

Sustain ability Report ²²

planted.

Content

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What This Report Is About

When compared with a diet high in animal products, choosing alternative proteins has many benefits. In addition to ethical considerations, the production of plant-based protein emits fewer greenhouse gas emissions and pollutants, in addition to lowering water consumption and reducing soil degradation. **Planted aims to radically change how meat is perceived by inspiring a shift from animal- to plant-based proteins.** We set a new standard in plant-based meat with great taste, no additives, and juicy texture. Through plant-based meat, our goal is to enable sustainable, healthy and tasty choices, better than animal meat and better for the climate, health and animal welfare.

On this journey, we prioritize taste, the environment, pricing and health to lead a sustainable change in the food system. In our second sustainability report, we outline what we have achieved so far and provide a forward-looking perspective on the direction we are headed.

As a young company pioneering in sustainability, we've updated our carbon and water footprint assessment for all our products. **Planted's product portfolio shows that there are large savings, compared to animal meat, with 77-87% fewer CO₂-equivalents generated and up to 90% of water saved.** We have calculated our corporate carbon footprint using the Greenhouse Gas Protocol, resulting in, 8216 t CO₂-equivalents across all three scopes. This data lays the foundation for our future climate journey. We strive to source ingredients locally whenever possible, which is why we have bought a first batch of peas grown in Switzerland to produce our first all-Swiss protein. In collaboration with the Swiss Protein Association, we also worked to promote a level playing field for plant-based products through political advocacy.

We have also been committed to using resources responsibly. **Planted's investment in green infrastructure, including the use of 100% renewable energy during construction, and the installation of water-efficient equipment has helped minimize our environmental impact while still being able to double production capacity.**

Planted has grown rapidly, and we are now expanding our presence in seven countries. This success has been built upon a great team of Planted hero:ines and Planted's work culture which continuously promotes diversity and equal opportunities, with 43% of women in leadership positions.

Furthermore, we are extremely proud to have won the Green Business Award Switzerland, which recognizes innovative companies that combine ecological innovations with economic success. To affirm our ambitions, we are now working towards B Corp certification and are participating in the Oeko-profit corporate resource efficiency program for 2022/23 in Zurich.



A Message From Our Executive Board & Founders

Hi, there!

When we founded Planted, we knew that we wanted to make meat better. Our focus was on four pillars: taste, environmental footprint, health, and pricing. Whether we're improving processes, upgrading existing products or developing new ones, these four pillars remain essential to everything we do today. Now that we have grown so much, we ask ourselves: How can we keep improving?

With this question in mind, we are thrilled to share with you our second annual sustainability report. It not only shows how we fair compare to animal meat, but also demonstrates how we've improved our foundation and, most importantly, highlights what needs to be done in the future.

In the last few years, we've all witnessed climate-change-driven weather extremes such as record heat waves, sprawling wildfires, and devastating summer floods¹. With 8 billion people living on this planet, the food we produce has an especially significant impact on our environment. However, we believe a plant-based shift in the food system can positively affect human and environmental health. **That's why we continue to stay true to our mission of offering natural, tasty and healthy products without the negative environmental impact of animal meat.**

Whilst 2022 confronted us with challenging economic circumstances, it turned out to be one of our most exciting years. We doubled both production output and number of team members, we launched four new whole-cut products, including the planted.chicken breast, planted.chicken tenders, and the planted.roast, and we won the Green Business Award Switzerland for combining ecological innovation and economic success.

Sustainability remains at the core of everything we do at Planted, which is why we spent the last year collecting environmental data on all our products and our company's footprint. **We found that our main four products produce 77-87% less CO₂-eq and use up to 90% less water than their equivalent animal products.** To further understand our company's impact, we also conducted our first corporate carbon footprint analysis, which we are now using as a baseline to develop our future climate goals and strategy.

There were several other big steps forward for us in 2022. For the first time, we purchased Swiss yellow peas, which was accompanied by the ruling from the Federal government to support alternative protein supply. In an attempt to further level the playing field, we spent considerable time and effort with policy-makers, advocating for plant-based products as alternatives to animal-based products. And finally, we continued working on our B Corp assessment and taking part in the Oekoprofit cooperate resource efficiency program of Zurich city for 2022/23.

Despite a tumultuous year filled with international conflicts, the first war in Europe in 80 years, supply chain problems, raw material crises, inflation, and sustained COVID effects, our team remained committed to our mission and values of making meat better, and we want to take this opportunity to thank you for your hard work and the progress we have made so far. You are true hero:ines!

To tackle climate change, we need a shift in the food system and a switch to a more plant-based diet². That's why we are excited to be at the forefront of a movement that strives for a better climate, animal welfare, and social equity in food distribution. We are still a young company and are learning, and we'd love your feedback.

Together we can plant change.

Judith, Pascal, Lukas, Chris & Eric



Judith



Chris



Eric



Pascal



Lukas

Harvested Wins

We won the Green Business Award Switzerland

Tim Raue added our whole-cut planted.chicken breast to his restaurant's menu in Berlin

We launched our planted.chicken tenders & patties, and our special holiday edition planted.roast.

We doubled production capacity to over 1 t of plant-based meat / h

5'381
pigs saved*

276'143'335 L
water saved*

13'785 t
CO₂-eq. saved*

We successfully closed our 70 million CHF Series B financing round

We launched new products and landed in international retail at Edeka, Rewe, Spar, Despar, Monoprix, Franprix, Planet Organic & Morrisons

Our Planted products are now on rail lines: Cooperation with DB & SBB

1'237'843
chickens saved*

We are the Winner of the Swiss Vegan Award

*Impact compared to animal meat products measured from founding until 2022

How To Plant Change

There are many ways to take action on protecting the climate and biodiversity. These include driving less, choosing energy-saving electrical appliances, and supporting nature conservation efforts. However, one important way is often overlooked – our daily food choices. We have collected some numbers and facts on how shifting from animal- to plant protein can plant change.

Fighting Climate Change With Our Forks

We need to consider the environmental impact of what we eat. Food production is responsible for one-quarter of total greenhouse gas emissions³, with animal products responsible for 57% of those emissions. Plant-based foods contribute 29%. Scientists warn that even if we eliminate fossil fuel emissions, the global food system alone will make it impossible to limit global warming to 1.5°C and make it difficult to achieve the 2°C target⁴.

