. ‘With the online reservation system, phone calls have decreased by 90%,’ he explains. ‘I’ve used to have to run out of the kitchen every time the phone rang. I’d clamp the phone to my ear with my shoulder and keep cooking! Then I’d scribble the reservation down on a random scrap of paper. Now, people also make reservations in the morning or at night – times when they wouldn’t be able to reach anyone at the restaurant before. They would have to leave a message, and we wouldn’t be able to confirm the reservation until hours later. The online system confirms their reservation with just a few clicks, and then they can plan their day or their week better.’ Wankerl says he even noticed that one of his suggestions for improvement had been implemented in the reservation system: ‘Originally, there was only one setting for the length of the guests’ stay, regardless of whether it was for lunch or dinner. But people eat faster at lunchtime and only stay for an hour, max, and then they usually stay for 2 hours. Now, I can set that in the system, which lets me plan even more precisely.’ He can now make better use of his restaurant’s capacity, helping him to increase revenue.

For Wankerl, fewer calls also means more time in his kitchen without interruptions. ‘That shared basic understanding of cooking in it for me. Any meat that comes in my kitchen gets braised!’ he knows and trusts slaughters a cow, Wankerl takes half. ‘I’m just not interested in those cuts. Slap it on the grill, brown it on both sides – to me, that’s so uninspired. There’s no character or feel- ing for the meat. That comes in non-returnable plastic canisters that he has to dispose of. He understands the reasoning behind the regulations, but wishes for a change in thinking here, too – along with some compromises.

When it comes to meat, however, Michael Wankerl makes no compromises. He insists on his cooking, it must be very local, just like all his other ingredients. If the nearby farmer that he knows and trusts slaughters a cow, Wankerl takes half. ‘I always leave the fillet and the roast behind,’ he says. ‘I’m just not interested in those cuts. Slap it on the grill, brown it on both sides – to me, that’s so uninspired. There’s no character or feeling for the meat. That comes in non-returnable plastic canisters that he has to dispose of. He understands the reasoning behind the regulations, but wishes for a change in thinking here, too – along with some compromises.

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The mountains are calling – and the future is coming

Freshly caught shrimp. Delivered within 20 hours of leaving the water. Not deep-frozen. From Austria. In sashimi quality. This may sound like a dream of the future, but it is already a reality – thanks to Daniel Flock and Markus Schreiner.

In terms of work schedules, shrimp farms are easier to care for than cow or pig farms. Shrimp don’t have to be fed, milked or cleaned at 5 o’clock in the morning. ‘We can just as well start at 8 o’clock,’ says Daniel Flock, laughing. ‘The feeding is done automatically by machines – we just have to make sure they’re running correctly.’ His day begins in the morning with an inspection round: are all the pumps operating, is the food being dispensed in the right amounts? Afterwards, over a cup of coffee, plans are made for the day. ‘We look at the tasks that need to be done and what orders need to be filled, packed and sent,’ he says. The growth time of a shrimp is 5 to 6 months – only then can it be harvested. Flock and his business partner, Markus Schreiner, have developed a system that allows a continuous harvest – so they can supply food service industry customers, retailers and private households year-round. Flock actually planned to open a restaurant and serve his guests regional specialities. Then he saw a documentary about shrimp production and thought to himself: that must be possible to do without the chemicals and antibiotics! He decided not to become a restaurateur after all, but – together with Schreiner – a restaurant supplier instead. One with the healthiest, freshest shrimp of the image – grown in the Austrian Alps in the best mountain spring water mixed with sea salt. ‘We started out small, experimented and researched, and we networked with specialists in building aquaria,’ Flock recounts. ‘Our own professional background in design engineering came in handy, of course.’

The highest standards for the animals’ well-being

Their shrimp farm in the Alps is equipped with an elaborate system for wastewater treatment, so even if a minimal amount of freshwater has to be added, to replace what is lost due to evaporation. ‘We give the shrimp the water they need to regenerate itself,’ Flock explains. He and Schreiner set the highest standards not just for the well-being and health of their shrimp, but also for the environmental aspects of the aquaria. The water in the breeding tanks is kept at 28°C to 30°C and is inspected daily in the in-house laboratory. The tanks are located on 2 floors of an isolated building. The sludge that forms from the shrimp excretions is removed and could be used in biogas plants – but that’s a project for the future.

Flock and Schreiner buy the shrimp larvae they need for production from breeders – but they are working at full speed on their own shrimp cultivation and have engaged a biologist to support them. ‘We’ve had some initial success,’ Flock says. ‘Now we have to work that into our ongoing production process. We want the quality of the shrimp to continue to improve, not decline, over time, so we have to work very cleanly and precisely.’

