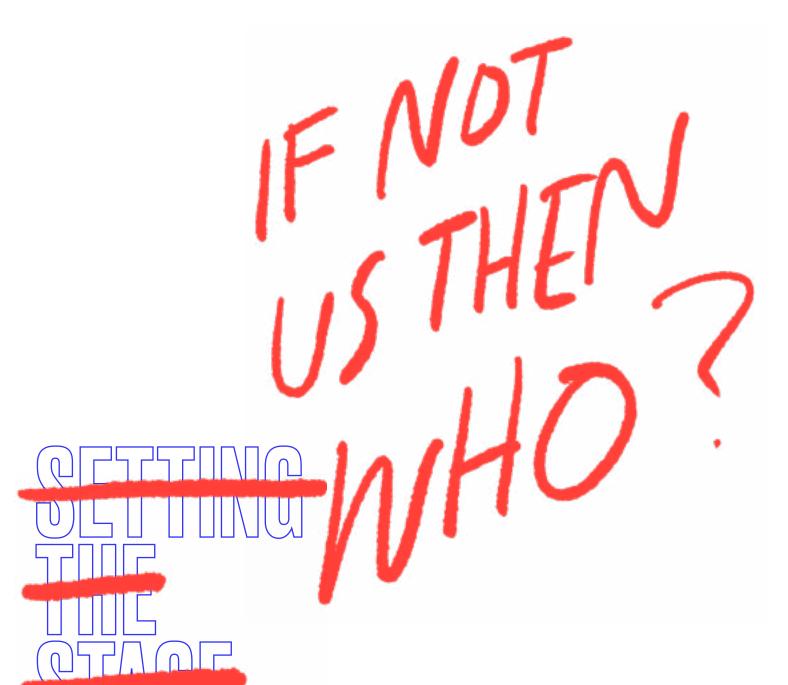


Impact Report 2019





The use of animals to produce food for human consumption has long been taken for granted as an indispensable part of the global food system. Now, finally, this disastrously resource-intensive and inefficient system is being recognized by environmentalists and, increasingly, by the public for what it is: a destructive and unnecessary technology. Yet global demand continues to surge for the foods that have until now been produced using animals -- and their catastrophic impact on climate, water resources, biodiversity and ecosystem integrity keeps skyrocketing. Awareness isn't enough; we need urgent action. That's why I founded Impossible Foods.

We have a simple mission: to replace the use of animals as a food-production technology, globally, by 2035. To achieve this goal, we set out eight years ago to create and scale up the world's most delicious, nutritious, versatile, affordable and sustainable meat, fish and dairy foods, and make them available to consumers around the world.

We leapt into 2019 with the launch of a reformulated and vastly improved version of our flagship product, the Impossible™ Burger, the result of a year-long R&D program. Thanks to Impossible Burger 2.0, demand has soared from every category in which we do business --large fast-food chains, individual restaurants, colleges and universities, corporate campuses, theme parks and more.

To achieve our 2035 goal, we still need to scale up more than 100,000-fold. That means that on average, we need to double our production, sales and impact every year for the next 16 years.

Our decisive advantage over the incumbent industry is our ability to continue improving our products, processes and supply chain, in every way that matters to consumers and the environment -- week by week, year by year, far into the future. Cows aren't getting any better at making meat. We are.

For Impossible Foods, a sale only counts if it comes at the expense of an animal-derived product. As intended, more than 93% of consumers who purchase the Impossible Burger regularly eat meat from animals. In fact, if everyone who ate an Impossible Burger in 2018 ate it instead of a burger from cows, we would have collectively spared:



A full day's worth of water demand of 2.6 million Americans



The greenhouse gases of 250 million miles driven in a typical US car



A land area nearly the size of San Francisco

And we're just getting started. As you will read in this report, we're aiming for a far greater impact in 2019 and beyond. There's no time to waste.