Keeping Our Footprint Small

With a plant-based diet, we can significantly reduce emissions and protect the climate. Plant-based foods have a climate impact 10 to 50 times smaller than that of animal products³. This fall in emissions comes from both a reduction in livestock production and the sparing of land that would otherwise be used for livestock rearing. Research shows that the world can still be fed without meat and dairy consumption and, doing so, would reduce global farmland use by more than 75%, an area equivalent to the United States, China, the European Union, and Australia combined⁵. Moreover, industrial animal farming pollutes water sources by releasing large volumes of manure, chemicals, antibiotics, and growth hormones, posing risks to both aquatic ecosystems and human health.

Comparing Impacts

When comparing the environmental impact of animal and plant protein, it's easy to loose the appetite for animal meat. On average, 100g of protein created from plants generates significantly fewer greenhouse gas emissions and requires less land than the same amount of protein generated from animal meat. Moreover, consuming less meat has many benefits for human health, such as the reduction in the risk of cardiovascular disease⁶.

Skippping the Animal Straight for the Protein

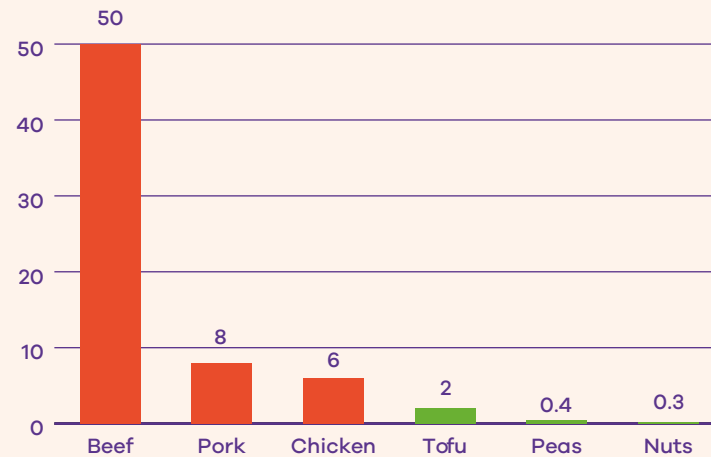
Skippping meat and choosing alternative proteins has a positive effect on animal welfare, human health, and the environment. Plant-based food production uses fewer resources and generates fewer emissions than animal-based production. When plant-based feed is converted into animal-based products, between 65 to 90% of the nutritional energy is lost⁷. Producing less animal food, therefore, means more arable land becomes available to be used to grow plant-based proteins for human consumption.

Don't Get Fooled By The Price

Global meat consumption has more than doubled in the last two decades, reaching 320 million tonnes in 2018 due to population growth and rising incomes⁸. Each person in the European Union consumes an average of 65 kg of meat per year⁹. However, the low cost of industrialized meat obscures its high environmental price tag, with animal-based products carrying the highest external climate costs¹⁰. These hidden costs are not reflected in meat's price tag and research estimates that the cost of meat for Western consumers, if taking into account the greenhouse gas impacts, would be nearly 2.5 times more than the current price¹¹.

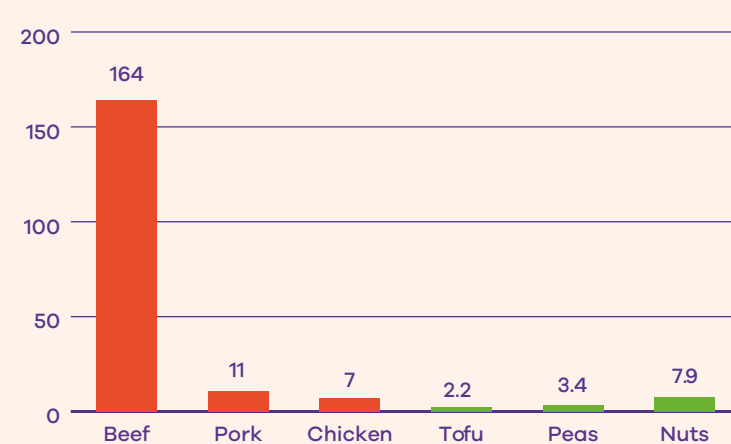
Greenhouse gas emission

kg CO₂-eq. per 100g of protein



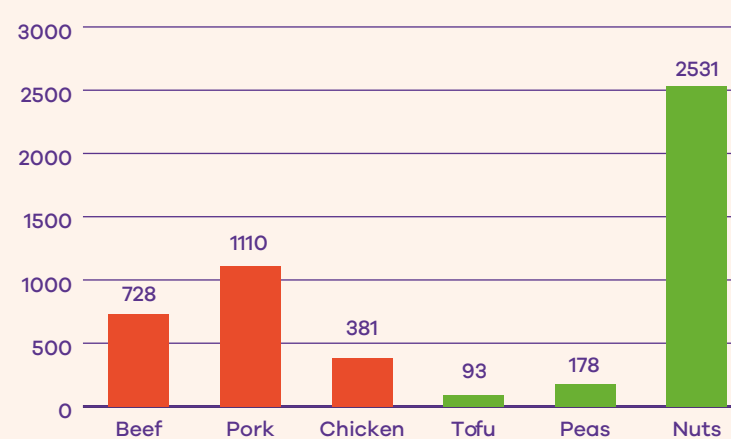
Land use

m² per 100g protein



Water use

L per 100g protein



Many Peas In A Pod

To us, our customers and community are our biggest stakeholders. Our recipe for change has more than one ingredient and on our journey towards a healthier and more sustainable food system, we have been able to find great partners, who help drive our mission forward. Some of our main activities and achievements are listed here:

Make Peas, Not War

Planted stands with the international community in condemning the war in Ukraine and has provided support through food donations. In cooperation with Caritas Switzerland, we donated 880 kg of product to Poznan in support of refugees fleeing to Poland. Additionally, we supplied products for a refugee kitchen in Basel.

