

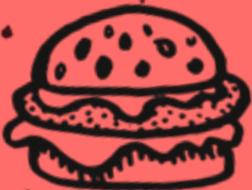
EAT &
DRINK
RESPONSIBLY



-NO BULL
NO SKULL



REPORT 2020



Index

- BACKGROUND..... 3**
- Bun2Bun 4
- The benchmark..... 5
- The local ecosystem (stakeholders and actors to consider) 5

- WHY DO WE NEED TO DO THIS NOW? 6**
- Creating a beyond sustainable business model: the regenerative restaurant 7
- What the data says about the food we consume..... 10
- Other aspects to consider 12
- Future trends 13

- OUR VISION..... 16**
- Our vision statement 17
- Actions based on values..... 17
- Our mission 18

- ROADMAP: THE FUTURE OF BUN2BUN..... 19**
- Strategy 20
- Communication and social media 20



01

Background

Bun2Bun

ABOUT

Bun2Bun is saving the world one plant-based burger at a time.

Bun2Bun is Finland's first 100% plant-based burger chain. It's burgers are juicy, tasty and full of flavour. But these burgers are also better for you - better for animals - and better for the environment.

The base of our burgers is the world's first plant-based burger patty created by Beyond Meat™ which tastes, looks and cooks like a traditional burger patty. But it doesn't contain meat, gluten or soy and it's GMO free.

Beyond Meat™ burgers are honestly one of the best inventions in the 20th century. And show just how far the human species has evolved. Some of the world's most influential people, like Bill Gates and Leonardo di Caprio have invested in this company, that take burgers to the next level. Bun2Bun is proudly Finland's first official Beyond Meat restaurant.

The flavours of Bun2Bun have been created by the founding chefs Pasi Hassinen and Pertti Kallioinen. They have gained their experience in various Michelin starred restaurants including Olo and Chez Dominique. Before establishing Bun2Bun, they created Street Gastro, Finland's favourite quality street food joint.

Bun2Bun has had great success as the first fully vegan burger joint, with four restaurants located in Kallio, Redi, Kampi and Punavuori. But the Corona crisis has given the fast food industry a bit of a blow. Bun2Bun has been looking to find ways to get the business back on its feet and is taking this opportunity to make some changes. In this report we look at the background research and benchmarks to find opportunities for Bun2Bun to transition to an even more sustainable business model.

The Benchmark

We started our background research by looking at other sustainable restaurants around the world. We found that concepts like locality, zero waste, the circular economy, tech, health and regenerative agriculture worked very well. The following image is a map based on the benchmark research.



The local ecosystem

We identified different actors in Helsinki that can be considered when developing the strategy. These are different restaurants, research institutions, startups, support and research funds, organizations and action groups, the clients and the citizens of Helsinki.



02

**Why do we need
to do this now?**

Creating a beyond sustainable business model: the regenerative restaurant

Let's start with an example, we asked Hesburger how many double burgers they sold per year. The estimate they calculated was 50 000 000, that is fifty million burgers and five million kilograms of meat per year. This translates to 170 million tons of carbon emissions per year, only from the meat in a double burger. Now, let's say the same number of burgers were sold from a regenerative source. These burgers would not only be carbon neutral, but rather carbon positive! And instead of contributing to CO2 emissions, it would extract a total of 175 million tons of carbon from the atmosphere per year.

Hesburger's annual Double Burger sales	50.000.000,00
Patty (2x50g), kg	0,10
Total patty meat per year, kg	5.000.000,00

	Meat	Impossible	Beyond	Regenerative
Co2 emissions of 1kg of product, kg	34,00	3,5	4	-35
Total Kg's of CO2 per year	170.000.000,00	17.500.000,00	20.000.000,00	-175.000.000,00
Now, one burger's equivalent of CO2 x kg	3,4	0,35	0,4	-3,5

Estimations extracted from a [Quantis study](#) on white oak green pastures, a single regenerative farm. The calculations assume the regenerative burger uses beef. There are no studies on patties made from vegan protein from regenerative sources at the moment.