Signed,



Pat Brown, Founder and CEO Impossible Foods



Shortly after the launch of Impossible Burger 2.0, numerous additional restaurants added it to their menus, including America's largest premium burger restaurant, Red Robin (570 outlets), and the fast-growing casual Mexican food chain Qdoba (730 outlets). In March 2019, we launched the Impossible Burger in eight of the most respected restaurants in Singapore -- further progress to help leapfrog the effects of expanding animal production's footprint.

Our mission of a vastly more sustainable food future, in which animals are not required for food, demands relentless growth and huge leaps in scale every year. And that means making the Impossible Burger available to mainstream, mass-market consumers around the world.

In 2016, the Impossible Burger made headlines with its debut at Momofuku Nishi in New York City -- an award-winning bistro owned by meat-centric Chef David Chang. We quickly followed with launches with more of America's hottest chefs – credible endorsement of an unprecedented plant-based meat. We expanded into America's favorite "better burger" chains like Bareburger and Umami Burger, among others, across the United States.

In 2018, we entered the mainstream. America's original fast food restaurant chain, White Castle, launched the Impossible™ Slider in 144 restaurants in April 2018. White Castle quickly expanded availability of the \$1.99 Impossible Slider to all 377 restaurants nationwide.

The Impossible Burger is now available in more than 8,000 restaurants in every state in America -- as well as Hong Kong, Singapore and Macau. During the second quarter of 2019, sales quadrupled in Asia alone - the key region to bypass the environmental side effects of an increased demand for animal products. We are on track to continue our steep growth curve throughout 2019 and well beyond.

We started 2019 by launching our first significant product upgrade: Impossible Burger 2.0. The R&D team set ambitious goals for improving flavor, texture, appearance, versatility and protein quality, while lowering calories, total fat, saturated fat and sodium content, and further reducing environmental impact.

The team nailed all of the goals. Thanks to the product's improved versatility, Impossible Burger works perfectly in any recipe that calls for ground beef, from any food culture -- from dumplings and baos to lasagne, chili and Bolognese sauce. Chefs can cook it easily in a crock pot, flattop or any other equipment -- including a flame-broiler or barbeque. As a result, restaurants increased the number of ways that the Impossible Burger is served, expanding it on the menu to tacos, meatloaf and sloppy Joes.

GREEN GOES MAINSTREAM



A plant based diet is healthier for me and the environment. I invested in Impossible Foods to provide healthy plant based options for people that may not have ever had those choices due to cost and availability. I also don't have to sacrifice the taste and flavors I enjoy. My entire family can't get enough.

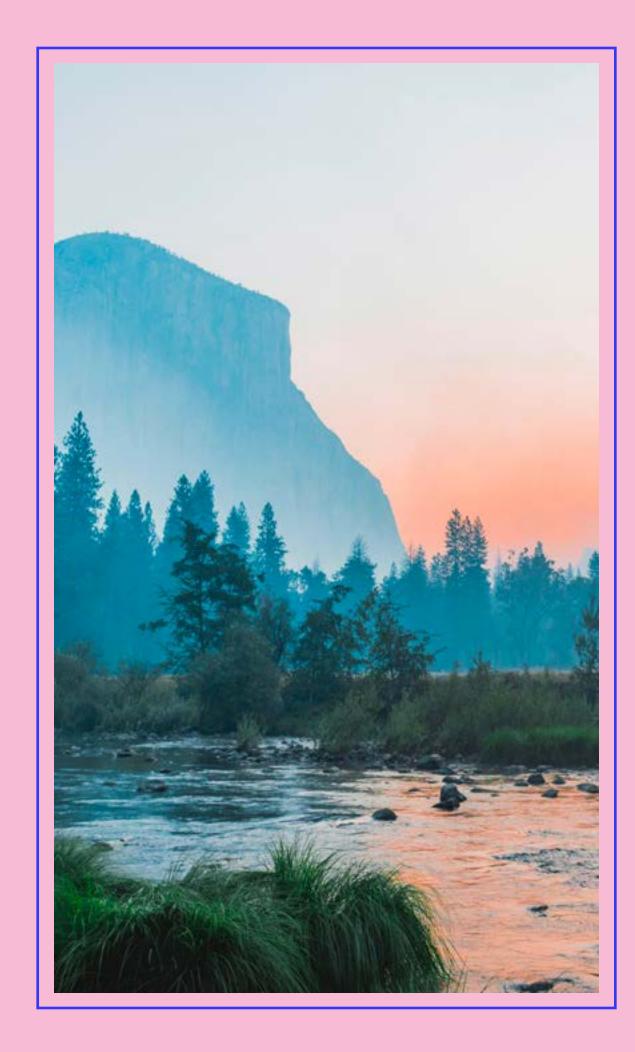
Plant-based meats have always been seen as a niche product for vegetarians content to settle for an approximation of the meat-eating experience. But in April 2019, Burger King launched the Impossible™ Whopper® in 59 restaurants in the St. Louis area. The fact that the world's second largest burger chain would launch a plant-based version of its iconic Whopper generated headlines around the world. The move into Burger King signalled that a tectonic shift away from meat isn't just possible, it's inevitable -- especially since Burger King announced its intention to serve the sandwich nationwide in all 7,200 of its US restaurants by the end of 2019.