Jumped on a train for a joint mission



Planted is collaborating with leading train mobility and logistics companies in Germany and Switzerland to provide plant-based delicacies for train passengers. This partnership allows travellers to combine environmentally-friendly travel with sustainable and healthy dining options.



SBB CFF FFS

Green Business Award

Planted received the most prestigious sustainability award in the Swiss economy, joining several inspiring companies that combine ecological impact with economic success. The award recognizes outstanding solutions that combine ecological innovations with economic success, thus contributing to climate and environmental protection.



Swiss Vegan Award



Every plant-based product protects and preserves animals, the environment, and our health, paving the way towards a more sustainable world while filling our stomachs with tasty food. We are proud to have won the Swiss Vegan Award 2022 in the „Salty Foods“ category.



University Sustainability Week

Sustainability Week Switzerland aims to promote sustainability at Swiss higher education institutions. Planted participated in several locations from March to April, bringing the Planted food truck, posters, and a keynote speech to stimulate discussions about the environmental impact of food choices. Students were encouraged to consider the unsustainable resource use of livestock farming and to learn about the benefits of alternative proteins.



Sea Shepherd & Planted

Planted has supported the independent marine conservation organization, Sea Shepherd. In Switzerland, we hosted the Captain's Dinner fundraiser at Hiltl HQ in Kempththal, raising around 1500 CHF, and donated around 90 kg of product to the board kitchens of Age of Union and Sea Eagle. In Italy, we donated products to the 100% plant-based menu of Linfa restaurant for around 50 guests at the Milanese dinner.



Swisstainable Veggie Day

On World Vegetarian Day, celebrated on October 1st, Planted partnered with Switzerland Tourism for the Swisstainable Veggie Day. Over 1200 restaurants and various hotels across Switzerland created a vegetarian menu or offered only vegetarian dishes. Planted advised restaurants on creating plant-based menus, and this resulted in some restaurants fully switching their animal meat options to Planted products for their dishes. This one-day initiative saved 75 tons of CO2-eq, equivalent to the amount of land 141 football fields full of trees can absorb.



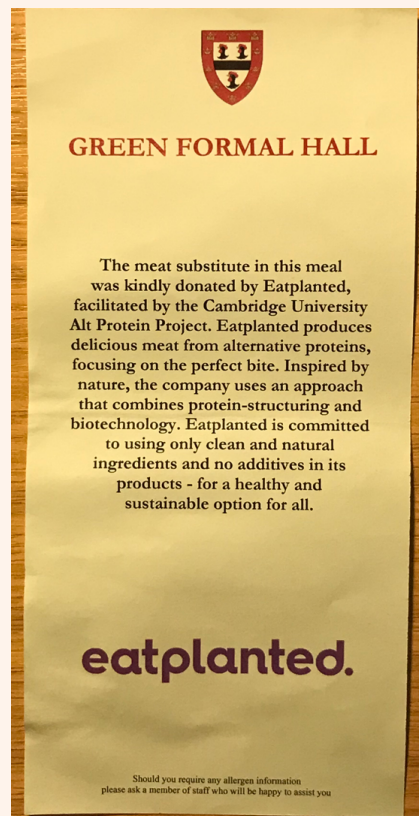
Supporting Local Food Kitchens

We supported local food kitchens, including Made in Hackney, by donating 279kg of stock for their plant-based cooking workshops and classes. We also collaborated with the organization to provide canapes at our events. Additionally, we ensured our events had a charitable component by hosting a special plant-based Christmas dinner featuring our new planted.chicken breast and planted.roast. Low-waste chef, Max La Manna, cooked the dinner without leaving any ingredients behind, and the cost of each ticket was donated to Feeding Britain, raising £1,000 to help combat hunger in communities across the UK.



FOOD FOR THOUGHT

Finally, in homage to our founders' university backgrounds, we included a scientific twist to our events. For example, we sponsored a special Green Formal Hall at Jesus College, Cambridge University, where we gave stock to 30 alternative protein enthusiasts and 150 college members to explore our innovative and clean-label meat alternatives.



Vegan-Friendly Society

We sponsored the Vegan-Friendly Society and exhibited at, and sponsored, their biannual markets in London and Brighton. This allowed us to reach 10,500 people passionate about living a plant-based lifestyle.



Changing The Status Quo

In our mission to change how meat is perceived, produced as well as consumed, we knew there would be obstacles to overcome – changing our food system isn't an easy one! Here are some of the actions we took to push for change on a variety of different levels:

Swiss Subsidies: Taking a step in the right direction.

In late 2022 with the support of the Swiss agricultural industry, the Swiss government took a significant step towards promoting plant-based foods. The 2022 agricultural ordinance package encouraged the cultivation of plant proteins for food and meant that the government would support the cultivation of plant proteins in addition to meat and milk. Starting in January 2023, individual crop contributions will be granted for the cultivation of protein crops for human consumption, which was previously only done for animal feed. As a result of this change, Planted can now increase its local raw material supply by purchasing yellow peas grown in Switzerland, in addition to Swiss rapeseed oil.

„This is a big investment in the Swiss protein market for us as a start-up, which we are making out of conviction. Scaling the value chain will take several more years and we are happy to have found partners with whom we can push this vision further. We are immensely excited to be able to incorporate Swiss yellow peas into our production.“
Lukas Böni, Co-founder

In furtherance of its mission, Planted partnered with the School of Agricultural, Forest and Food Sciences Bern (HAFL) and the company Peter Kunz e.V (gzpk) in a protein crop breeding project to explore options for high-quality peas in Switzerland.

Swiss Protein Association: Alternative Protein is Protein!

As a founding member of the Swiss Protein Association (SPA), Planted advocates for sustainable change in the Swiss nutrition system. The SPA was founded in 2021 and aims to promote alternative proteins and plant-based substitutes that can contribute to a more sustainable world. The association defines alternative protein sources as proteins and protein-rich products that are not derived from conventional animal sources. Its mission is to raise awareness amongst politicians, industry, and consumers about the potential of these products when it comes to a climate-friendly and sustainable diet, and to promote high-quality and competitive production of alternative protein sources along the entire value chain from cultivation to the end product. Read more here: [Swiss Protein Association](#)

Fighting For The Right Labels: We Don't Chicken Out

In December, the Zurich Administrative Court in Switzerland ruled that we can continue to label our products with names such as „planted.chicken“ without it being misleading to consumers. Unfortunately, our joy did not last long, as we now must defend our case once again. The Federal Department of Home Affairs (FDHA) has challenged the decision of the Administrative Court and referred it to the Swiss Federal Court.