The estimate of burgers sold yearly by Hesburger comes from a direct email with this inquiry and is an estimate based on the number of customers.

The carbon footprint of the Double Burger from Hesburger is 3,4 kg CO₂e. In comparison, the footprint of the Beyond burger patty is of 0.4 kg CO₂ eq. This is a huge difference. However although the Beyond Burger is vegan, both products are produced with industrial agriculture methods, which in the long run damage the environment, increase soil erosion, pollute the waterways from the use of fertilizer, extract carbon from soil and release it into the atmosphere. These conventional agriculture practices use fertilizers and pesticides that end up in our foods and can damage our bodies. The heavily processed foods are linked to many of the diseases we see in society today, such as hypertension and diabetes. So how can we flip the script and make these products not only more delicious, but better for the customers and the environment at large?

In [the study from Quantis](#), a sustainability consulting group conducting life cycle assessments (LCA) for both Beyond Meat and a White Oak Green Pastures, it was found that regenerative farming doesn't just reduce carbon emissions; it has a positive impact on the environment. Quantis did a comparison of both products and found that regenerative farming is not only less polluting, it actually has a positive impact, as it restores at least the same amount of carbon from the Hesburger meat patties back into the soil every year.

However, this is a comparison of beef products and Bun2Bun needs its vegan burgers to be created only using vegetable products which are cultivated from regenerative agriculture. This means the impact will be even more positive because, unlike beef, these vegetables do not emit any methane, take less resources and if farmed appropriately, help restore carbon back into the soil.

WHAT IS REGENERATIVE AGRICULTURE?

Regenerative agriculture is about regenerating landscapes while producing the food we consume. A big part of the carbon that exists in the atmosphere has come from the erosion of soil. Naturally stored carbon in the soil will encourage microbes to thrive. These microorganisms turn decaying organic matter into the nutrients that plants need to get from the soil. However if the soil is moved and left bare, the microbes are lost and the carbon is released into the atmosphere. This is how conventional agriculture works. The soil is depleted of nutrients, which is why the use of fertilizers and pesticides becomes essential. Regenerative farming is about reverting this cycle. Instead of farming eroding the soil, regenerative farming restores microbes into the soil and creates a naturally thriving ecosystem. According to the Quantis LCA study, regenerative agriculture can have 111% less emissions than conventional agriculture. ([Quantis](#))

Regenerative farms are generally owned by families and not by big corporations. These farmers generally take better care of their land, because they want the farm to be productive and healthy for generations to come. Industrial agriculture is usually built on a model of profit making and resource extraction. There is pressure to make profit in the short run, but in the long run it can cause irreversible damage.

One example of short-term thinking is the use of the pesticide Glyphosate, which is approved for use in the EU until 2022 as a cure-all common pesticide, despite studies linking this pesticide to sickness and changes in the ecosystem.

Another example of the damage fertilizers are doing occurs in the Baltic Sea. This is already one of the most polluted oceans in the world and the dumping of fertilizers is adding to the damage by creating eutrophication. Eutrophication is a phenomenon where the nutrient dump in the waterways increases algal growth. This in turn creates a feedback loop of more nutrient density as the algae dies and decomposes, which in turn, makes the water inhospitable for other life. This is a worrisome aspect of ecosystem changes that contributes to climate change. [The Baltic Sea Action Group](#) is one of the organizations working to revert the damage. One of their initiatives is the Carbon Action, a national effort to mitigate the use of fertilizers and instead increase carbon sinks through regenerative agriculture.

But why, you may ask, is the role of restaurants so important in the transition to regenerative and sustainable practices in the food system? [The Ellen McArthur foundation](#) has stressed the role of cities and the businesses within it to transition towards regenerative ecosystems that support life. Restaurants have a key role to play as educators and frontrunners of the change. Moreover, many researchers and academics have stressed the role of businesses to support a transition towards sustainable and regenerative societies. When government structures allow for change to happen slowly, businesses can be the ones bringing radical change.