When they first went into business in 2015, the fledgling shrimp farmers produced in small volumes. They contacted a handful of regional restaurateurs as well as retailers and let them try the shrimp. The response of the testers was unanimous: they wanted more! Because these shrimp from the Alps had proven that you can taste the health of an animal, even a small one. And you can see it, too: they have feelers as long as their bodies and quite a tough shell – unmistakable signs of natural product with their own flavour, maintain their form and size. They’re a tough shell – unmistakable signs of their outstanding quality of their water and food. ‘You can eat our shrimp raw,’ Flock says proudly. ‘When you fry them, they maintain their form and size. They’re a natural product with their own flavour, because they aren’t pumped full of chemicals.’ The shrimp are killed by quickly immersing them in iced water. ‘This cold shock from 28°C to below 0°C is the most protective method and the cold chain takes effect immediately,’ Flock explains.

Because, as with cows or pigs, you can taste stress in shrimp – and this mountain-grown variety doesn’t experience any. Flock and Schreiner’s Alpenaquafarm Tirol GmbH has reached a production volume of approximately 1 tonne per month. The entrepreneurs don’t believe in overly fast growth – with respect to either their shrimp or their company. ‘We didn’t want to invest millions right at the start, without first knowing the product,’ Flock explains. ‘We’re constantly growing, but at a healthy pace.’ They sell their shrimp through their own online shop, through selected delicatessen shops, directly to restaurateurs and through METRO Austria. Flock relates that ‘Lukas from the store in Rum and Christian from procurement reached out to us and suggested that we collaborate – with the result that the Tyrolean shrimp can now be found at 5 Austrian METRO wholesale stores. ‘We might expand to more in the future, but we’re taking it slowly.’

Decentralised production close to the consumer

Energy-efficient systems, healthy animals, no antibiotics, marine protection – the story of the shrimp from the Alps sounds like a sustainability fairy tale. But can a product that so obviously doesn’t belong to its place of production ever be truly sustainable? ‘When you go into a shop and have a look at their offerings,’ Flock says, ‘you find a very large number of products that we see as native today, but that once weren’t. Technological progress opens up completely new perspectives when it comes to taking a food originally from another region – like the shrimp – and making it “native” to a particular new place. And most importantly, without overfishing, without antibiotics and without living conditions that are unfit for people or animals.’ Flock is confident that, in the future, ever more foods will be produced this way: decentralised and close to the consumer. His mountain-grown shrimp show that it is already possible today.
While the world goes hungry, we throw food away. About 88 million tonnes of food end up in the trash each year in the EU, at a cost of around €143 billion. The figures show that this waste isn't just problematic on humanitarian grounds, but is also expensive. Fresh products past their best-before date account for 85% of food waste in the retail sector; the costs resulting from this waste of fresh food are more than double the profits earned with it. What nobody wants can't be sold – and lands in the bin.

Pricing food items using a dynamic algorithm on the basis of a best-before date – for this advance, the METRO innovation hub NX-Food and the Israeli start-up Wasteless won funding from the consortium EIT Food. The pilot project is set for launch at MAKRO Poland. The entrepreneurs behind the start-up Wasteless, which was founded in 2017, saw a significant part of this waste as the result of a data problem. Take a pre-portioned package of lettuce that the customer wants to use the same day, for example. Of the several packages of this product in the store display, one has a closer best-before date. While the customer would otherwise tend to choose a package with a later date, a targeted price reduction will likely prompt them to reach for the earlier-dated item. But many retailers lack a systematic overview of which articles will ‘expire’ on what day, as well as a clear pricing strategy. Currently, price reductions often seem arbitrary and must be carried out manually.

Dynamic pricing reduces costs and waste

This all may soon change – thanks to dynamic pricing. By means of a dynamic algorithm, this technology uses a date-enabled barcode to successively reduce the selling price of products as the best-before date approaches. The system developed by Wasteless gives retailers a real-time view of their inventory and at the same time offers customers lower prices. In addition, it makes waste avoidance visible – and by seeing it, business owners and consumers can implement it, thereby reducing the CO₂ footprint of the respective product.

There has been keen interest in such a solution for some time – ‘just not coupled with the technological capability,’ according to Clément Tischer, Head of Innovation & Partnerships at NX-Food. The METRO hub is dedicated to topics around food innovations, sustainability and efficiency. In partnership with Wasteless, NX-Food applied for and received funding from EIT Food, a consortium of leading companies, research centres and universities that was founded by the European Institute of Innovation & Technology (EIT). The joint project of Wasteless and NX-Food, ‘FRIENDS Reduce Food Waste’, was awarded a total of €702,500, the highest amount of any applicant in their funding period.