By providing an uncompromisingly delicious plant-based option to its mainstream, meat-eating consumers at a huge scale, Burger King became one of the biggest corporate leaders in climate action and reducing the planetary impact of our food system, all while investing in growth and consumer loyalty.

Continuing the zeitgeist take-over of green eating, global influencers, including elite athletes and entertainers, are increasingly using their farreaching platforms to show the world through their own food choices that a healthy, sustainable, plant-based diet can be both fun and delicious, and to shine a spotlight on sustainable diets.

THE IMPOSSIBLE WHOPPER, AS IT WILL BE **WITH PLANT-BASED**

— New York Times, April 1, 2019



The way we achieve our environmental goals is to compete successfully in the market against animal-derived food products.

AS INTENDED, MORE THAN 90% OF OUR CONSUMERS EAT MEAT AT LEAST ONCE PER MONTH-INCREASING DRAMATICALLY FROM 75% IN 2016.

We're determined to subvert the paradigm that business growth inherently comes at the expense of natural resources and natural ecosystems. Rather, the unique business model of Impossible Foods harnesses the power of consumer demand to spare resources. Climate and biodiversity goals are at the heart of our strategy, offering a radical way for established businesses like Burger King to take a decisive and meaningful step toward creating a better world for new generations of consumers.

Beef Is Just The Beginning

About 10 billion pounds of ground beef is sold every year in the U.S. Currently, the Impossible Burger accounts for less than a tenth of a percent of that volume. And while we maintain our focus on our flagship product, we continue to strengthen our technology platform to offer consumers more sustainable alternatives to the full range of inefficient animal products, with a big focus on the environmental problem-child of agriculture: cattle. As such, steak and whole cuts of beef are in active development.

Our platform has never been burger-specific. We're continuing to invent and discover the capabilities and tools for the whole range of meat and dairy products from plants. Plant-based fish is a particularly high priority, as marine harvesting has decimated underwater populations and is leading to a collapse of biodiversity in oceans, lakes, and rivers.

Our platform also allowed us to develop another iteration of plant-based beef. In early 2019, Little Caesars, one of the world's biggest sellers of pizzas, asked if we had a plant-based equivalent of their popular sausage topping. Our scientists created more than 50 prototypes -- and in May 2019, Little Caesars introduced the Impossible™ Supreme Pizza.

The entire industry needs to find ways to replace unsustainable animal systems, from the sea to the feedlots of the US. We've developed a technology platform to make rapid progress, but hope that this young plant-based meat industry can collaborate for shared progress in a way few others have -- because the consequences of not doing so are unacceptable.

The Kids Are Alright

This year, students mobilized. They rallied in the streets to demand climate action and marched out of schools. They gave fiery speeches at the United Nations and to national legislators across the world.