This setback comes as a great surprise to us, especially after the EU paved the way for plant-based products in October 2020 by allowing them to be labelled as meat on the packaging. We trust that our Swiss government will continue to pursue its sustainability, innovation, and entrepreneurship agenda and set the record straight. We believe that it's worth the energy and effort to make these changes towards a healthier and more sustainable food system, rather than maintaining the status quo.

Transparency: A Glass House with Open Doors

We don't have anything to hide, so we built Planted's production site in a building made of glass. We believe everyone should see how meat is produced, unlike traditional animal slaughterhouses to which only few people have access. We strive to educate people about the impacts on the climate, environment, and society from animal-based products versus plant-based and encourage action and dialogue by sharing experiences. Our company tours for groups have been popular, and, since May, we have been opening our doors to individuals on „Open Saturdays“ to reach a wider audience of knowledge-seekers and innovation enthusiasts.

- Over 2500 visitors
- 102 Events
- 9 school classes
- 7 university classes



Science: Supporting The Community

SVIAL, an association for university graduates in the agro-food sector, discussed sustainable protein cultivation in Switzerland with Planted. Our head of Science participated in the panel, providing insights on the sustainable pea value chain from cultivation to consumption.

To tap into the bright minds and inspire future generations, we also lecture in various courses at the university ETH in Zürich, and conduct scientific research with partner institutes.

We thank our scientific partners

ETH zürich

Zürcher Hochschule für Angewandte Wissenschaften

zhaw

BH
Bern
Fachhochschule

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

gzpk Blodynamische Pflanzenzüchtung

UNIVERSITY OF GUELPH

Empa
Materials Science and Technology

Eidgenössische Departement für Wirtschaft, Bildung und Forschung WBF
Agroscope
Schweizerisches Nationalgenetisches Institut SNG



Rooting For Each Other

At Planted, we are dedicated to revolutionizing the plant-based meat category, creating a product that is not only essential, but irresistible. We also strive to build a culture of everyday hero:ines, who are empowered to do their best work, and who feel like they are given the support they need to thrive.

How to plant Hero:ines

5 Hero:ines achieving Excellence: Our dedicated hero:ines work hard to create positive change every day. We value their contributions and recognize those who go above and beyond. Each quarter, team members nominate colleagues, and the lot selects five individuals to attend a plant-based dinner hosted by Planted.

8.3 Employee Net Promoter Score: We encourage team members to proactively give feedback. As an employer, we ask quarterly about topics such as workplace, overall health, stress management, and leadership. We are proud to have scored a stable 8.3 out of 10 on the Employee Net Promoter Score (eNPS), which shows how likely an employee is to recommend Planted as an employer to a friend.

4 Self-care Mondays: Providing good working conditions is essential, but we also need to prioritize our health by learning how to manage our time and energy. Besides expert counselling, we offer quarterly self-care Mondays. These include initiatives such as yoga and weightlifting classes, as well as a stress management workshop led by a psychologist.

29% of team members work part-time: If the role allows, Planted offers full and half-time positions, as well as job-sharing options if possible. Finding the right work-life balance can be difficult, which is why we provide flexible working hours if the role allows, so our hero:ines can distribute their own working hours according to their tasks, preferences and current life situation.

2 kg free Planted product: We are a foodie company that values plant-based nutrition. Therefore, we offer monthly supplies of our favourite Planted products. Our teams enjoy homemade meals by our Michelin-star-experienced in-house culinary team, subsidized meals at Planted partner restaurants, and at our in-house planted.bistro by Hiltl in Kempththal.

1 Code of Conduct: We have established a code of conduct for our Board of Directors, Executive Management, and Senior Management. This code outlines ethical business practices, as well as our social and environmental responsibilities. It also prohibits misbehaviour such as bribery and corruption.

2 Onboarding days: Our rapid growth constantly creates many new exciting opportunities and, to take advantage of this, we invest in professional development across various initiatives. For example, for new team members, we host an extensive two-day onboarding program at our HQ in Kempththal every month.

0 accidents goal: Our Health and Safety policy is based on the ASA compact of the Canton of Zurich. We aim for zero accidents and ensure an understanding of Health and Safety principles through regular training. We track occupational safety using KPIs and implement improvement measures accordingly.



Diversity

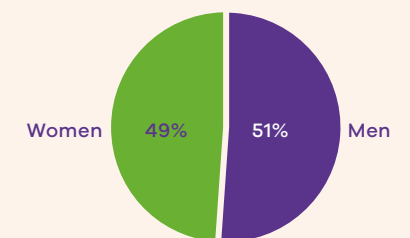
We recognise and appreciate the fact that we employ individuals, and that the beauty of humanity lies in our diverse perceptions, thoughts, and behaviours. We promote equal opportunity in the workplace and do not discriminate based on gender, age, nationality, sexual orientation, or any other non-professional classification. We value diverse perspectives because we believe they enrich our corporate culture. To enhance our efforts in adhering to these principles, we have created mandatory training for all employees in order to prevent any form of workplace harassment, discrimination, and mobbing.

Looking forward: Enabling change

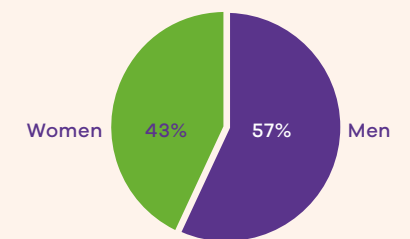
At Planted, we provide our growing team with an inclusive and enabling working environment. As such, we expanded our professional development and training program. In 2023, we will be launching our Planted Leadership Academy, which is specifically designed to train our leaders and equip them with the necessary leadership skills to help them develop their team members to their fullest potential. We also organize specific workshops for our teams to help them reflect on their collaboration and on Planted's values and competencies. These workshops provide a space for our teams to learn from each other, share best practices and work towards a common goal.