The [eat-LANCET](#) report on nutrition, health and the planet, states that:



Without action, the world risks failing to meet the UN Sustainable Development Goals (SDGs) and the Paris Agreement, and today's children will inherit a planet that has been severely degraded and where much of the population will increasingly suffer from malnutrition and preventable disease."

There is clear evidence that the food we are eating today is not only damaging the planet, but it is also linked to malnutrition and the rise of chronic disease. We need systemic thinking that considers the interrelations of the food we consume, how it is produced and the impact it has on the environment and society. Government structures are too linear and limited in their thinking to make real change and therefore it is up to businesses to support radical innovation and transitions.

[Syke](#) made a study on the Finnish food system and how we could achieve more sustainable consumption. They discovered that merely encouraging citizens to eat a climate friendly diet does not work. The way to make real change is to change the way food is presented and marketed to customers. They stress that the engagement of both retailers and restaurants is important to create meaningful behavioural change, and that restaurants should be encouraged to increase the use of plant and fish based proteins.

What the data says about the food we consume.

The land we use to produce our foods takes up half the world's inhabitable space, from this land, 77% is used for meat production and 23% for crops. However, only 37% of the protein consumed globally comes from the meat industry, and 43% of protein comes from plant crops.

The CO₂ emissions of most plant based products are 10 to 50 times lower than most animal based products. According to a study from [our world in data](#), the impact of most plant-based foods have very low land use impact (coffee and cacao are excluded). And, in fact, nut production has a positive land use, as these trees help reforest and restore degrading land. On the contrary, products like soy and pea have the highest degradation impact due to the use of fertilizers and farm machinery. Nonetheless, producing 100 grams of protein from peas emits just 0.4 kilograms of carbon dioxide equivalents (CO₂eq). To get the same amount of protein from beef, emissions would be 35 kgCO₂eq, nearly 90 times higher.

In the same study, clarification is needed when talking about eating local foods. Contrary to common thinking this practice might actually increase emissions. This is because most crops grow in seasons, and to get a staple vegetable all-year round, the use of greenhouses is needed. These are resource and energy intensive and they increase the overall impact of these vegetables. A common alternative is to use refrigeration and preservation methods which are still very energy intensive. The best alternative is often to buy the products from countries in which the vegetables are in season, or avoid using them at the time of the year when they are not in season.

THE GREAT SOY DILEMMA

It is widely debated whether it is sustainable to substitute meat with soy. On the one hand, soy is one of the crops generating the most impact on the environment. On the other hand, most of the production of soy is going to feed cattle, which are then consumed by humans. So the impact from eating soy directly is significantly smaller than eating cattle, which has eaten soy. So even if the emissions are high, [the CO₂ emission of cattle is 10 to 50 times higher than most plant-based products](#). On the other hand, soy consumption is increasing rapidly around the world, and it is impacting the world's ecosystem, as the second driver of deforestation in agriculture, especially in the Amazon. Countries such as Brazil, the United States and Argentina are quickly losing forests to produce soy.

Soy is a staple food in many cultures around the world. Particularly in China, the country depends on this food and the culinary culture is built around it. With China's increasing population, the consumption of soy will only grow. The bottom line is that soy production will not stop, but if we want to be as sustainable as possible we should look for alternatives to soy at Bun2Bun, where it is used in some of the products offered.

What we know is that soy production contributes to: biodiversity loss, deforestation, water use, contamination from pesticides, exploitation of workers, inequality; not to mention the fact that this food is part of the cultural identity of countries with high poverty whom are losing access to their main source of protein. So what can we do?

- Look for soy that is produced following the [RST guidelines](#).
- Substitute soy with a product that is not as resource intensive such as oats.
- Make a [trade-off](#). What is lost and what is gained by using soy?

THE FINNISH AVERAGE FOOD CONSUMPTION

According to Sitra, the average footprint of a Finn is 10.3 tones per year. 18% comes from food consumption ([sitra](#)). If the targets envisioned by the European Union are to be met, the recommended reduction is almost 90%, which would reduce the footprint to 2.5 tonnes or less ([sitra](#)).