Younger generations are more inclined to view climate change and biodiversity as priorities. They've inherited a mess, and they recognize that starving polar bears and razed rainforests mean an impoverished planet -- and an existential threat for our own species. They're fighting to wake the world from its collective passivity and indifference to the relentless march of climate change and biodiversity loss.

At Impossible Foods, our consumer researchers are picking up the same trends that we're seeing on the streets of Paris, Singapore, Jakarta and Stockholm, where students are leading the charge toward a green planet.

Our own research shows that consumer attitudes toward animal-derived foods are quickly changing. Roughly half of Americans under 40 years old eat plant-based meat substitutes at least once a month, and two-thirds report eating more often than they did a year ago -- and many are motivated by environmental concerns.

Younger consumers are less inclined to believe that eating meat from animals is part of the American identity, or that plant-based products won't taste good. What parents feed their children influences future tastes, and younger parents are more likely to purchase plant-based meats than older parents.

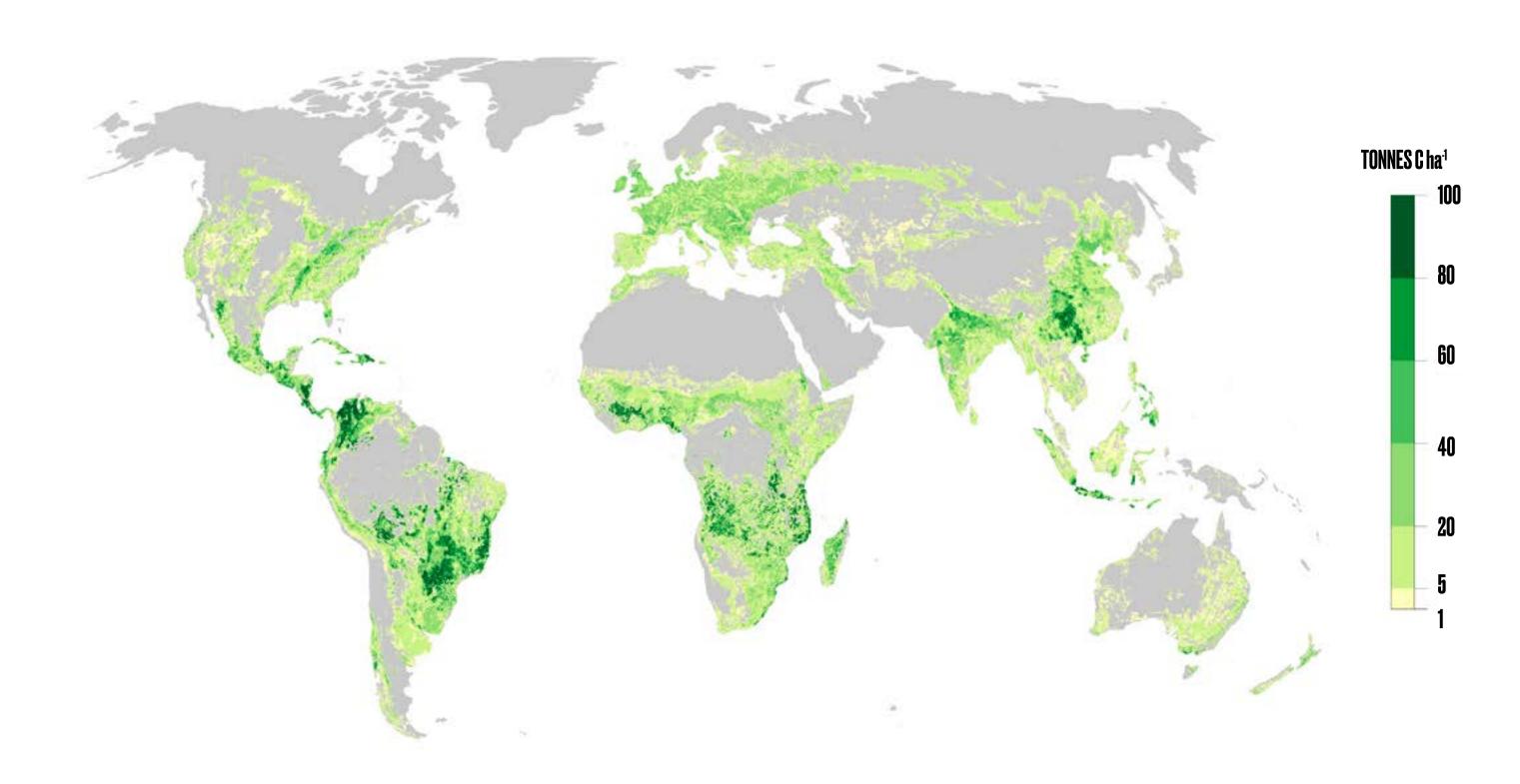
We agree with these students -- let's mobilize. Why sit back and wait for someone else to fix the big problems? If we have the know-how and the tools — and we do — it's our responsibility to use them to save our beautiful planet. And if not now, when?