‘Best before’ doesn’t mean ‘expires on’

‘FRIENDS Reduce Food Waste’ is now set to be launched as pilot project in selected MAKRO Poland stores. ‘Innovation means putting new processes in place, embracing new learnings and persistently pursuing the path you’ve set out on,’ says Tischer. ‘We immediately sensed that the people at MAKRO Poland had a passion for the subject. It was more like being pulled than having to push.’ If implementation is successful in Poland, the project will then be rolled out in other countries. Educating consumers plays a role here as well. People often equate a product’s best-before date with its expiry date. This is an error, as many foods are still perfectly edible days, weeks or even months after the best-before date. Shoppers nonetheless tend to reach for the item that will keep the longest, even though fresh food products, for example, will often be eaten or used the following day. ‘The incentive of a reduced price will alter many purchasing decisions,’ Tischer believes. Admittedly, a bit of planning on the part of the purchaser is required with regard to when the respective product is to be used, as ‘older’ goods have to be consumed faster in cases of doubt. ‘But since restaurateurs generally have to calculate costs very closely, this offers a way of reducing operating expenses,’ Tischer explains. In the end, there are advantages in it for all involved – the restaurateur saves purchasing costs, vendors can sell edible goods instead of throwing them away and the guest makes a decisive contribution to helping food fulfill its intended purpose: being eaten and not wasted.
The coronavirus pandemic is bringing yet more plastic waste to our environment. This is just one reason customers are calling for alternatives to plastic. METRO offers the food service industry a range of solutions using sustainable takeaway packaging.

Ordering takeaway from a favourite nearby restaurant is a popular option these days – it lets you spic up your life a bit while also supporting local restaurateurs during the crisis. But in the pandemic, takeaway means significantly more packaging waste for our environment. According to the German packaging market research institute Gesellschaft für Verpackungsmarktforschung, or GfV, which collected data on behalf of the country’s nature conservation union NABU, single-use tableware and takeaway packaging accounted for 346,419 tonnes of waste in Germany in 2017. Other estimates point to the use of some 400,000 disposable food containers per hour in Germany – before the pandemic.

And since the first shutdown, the use of food delivery services and single-use packaging has gone through the roof worldwide. Zurab Natsvlishvili, Head of Global Sourcing, Near Food, at METRO AG, says: ‘The takeaway business has steadily increased in recent years, but during the Covid-19 crisis, we’ve seen double- and triple-digit growth in certain takeaway items. We expect it to remain at a high level, even after the pandemic has ended. We would of course welcome that, but at the same time, we’re concerned about the volume of plastic waste that the takeaway business generates.’ In addition, the increased use of hygiene products and personal protective articles such as disinfectant and face masks has also produced more plastic waste. And the planet already had a massive plastic problem, even before the pandemic: in the EU alone, 60 million tonnes of plastic are produced every year, nearly 40% of which is used as packaging material.

Customers are willing to pay

Bags, to-go items, packaging for shipping – plastic is present throughout the food logistics cycle. Higher delivery and quality standards usually result in excessive packaging of goods. Many restaurateurs still see conventional plastic packaging as more hygienic and affordable than other options – but switching to more sustainable products, and especially to more sustainable packaging, can actually help to boost their business over the long term. That is because customers are increasingly demanding greater sustainability. According to studies, 90% of customers are at least aware of the issue of sustainable consumption; 88% expect manufacturers to support them in living a sustainable lifestyle; and 77% are prepared to spend more for sustainable packaging. ‘For at least 2 years now, we’ve seen a clear trend towards purchases of items made of sustainable materials instead of conventional plastic,’ Natsvlishvili says. ‘Plastic consumption is continuously declining, particularly in Western Europe.’ For this reason, recyclable and even compostable products and packaging are an important pillar in METRO’s overarching sustainability strategy. In order to more strongly promote the sustainable use of raw materials and to minimise plastic waste, the company relies on 3 guiding principles: reduce, reuse, recycle.