According to this footprint, an average Finn eats 560 kg CO₂eq worth of red meat each year. That's the equivalent of 5.6 double burgers from Hesburger per week. If the average Finn eats one burger from regenerative agriculture and 4.6 double burgers (using the calculations from the White Oak Pastures Farm) per week instead, the footprint from red meat consumption per year is reduced to 49%, with a total of 273.8 kg CO₂eq per year. This is a massive reduction of emissions by only changing people's habits one day of the week.

HEALTH, AND THE FOOD WE EAT

[Many doctors](#) are investigating the relationships that the earth biome and our own biome have on our health and the health of the planet. The biome is the composition of microbes and bacteria that is found both in our bodies, in the soil and even in the air we breathe. But through antibiotics, pesticides and fertilizers the biome is affected and the healthy balance is destabilized.

In the previous chapter Glyphosate was briefly mentioned. There is some evidence suggesting that this herbicide is directly connected with many of the health problems we have in society today. [Doctor Zach Bush explains](#) that essential amino acids are the building blocks of our health. We are supposed to get them through the foods we eat, however glyphosate kills the ability the plants have to deliver the amino acids to our bodies. Hence most of the food we eat today is deficient in essential amino acids that are essential to our health.

New research suggests that fats, which used to be branded as unhealthy, are in fact essential, and can actually help increase our [metabolism](#). Research suggests that carbs are in fact the culprits of many dietary ailments as they get transformed into glucose when they are digested.

Soy, the friend to the occidental vegan diet is in fact not as good as it seems. Soybeans contain high levels of “enzyme inhibitors”. These prevent us from getting the nutrients they have inside. However, fermenting soybeans can be the solution, as through the fermentation process the nutrients become available (Hyman, 2018). Alternatively, other beans are much healthier than soya beans.

Talking about fermentation, this technique has incredible benefits as it helps pre-digest food and increases the availability of nutrients. Fermenting foods also provides probiotics, which are the microorganisms our body needs to help us digest food and remain healthy.

Other aspects to consider

FOOD WASTE

Food waste contributes to 6% of the global greenhouse gas emissions. Food is wasted all over the supply chain, from production to households and efforts are needed to reduce the waste. As a restaurant, it is essential that the waste is minimized whenever possible, or even better, the waste is reintroduced to the system as compost to completely counteract the emissions.

PROVENANCE OF FOOD

As mentioned above, it is not a matter of locality, but rather of seasonality. For a food chain to be sustainable, seasonality is an important aspect to have in mind, be it by having a seasonal menu, by sourcing the products from places where the vegetables are in season and by buying frozen or canned whenever possible (although the last option is more resource intensive)

SUSTAINABILITY OF FOOD PRODUCTION

Switching to a vegan diet can be resource intensive and could actually increase one’s footprint if it is not done properly. One needs to keep in mind how the food is produced, processed, transported and disposed. The social aspect of food production is another thing to keep in mind, for example, the increased demand of avocados has created a mafia in Mexico, deforestation and intensive resource use.

NON-FOOD MATERIALS USED IN THE KITCHEN

Another way of reducing waste is to think of all the non foods used in a kitchen. This includes containers for sauces, vegetable boxes, containers for premade foods and takeaway containers. With emerging trends such as the circular economy, these containers can be returnable or fully compostable. An example of returnable containers is Loop, a store partnering up with companies to make containers that can be returned and refilled. The restaurant Nolla is creating a system in which delivery trays and boxes are returned to the retailer, so the waste is minimized.

RESTAURANT TABLEWARE, FURNITURE & OTHER TANGIBLE OBJECTS THE CUSTOMERS INTERACT WITH

The furniture and utensils have a life cycle too, and as a sustainable restaurant these are important aspects to consider for the future. In the Cradle 2 Cradle Centre there is information that considers the life cycle of these products

ELECTRIC APPLIANCES (REFRIGERATORS, OVENS AND FURNACES)

Electronic appliances impact how much energy the restaurant uses, and thus impacts the overall footprint. A solution is to opt for the most efficient appliances in the market, and if there are any “electronics as a service” schemes (such as Philips) it can also be an alternative to prevent them not going into a landfill.