Gender Distribution

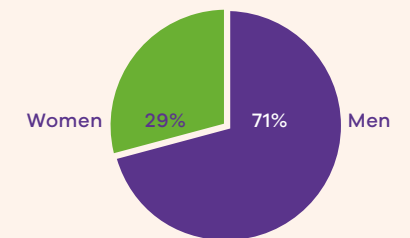
All employees



Leadership Team



Executive & Director Board members



Planting A Better Future

At Planted, our goal is to make the food system more sustainable and have a positive impact on the planet. In addition to producing environmentally friendly products, we do this by spreading awareness about the environmental impact of animal-based vs. plant-based products, and by providing transparent information to stimulate and encourage discussions around the topic. Below are climate-relevant data about our products and company.

Look, Plants overtake Animal Meat!

To measure their environmental impact, Planted's four core products were compared to conventional animal-based products. They underwent a cradle-to-gate evaluation, which measured greenhouse gas emissions (CO₂-eq) during cultivation, processing, and packaging, up to leaving the Kemptthal production facility. Their water footprint was determined by including fresh water used for crop irrigation, animal drinking and housing, slaughtering, and the production of Planted products. Distribution, storage, and disposal were not considered since they are similar to animal meat products.

Climate footprint

Plant-based products emit significantly fewer greenhouse gases than animal products, reducing the potential impact of global warming by up to 87% per kilogram. This is mainly due to the avoidance of livestock farming, which requires large quantities of feed crops where, in contrast, plant-based foods can be directly consumed. Of course, the purchase of fewer animal products also results in a reduction of animal suffering.

What's a life cycle assessment

An LCA is a method to assess a product's environmental impact over its entire life cycle. It records an inventory of energy and materials required across the value chain and calculates corresponding emissions to the environment¹².

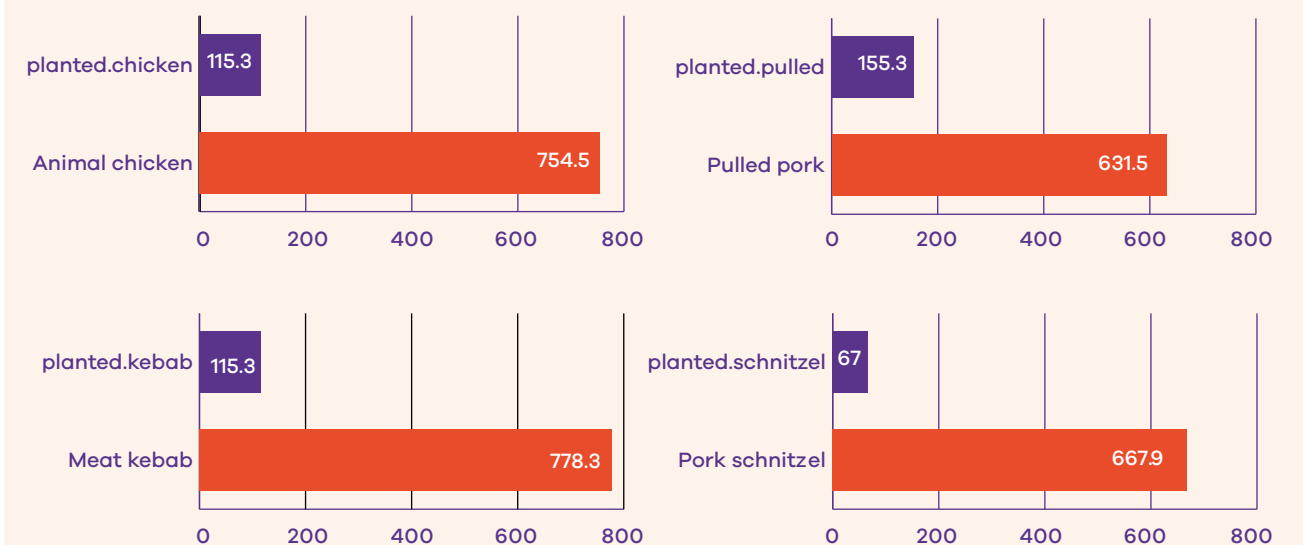


Eaternity is an independent environmental footprint expert based in Switzerland, specialized in life cycle assessment of food products. The first LCA for Planted products was conducted in the summer of 2019/20, which followed the update in the summer of 2022. For more information: www.eaternity.org.

Planted vs animal meat [Kg CO₂eq/kg savings]



Freshwater savings Planted vs animal meat [L/kg]





Updated Footprints

This year, we updated our product footprints to allow for methodological adjustments and to highlight the effects of improvements. Although the more detailed calculation, which includes secondary packaging, results in a slight increase in the product footprint, it provides a more realis-

tic picture of our product's impact. When compared to equivalent animal products, the results show even greater savings: up to 87% less CO₂-eq and 90% less water used. This represents a 3% improvement in the climate footprint and over 50% more water savings than last year's study achieved.

Water footprint

Planted products require 4 to 9 times less water than animal products. The updated life cycle assessment has shown even greater savings, taking into account water use for animal farming and slaughter, as well as adjustments to EU consumption data. We analysed the water footprint of our meats and demonstrated the amount of water that could be saved if it replaced animal meat in countries where it is already sold.