Recyclable materials are a building block

METRO is actively seeking alternatives to conventional plastics and at the same time wants to continue to meet the high quality and hygiene standards expected by our customers. One solution is sustainable takeaway packaging made from renewable raw materials such as bagasse, which METRO also uses in its own-brand products. Bagasse is a by-product of sugar cane processing. It is a purely bio-based material that is fully compostable. It is an ideal replacement for plastic, as it is waterproof, grease-resistant and heat- and cold-proof. However, materials that in some cases can be recycled multiple times – like aluminium trays, paper, wood, bamboo, palm leaves or pET – can also be used in more sustainable solutions for takeaway packaging. Various takeaway cartons, salad containers, soup bowls, cups, catering and pizza boxes can be made of more sustainable materials and still be just as popular with customers. Natsvlishvili explains: ‘We currently have over 50 items made of bagassas in our product range that can be composted at home. We also have wooden cutlery and paper drinking straws. In 2021, we’re developing more than 70 new articles in the areas of aluminium trays, single-use paper items and further bagasse articles under our own brand METRO Professional.’

Additionally, in 2018, METRO committed to a drastic reduction in its own plastic footprint by 2025. One target was to reduce the amount of conventional plastic used in its own-brand packaging by 300 tonnes by the year 2023. The company had already achieved, and far surpassed, that goal by the end of financial year 2020 with plastic savings of almost 500 tonnes. Another major step towards a reduced-plastic future is the EU ban on a range of single-use plastic products from 2021. Through the use of more sustainable materials and sustainable packaging, METRO is thus steadily adapting its range of products to meet the growing demands of consumers and society – for a future with less plastic.

— By using more sustainable products and packaging, restaurateurs can enhance their public image while also protecting the environment.
— Active communication on the issue can raise guests’ awareness – and with it, their willingness to pay higher prices if necessary.
— METRO encourages customers not only to recycle, but also to reduce and reuse – by doing without unnecessary packaging and relying on multi-use options, such as refillable containers and cups. These are all key elements in the fight against plastic waste.
With the TGTG app, users can reserve and pick up unsold food at restaurants, cafés, bakeries and, for example, METRO and MAKRO stores, within a certain time window. Created in 2015, the app is now available in 15 countries, with over 35 million users registered.

But many meals which, for example, are lying in the display case shortly before closing time will still be purchased, perhaps at a reduced price, if they can be found by app. The solution: the app from Too Good To Go (TGTG).

With the TGTG app, users can reserve and pick up unsold food at restaurants, cafés, bakeries and, for example, METRO and MAKRO stores, within a certain time window. Created in 2015, the app is now available in 15 countries, with over 35 million users registered.

On average, the project keeps 325 meals per month out of the rubbish bin at each participating METRO or MAKRO store.

The partnership was formed in October 2018 and is based on 2 pillars:

- Saving food in METRO/MAKRO wholesale stores
- Advising professional customers in the use of TGTG and thus inspiring a wider public

26 stores are participating to date.

99% of the meals offered find a buyer.

METRO, MAKRO and TGTG have already saved more than 104,000 meals from the rubbish bin.

By wasting less food, we at METRO are also effectively reducing our carbon footprint – and moving closer to our goal of achieving CO₂ neutrality by 2040. When food and meals that have already been produced aren’t thrown away, but eaten, we protect resources. We also advise our customers from the food service industry on cutting CO₂ emissions – and in their sector in particular, the food that is used and the food waste that is generated play a major role in this respect.

We don’t just see ourselves as a partner of food service professionals, but offer entrepreneurs from wide-ranging industries – small, independent retailers, for example – products and services that are individually tailored to their needs.

You will find further informative, fascinating and entertaining information on our work at www.mpulse.de.

By 2025. The partnership with TGTG is part of this commitment.

In the Netherlands alone, the meals saved since the launch of the cooperation have a CO₂ equivalent of 225,000 kg – emissions that would otherwise have been generated in vain. The saved meals also resulted in savings in operating costs (through the avoided costs for storage and disposal, plus generated sales) of about €342,000.

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Find out more about our path to becoming carbon-neutral at

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When restaurants, canteens or stores throw away whole meals, it’s more than just aggravating. It also costs valuable resources – after all, the food was grown and brought to market, the meals painstakingly prepared.

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When restaurants, canteens or stores throw away whole meals, it’s more than just aggravating. It also costs valuable resources – after all, the food was grown and brought to market, the meals painstakingly prepared.
To eat meat or not to eat meat – is that really the question?

Do we all need to go vegan to save the world? No, says Jette Feveile Young, a food scientist at Aarhus University in Denmark. She is researching cultured meat – the technical term for meat grown in a steel tank – and she believes that completely eliminating meat from our diets is not the solution. Instead, the focus should be on finding resource-saving alternatives – without sacrificing flavour.

Jette, meat consumption and the factory farms associated with it are having a demonstrable effect on the environment and our health. Do you think that at some point, we will simply stop farming animals purely for meat?