SUPPORTING THE LOCAL COMMUNITY

The local context in which the supermarket operates is important. Engaging with the community encourages sustainability. Examples of this are to create events with inspiring speakers that bring people together; the installation of community solar panels; and improving improving the wages of the workers at Bun2Bun and giving opportunities for them to upskill and gain knowledge.

CREATING AWARENESS

There is division and desinformation on global issues and businesses are in a position to raise awareness. Being an ally to activists and events for sustainability can help Bun2Bun be at the heart of the movement.

BRING OUR EMPLOYEES ALONG

In order for our values to be realised we need our employees to be with us on our journey. This means we need to be an inspiring workplace that takes care of our employees and is committed to their growth and learning.

Future trends

It is important to understand what is happening globally and use these trends to our advantage. We looked at the relevant global trends from the food industry from leading [future institutes](#), [hubs](#), [think tanks](#), and leaders in the industry. Here are the most relevant for Bun2Bun on their transition to sustainability.

SYNTHETIC BIOLOGY

This is a trend that is spreading across many disciplines. When it comes to the food sector, this trend is looking into using plant based proteins to grow meat-like steaks. There is a lot of debate, controversy and concerns around these methods, but it's likely that in the near future this will be a readily available technology.

AEROPONICS, VERTICAL AGRICULTURE AND INDOOR PLANT FACTORIES

New technologies are emerging as a response to extreme weather events becoming more unpredictable. This summer the cultivation of Napa Cabbage was affected due to heavy rains and this in turn is affecting the whole kimchi industry which directly depends on this vegetable. To combat the unpredictable global conditions, a lot of resources are being invested in the development of indoor factories. In Finland, innovations such as indoor sprout growth, hydroponic herb growing systems and indoor mushroom cultivation are amongst some of the more available innovations we see in supermarkets today. This can also be a solution for the cold climate, if it is done in a resource efficient way.

INSECT AGRICULTURE AND BUG PROTEINS

This is another emerging trend. Although, in Finland it has been around for a few years. Entocube is the company that started grasshopper production as a personal test to find alternative edible proteins. More products are embracing bug proteins and fighting against the stigma of eating bugs. While it is not vegan, it is a less intensive and more humane way of farming.

CELLULAR AGRICULTURE

This is similar to synthetic biology. Cellular agriculture produces food from cell cultures. One of the most famous examples of this is lab-grown meat, which is technically vegan, although it comes from animal cells. At the moment this technology is expensive and not readily available. However, as more investment goes into cellular agriculture, the prices will decrease and eventually this will be a viable alternative, not only for meat, but for other plant foods that can be grown using no land.

USING FARMING AND RESEARCH AS A WAY TO WORK TOWARDS CARBON REDUCTIONS IN THE ENVIRONMENT

Many research institutions are partnering up with farmers and food producers to create carbon sequestration and soil health initiatives. They are also looking at ways to preserve food for longer and make it more accessible, while keeping the sustainability and regenerative aspects of environmental health top of mind.

TREND TOWARDS CIRCULARITY

These are initiatives that close the loop of resource use to reduce waste or find ways to input waste into the system.

THINKING OF THE SOCIAL ASPECT

Restaurants and food producers are increasingly incorporating social aspects to their business models. This includes awareness of where the products are coming from (fairtrade), who is employed and how employees are supported. It also includes finding ways to encourage the health of customers.

REINFORCING SUSTAINABILITY THROUGHOUT THE SUPPLY CHAIN

With the pandemic, and with the current state of affairs, there is more global pressure from investors, customers and governments for companies to make an effort and really focus on the supply chain. A company's supply chain can have a big impact on the environment, on human rights, on the fight against corruption and on building an economy that is fair and sustainable.

ENTERPRISE EMPATHY

Empathy is becoming a driver of change. Companies use empathy to understand their customers and their needs. Catering to them reassures their customers they care and gains their trust. This could be small things that make everyone feel welcome, like being sign language friendly, or changing the pace in a fast moving society. Little changes in service can have a big social impact.