Savings with Planted products compared to animal meat products

Carbon footprint [kg CO₂-eq/kg]

Planted.chicken	-77%
Planted.pulled	-83%
Planted.kebab	-87%
Planted.schnitzel	-87%

Fresh water footprint [L/kg]

Planted.chicken	-85%
Planted.pulled	-75%
Planted.kebab	-85%
Planted.schnitzel	-90%

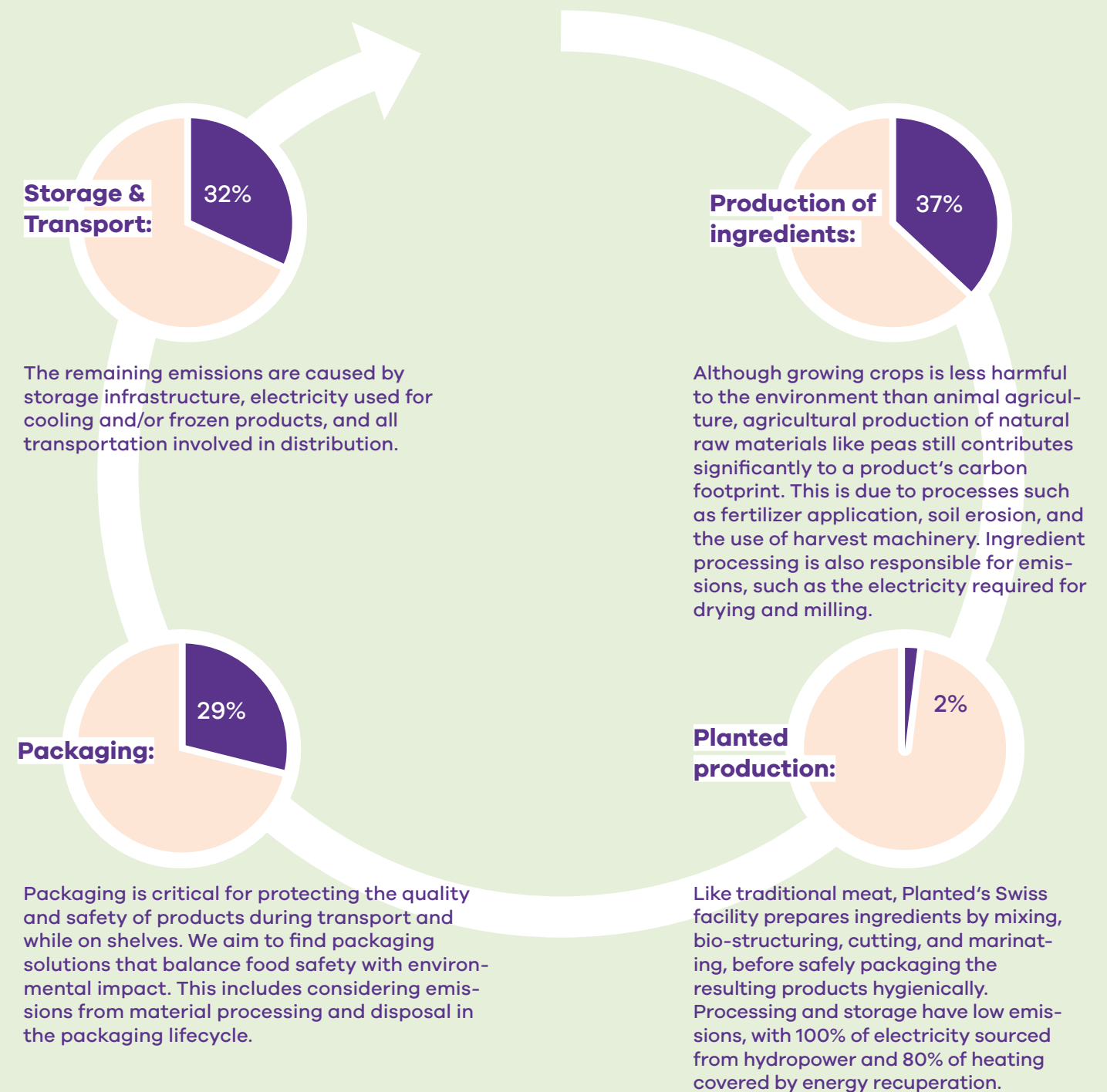
Scarce water footprint* [L/kg]

Planted.chicken	-80%
Planted.pulled	-68%
Planted.kebab	-13%
Planted.schnitzel	-87%

*The water scarcity footprint is distinctive in that it explicitly includes the water stress of that region.

The Life Cycle Of A planted.chicken

Planted products were analysed on a cradle-to-grave basis, including all life-cycle stages, to show the total greenhouse gas (GHG) emissions for one kilogram of Planted product. It was found that planted.chicken emits 2.66 kg CO₂-eq per kg of meat. Below is the breakdown of the sources of greenhouse gas emissions involved in the production of planted products.



Let's Get Down To Business

This year, Planted calculated its first corporate carbon footprint, showing our share of greenhouse gas (GHG) emissions by category. Supported by the strategic environmental consultancy Quantis, Planted measured the greenhouse gas emissions of its entire value chain (scopes 1, 2, and 3) by following the international Greenhouse Gas Protocol developed by the World Resources Institute and the World Business Council for Sustainable Development. The comprehensive footprint analysis resulted in a corporate carbon footprint of 8`216 T CO₂ equivalents in 2022. The following chart breaks down our corporate carbon footprint by GHG emissions scope (1, 2, and 3), as defined by the GHG Protocol.

As it is typical for food companies, the vast majority of emissions (over 99%) relating to our business activities, come from our value chain (Scope 3).

Impact per scope

Climate change t CO₂:eq

- Scope 3 – 8.2k 99%
- Scope 2 – 0.02k < 1%
- Scope 1 – 0.03k < 1%



Equivalent to a transatlantic round-trip flight for 3k people

What's a Corporate Carbon footprint?

A company's carbon footprint, also known as Corporate Carbon Footprint (CCF), is the total amount of GHG emissions that are directly and indirectly caused by a company's activities. Calculating the CCF is the first step toward continuous CO₂ management and is required to develop CO₂ targets.

Specifically, they come from the upstream supply chain, which includes the cultivation, production of ingredients, and transport of products. They are mostly linked to agriculture.

Planted's purchased goods (Scope 3 category 1) account for 89% of its total carbon footprint, with raw materials dominating this category. **Ingredients**, which mainly consist of pea protein, make up **80% of the footprint**. **Packaging production and its end-of-life contribute 5% to Planted's footprint**, while up and downstream **transport accounts for 5%**. Scope 1 and 2 contribute respectively less than 1% to the overall company footprint. More information about each category and how we are addressing them can be found in chapter 9, 10 and 11.

We strive to provide our consumers with greater transparency regarding CO₂-eq emissions for our products. As pioneers in this field, we display the respective life cycle assessment numbers of each product compared to animal meat on all our packaging. To achieve this, we collaborate with Eaternity to measure the ecological footprint of our food. For detailed information, refer to the product climate and water footprints in chapter 8.