No, but we should change the way we produce meat. The issue is often presented in a very antagonistic way, as though there can be only one correct solution. But global demand for meat is definitely still strong! And that is the starting point for our research into cultured meat – meat grown industrially using tissue engineering concepts.

Does that mean strict veganism isn’t the way to solve our problems?

I don’t think we need to stop eating meat entirely in order to lead sustainable lives. Instead, the idea is to create more alternatives. People have a myriad of reasons for deciding to eat less meat, or to stop eating meat altogether. Environmental protection and animal welfare are one aspect, and taste is another. This also explains the success of plant-based meat alternatives that intentionally taste different than the original. However, I think passionate meat eaters would be prepared to switch to cultured alternatives once they are market-ready, because the flavour will meet their standards and the products themselves will have less impact on the environment. Some meat eaters are already embracing ‘meat-flavoured’ plant-based products.
Moving Boundaries

By deliberately choosing alternatives to meat, restaurateurs can reduce the CO2 footprint of their restaurant and inspire their guests to eat less meat, and to consume it more consciously.

METRO is advancing the development of meat alternatives in various ways. The METRO delivery specialist Classic Fine Foods, for example, works with innovative start-ups as a sales partner, actively helping them to offer such alternatives to as many customers as possible worldwide.

Success lies in diversity. METRO defines 3 groups of proteins as ‘conscious proteins’: proteins from sustainable animal sources, including those obtained in accordance with high standards of animal welfare; from ecologically grown plants; and from alternative sources. The latter are considered unconventional products in many places – including, for example, products from insects or algae – or are produced using innovative technologies like cultured meat.

There are 2 camps in the food service industry: those who say that meatless meals can be delicious, and those who believe that meals without meat have no flavour. Can meat alternatives - whether they’re made of peas, fungi, or are grown in a lab - bridge this gap?

I am firmly convinced that the food service industry will move quickly to take advantage of the opportunities presented by alternatives to conventional meat products - and maybe even both camps in the food service industry will do so! The industry is always hungry for new ideas. A chef who has the skills to prepare a product the right way – in terms of texture and taste, as well - will be able to add it to their menu quickly and get their guests excited about it.

Do you think this approach will also work for people’s Sunday roasts at home?

Meat will remain a part of our culture, particularly in industrialised western countries. That’s likely one of the reasons why there are so many plant-based alternatives in the attempt to imitate the flavour of meat. I think it will take 1 or 2 generations to shift our mindset towards eating less meat and actually embracing the idea. From a nutritional science perspective, I can say that meat provides unique nutrient compounds that cannot be found in any other foods – but we only need a little bit of meat to meet our needs.

Well, compared to animals, plants produce practically no emissions. And in the production facility, we can decide what kind of energy sources we use to ‘grow’ our meat. I am also convinced that we will be able to integrate new production processes - such as cultured meat from animal cells – into existing food industry structures, such as conventional meat production. The breeding of livestock could deliver cells and side stream proteins for the culture media from the slaughtered animals. That would give us enough meat to meet the needs of the population, and we would need fewer animals to do it. Decreased demand for animals may reduce intensive factory farming, which would reduce the negative impact on animals and the environment.

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Publisher
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Germany
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Project lead, concept and editorial
(same address as publisher)
Katharina Meisel

Project management
Viktoria Ruef

Graphic design
Strichpunkt GmbH
Köpenicker Chaussee 3 b
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Germany

Editorial support and realisation
Keuchte GmbH
Bahnhofstraße 2
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Printing
Druckstudio GmbH
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Illustration
Yves Haithner

Management Board of METRO AG
Dr Stefan Gruppel (Chairman)
Christian Baker
Andrea Euenheim
Rafael Gasset
Eric Poitier
Chairman of the Supervisory Board
Jürgen Steinemann

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Useful Facts

Bananen bleiben weich und halten lange, wenn sie in einer Wasserbadlange gehalten werden. Source: https://www.gartenjournal.net/bananen-lagern

Carrots stay crispy when kept in a water bath in the fridge. The water should be changed now and then.

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At METRO, sustainability is printed in bold

The entire electricity demand for production was met through the use of 100% green electricity from hydropower.

The vegetable oil-based inks are free of mineral oils and hazardous substances.

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The carbon emissions resulting from both the production and the shipping of the magazine are offset. In this way, we promote environmental projects and compensate for the small amount of emissions that can’t be avoided. This issue supports the project ‘Bäume pflanzen in Deutschland’ (Planting trees in Germany), which contributes to regional reforestation and the restoration of tree populations in mixed woodlands.

At METRO, we don’t just set sustainability targets for ourselves – we also make them a criterion in our choice of business partners.

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