BACK-STORYTELLING

Organizations and companies have started to tell the story of the brand and their values as a way to gain trust and loyalty. The story of Bun2Bun can be an engaging and interesting way to gain a following on social media. It makes people feel like they are part of your story and gives your product meaning in their lives.

FOOD DELIVERY TO YOUR DOOR

There is a growing trend of restaurants offering only to-go food delivered to your doorstep. This is not a novelty and is growing in popularity, especially with the pandemic.

PERSONALIZED FOOD

Food companies are picking up on the desire for personalised products and are allowing customers to "make it their own" more and more.

MICROALGAE AS A SUSTAINABLE VEGAN HEALTHY REPLACEMENT

Algae is becoming a replacement for many animal proteins. It is healthy and good to eat it. Algae also has potential for packaging alternatives that are edible and degradable.



03

Our vision

Our vision statement

Our vision is to turn the fast food industry on its head. We create great burgers that uplift the planet and the people. Through innovation, curiosity, empathy and partnerships we are fast becoming the most sustainable fast food chain in the world, and showing others what's possible.

WHY TURN THE FAST FOOD INDUSTRY ON ITS HEAD?

The fast food industry is popular, indulgent and easy. It's also part of consumer culture where animal suffering and environmental damage is condoned for cheap food that damages our bodies but gives big business a high return on investment. Bun2Bun is also going to be popular, indulgent and give customers an uplifting experience, but not at the expense of animal suffering, environmental damage and cheap labour. We believe it's possible and we believe when we show there's a different way for the fast food industry to be, others will follow.

Actions based on our values

MOVE FROM CORPORATE RESPONSIBILITY TO REAL MOTIVATION AND ACTIONS

We mean what we say and we show this with actions. We commit to leave the planet in better conditions than we found it.

PARTNERING UP WITH LOCAL ACTORS

We encourage our existing suppliers to keep doing better and we actively seek out suppliers and producers with good practices. This amplifies a sustainable transition.

LEADING BY EXAMPLE

By just doing BETTER we show others what is possible. And by sharing our story, we encourage others to do the same. We shall be the pioneers in the fast-food industry that shows the way for many others to come.

THE GREATEST BURGERS

Our burgers are uncompromisingly delicious. People keep coming back for more because we offer a great experience, whilst still keeping our commitment to the environment, our partners and our customer's health.

THE HEALTHIEST BURGERS

We are constantly informing ourselves on the healthiest and best ways to nourish our customers, this also leads us to new recipes and experiments.

GETTING RID OF “WASTE”

We are part of an industry that creates a huge amount of food waste. We see our future as a place where waste does not exist, only resources.

Our mission

We uplift the world with great food.

WHAT DOES IT MEAN?

In its long form our mission is to uplift the planet, our partners and our customers with great food. We want to create a good experience for our customers and have a positive impact on everyone around us including our customers who are served healthier food, animals who don't suffer for us, our employees and people in our supply chain who are getting better wages and fairer treatment, and of course, the environment which affects everyone.



04

Roadmap

Strategy

The action plan and strategy for Bun2Bun to become the most sustainable fast food chain in the world has 3 phases, based on the [Strategic time horizon tool](#). The 3 phases are:

TACTICS

Within the first 3 years, what are the obvious actions that can be taken that will kickstart the process of becoming the leading sustainable fast food chain? These are the highly probable events and actions, and related to the internal actions and processes. Looking at the research and understanding how this can be applied to Bun2Bun's structure.

STRATEGY

The next three years are about expanding Bun2Bun in a resilient way. After improving internally, the story can be shared and expanded overseas. We are also expanding the ways Bun2Bun can create income with many products and many initiatives that will make the business more resilient.

VISION

The next years are about growing a thriving business and reaching the vision. With the actions taken Bun2Bun is a sustainable fast food chain and is inspiring others to do the same.

View the full Action Plan in the "Bun2Bun Action Plan" document.

Communication and social media

View the full Communication and Social Media plan in the "Bun2Bun Social Plan" document.

THANK YOU.