Looking forward: Enabling change

We are dedicated to being transparent when it comes to our company's, and product's, impact on the climate and strive to be open about our efforts dedicated to improving and guiding our progress. We are evolving our approach to align with the best available science on tackling climate change and considering our complete carbon footprint, including emissions from our entire value chain.



What We Are Made Of

The Power of Plant Protein

We only use clean ingredients and there are no additives in our products. Planted's most important raw materials are plant-based protein and fibres sourced from three plants:

Peas

Our meats are made mainly from protein-rich yellow peas, a legume that has been part of the human diet for centuries. Peas have a protein content of 20-25%, making them an excellent source of nutrition¹³. Pea plants have the ability to „fix“ nitrogen from the air, an essential nutrient for soil. They form a symbiotic relationship with bacteria at their roots, resulting in healthy and nutrient-rich soils. The efficacy with which pea plants do this, means peas are preferred in crop rotations because they replenish the soil with nutrients for subsequent crops to grow and, moreover, pea plants require less water than other vegetables.

Sunflower

Sunflower seeds are popular due to their protein content and widespread availability¹⁴. They are mainly used for their oil, but the remaining press cake after the oil is extracted is a valuable by-product. Usually the sunflower press cake is used as feed, fertilizer or biogas waste. However, it can also be upcycled for its nutritional value, as it is rich in both macro- and micronutrients, providing protein and fibre. Thus, nothing goes to waste!

Find how we apply circularity in planted. pulled: [Sustainability - Planted Foods](#)

Oats

Oats belong to the grass family and can be rotated with other crops to replenish the soil with nutrients¹⁵. The crops' stubble can also act as a natural fertilizer when ploughing back into the soil¹⁶ and, due to their high dietary fibre, vitamin and mineral content, means it is nutritious¹⁷.

Better ingredients

We assess our products' life-cycle to work at reducing our environmental impact. Our goal is to build supply chains that are vertically integrated, allowing for traceability and transparency down to the farm level, where we source our ingredients.

We support the community by sourcing locally and establishing short supply chains. In Switzerland, we work with a cooperative and this year, we purchased Swiss raw peas for the first time to produce all-Swiss protein. As a founding member of the Swiss Protein Association (SPA), we are taking the first steps towards creating conditions for local plant protein production.

Low-impact raw materials

Our goal is to reduce the environmental impact of our raw materials by using less

processed protein, which requires less energy and water. To further drive a positive impact in the food system, we leverage circularity and limit the generation of underutilized side streams. We achieve this by developing technologies that allow us to directly leverage existing side streams, such as sunflower press cake used in planted.pulled. In the future, we aim to use as much of the pea as possible and diversify our raw material portfolio with future-proof ingredients from plants, fungi, and other organisms, using our biostructuring technologies and intellectual property.

An eye on quality, safety & suppliers

We prioritize quality and food safety for all our products. Our quality management team monitors production, hygiene and product quality closely, and have implemented an in-depth HACCP concept and follows international-recognised standards to ensure food safety. We have obtained the IFS Food standard reaching higher level, as well as V-label certification, confirming that all our products are free from animal products.



Our ingredients and manufacturing partners are essential to Planted products, and we want them to share our vision for sustainable supply chains. As a result, we use a multi-layered approach to screen them. Our self-assessment questionnaire asks for information on certificates, quality management, environmental compatibility, and sustainability approaches. Planted's supplier policy also ensures sustainable cooperation based on ILO labour standards and UN Guiding Principles on Business and Human Rights, including minimum social and ecological standards, human rights respect, and non-discrimination. We believe in treating every person with dignity and respect.

- No use of palm oil
- No GMO ingredients
- No ingredients from rainforest regions
- No artificial, only clean ingredients
- No sourcing of proteins from water-scarce regions

Why is nitrogen important?

Nitrogen is crucial for plant growth and functions, as it plays a key role in the chlorophyll molecule that enables plants to capture sunlight energy through photosynthesis, driving growth and yield¹⁸. Adequate nitrogen levels in the soil are necessary for optimal plant growth, but the amount of nitrogen in the soil can decrease, negatively affecting plant health. Nitrogen can be replenished naturally through the decomposition of plant and animal matter or through the use of fertilisers. However, excessive use of fertilisers can have negative consequences, such as the release of nitrous oxide, a greenhouse gas that is 300 times more potent than carbon dioxide, contributing to 46% of global agriculture's greenhouse gas emissions¹⁹. It can also pollute waterways, leading to eutrophication and drinking water pollution.

Looking forward: Even Better Ingredients

We are always searching for new suppliers and locally sourced protein. Our big goal at the moment is to further evaluate the use of Swiss pea protein in our products.

Clean label: We prioritize building a broad and relevant portfolio of clean plant-based meats. This includes exploring and entering new product categories to make the switch to plant-based easy, while staying true to our commitment to using only clean ingredients and no additives.

Continuous improvement: We never stop improving our sustainable sourcing policy and review processes for screening suppliers and building relationships.

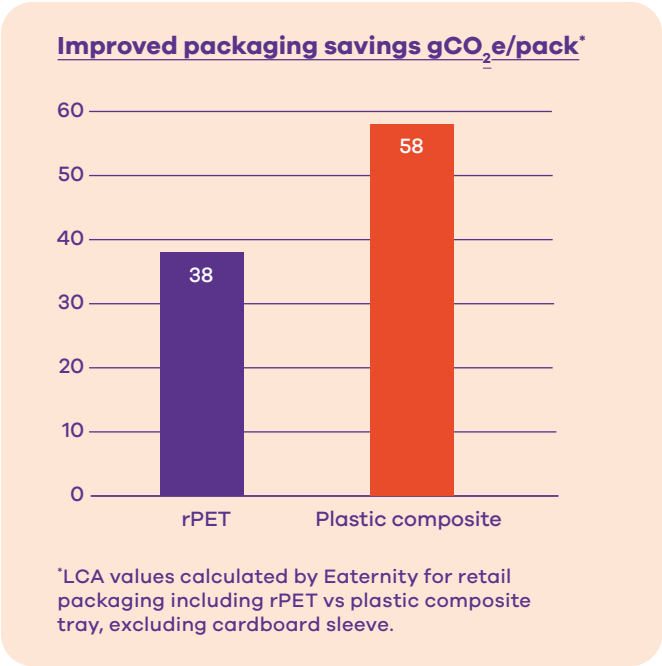
Striving For Sustainability Inside and Out

Packaging is primarily used to protect the contents of a product and prevent food from going to waste. Plastic remains our most widely used material for food packaging because it ensures food safety, quality and a longer shelf life. Simply reducing the environmental footprint is not enough to offset the product losses caused by food waste. Therefore, the environmental impact of our plastic packaging remains significant and must be considered.

Our goals are to reduce our environmental footprint by optimizing packaging and finding innovative resource-saving solutions. We work with partners to select suitable packaging materials based on factors such as food safety, cost, shelf life, and environmental impact and are developing new approaches to solve complex problems with innovative solutions. In addition to this, we are researching the various ways to naturally prolong shelf life.

Introduction of recycled content packaging material

In Switzerland, we have switched to using 80% recycled PET (rPET) in our retail products. This material has a smaller carbon footprint, having already been recycled at least once. We conducted a life cycle assessment, which showed a 66% savings in packaging when using recycled material.



This analysis confirmed our decision to move to recycled PET and has laid the foundation for future improvements.

We also collaborate with research institutes and universities to explore innovative packaging solutions. For example, interdisciplinary student groups at ZHAW worked with Planted as part of the Sustainable Packaging Architecture project to explore ideas for food packaging.



Planted utilizes Forest Stewardship Council (FSC) certified cardboard packaging to protect the environment. The FSC has established principles for sustainable and responsible forest management, and the FSC certificate guarantees that the raw materials used come from well-managed forests and controlled sources.

Looking forward: Even Better Packaging

Last year, we successfully implemented recycled PET trays in all Swiss retail locations to reduce plastic waste. However, expanding to new markets presents challenges in finding suitable packaging solutions.

Internationally, we are starting with using mono-foil packaging, which can be easily recycled through existing systems, promoting recycling and reducing plastic waste. As a company, we're committed to taking this step forward and recognize the need for further action. We are clearly not satisfied with where we, and the industry as a whole, stand at the moment.

We aim to use more recyclable and recycled plastics to keep our goods fresh whilst preserving resources. Planted follows 3 key pillars for packaging development to meet specific country requirements:

Reduce:

We aim to reduce the amount of material used and promote reusable solutions.

How

We reduce the overall packaging weight by using less virgin plastic material and use reusable components such as cool pads in our webshop packaging.

Recycle:

We strive to make our packaging easier to recycle.

How

Our webshop packaging is 100% recyclable and can be collected through existing schemes. For retail packaging, Planted is transitioning to mono-foil material where possible. This type of material is easily recycled, requiring less time and energy due to its single-origin composition, making separation during recycling easier.

Reuse:

We use certified origin materials and integrate renewable source materials.

How

Where possible, we integrate recycled content into our packaging materials. Additionally, we use FSC-certified cardboard for secondary packaging and wood skewers.

Producing Better Meat

Planted has been researching and producing plant-based meat since 2020 at its headquarters in Kempththal, Switzerland. Since then, we have doubled our production capacity and now produce over one ton of meat per hour, making Planted the largest, modern European plant-based meat facility, based in Switzerland.

Energy

100% renewable energy

Our new plant was constructed with green technology and uses 100% hydropower from Switzerland, meaning it is completely powered by renewable energy. The plant also benefits from an energy recovery system that reuses energy generated in the production's heating and cooling processes and, as part of "The Valley" industrial park, Planted is able to feed excess energy into the emerging district heating network developed by Mettler2Invest. This reduces the energy consumption of both the plant and site and minimizes resource consumption.

Waste Management

100% recycling rate for cardboard

Our waste management system achieves zero landfill waste by sorting waste categorically and depositing it into the correct recycling stream. Paper and cardboard are 100% recycled, and environmentally hazardous materials are not generated.

During production, we closely monitor organic waste generation as start-up losses can occur during meat processing when machines are not yet fully heated, or when parts do not

meet quality standards (e.g., if they are too small). To reduce these losses, we have implemented an internal optimization project that has cut losses by over 90%.

Water

To conserve water, Planted primarily uses water in its products and for cleaning, while managing wastewater to preserve surrounding sources. We avoid environmentally hazardous cleaning detergents and recycle water for cooling in our production process. Our products use up to 87% less scarce water compared to similar animal meat products, contributing to our goal of reducing our scarce water footprint. For more information, refer to chapter 8.

Transport

To spread the word about our plant-based meats, some travelling is unavoidably needed. However, we consider the environmental impact of our travel choices, which we wrote down in our company wide travel policy. We use public transportation whenever we can and explore the possibility of using online meetings instead of in person meetings. However, sometimes we must fly. We collect those unavoidable flight emissions and compensate it in quality climate protection projects. In 2022, with the support of Quantis, the calculated business flight emissions accounted for 30 tons of CO₂-eq. We chose to support a regional project in the Lake of Constance area

promoting fertile soil as a natural CO₂ sink. This pioneering climate protection programme in cooperation with Bio Stiftung Schweiz stores carbon in agricultural soil and promotes measures to contribute to a climate-friendly agriculture. [More information about the project.](#)

To make sure that our customers receive fresh products delivered in a sustainable way we chose partners, who count on climate friendly mobility. In Switzerland, we can assure the home delivery either with an electric vehicle or the generated CO₂ emissions are compensated by the provider.

Looking forward: Even Better Production

Green technology plays a central role in the construction of our production facility. Whilst it is currently not possible to install solar panels due to space limitations in Kempththal, we plan to keep it in mind for future developments. In conjunction with the increase in production capacity, we also aim to improve water efficiency in our production processes. We plan to optimize our cleaning routines and install water-saving industry-standard equipment. In the near future, Planted plans to open another production facility in Europe as well as take on an additional building space in Kempththal, which will be used to scale up the company's new meaty whole cuts. For this exciting undertaking we will take into account all our prior learnings.



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