Adults keep saying: 'We owe it to the young people to give them hope.' But I don't want your hope. I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. And then I want you to act. I want you to act as you would in a crisis. I want you to act as if our house is on fire. Because it is.

- GRETA THUNBERG

THE IMPOSSIBLE BURGER AND OTHER FROM FORESTS, AND AS THE WORLD **DEMANDS MORE BEEF, IT CLEARS EVEN** SUBSTITUTES FIRST BECAME VIABLE.









WAKE UP

Only 4% of the tallgrass prairie that once dominated the Great Plains from Canada to Texas remains today. Once home to over 500 species of plants and wild animals, it's now mostly converted to crops for farmed animals.



A BETTER FUTURE

By reducing our agricultural footprint with plant-based meat, we can leave more space for nature and can capture the soil carbon storage potential of untilled grasslands.





WAKE UP

Tropical forests are the most biodiverse and carbon-rich biomes in the world, but when cleared for pasture, carbon is released and biodiversity plummets. Keeping livestock out means keeping forests safe.



Tropical forests harbor amazing animals, ecosystem services that keep humanity safe and free from hunger, and can store over 150 tonnes of carbon per acre. A plant-based transformation takes pressure off of forests: no pasture needed.



Regenerative grazing sounds like an appealing pitch: If only we could restore ecosystems, fight climate change and build a more sustainable food system -- by using the exact same technology that compromises those very things!

Livestock grazing has been posited as a solution for climate change, benefitting recently from a widely-publicized, and now <u>very thoroughly debunked</u>¹, series of talks by rancher <u>Allan Savory</u>² and other proponents of regenerative grazing. They claim that the road to ecological salvation must come through more farmed animals, and more grazing, for a mystical alignment of soil and hoof.

Whatever the branding -- regenerative grazing, holistic grass-fed beef, "carbon positive" grazing -- none are sustainable at scale, and all are insufficient to feed the growing demand for meat and dairy products.

Iterating on animal farming will not stop the climate crisis, and it will not alleviate rampant <u>deforestation</u>. A transformative reduction in demand for farmed animals is the best and only course forward to safely and securely feed another 2 billion citizens of Earth.

While no rancher or farmer wants to damage the land they manage, grazing is an inherently environmentally impactful activity, whether from a wild animal, or a domesticated one. The reason that grazing is currently a problem is because human consumption of animals for meat is at an unprecedented scale. Diligent stewardship of herd density and rangeland health is better than unchecked and unmanaged animal farming -- but compared to the intact natural ecosystem that it disrupts, livestock grazing competes with wildlife³ for space and for food, contributes to erosion, and through feeding, converts vegetation that would otherwise capture carbon into a source of greenhouse gases. In most cases, industrial feedlot beef actually requires less natural resources and generates less greenhouse gas than does grass-fed beef⁴.

And there's no way to feed the market: Recent research has demonstrated that less than a quarter of US beef demand could be met with grass-fed production, and doing so would pump out more than 40% more GHGs than current industrial system⁵. Global consumers will never decide to voluntarily, radically, reduce their meat intake -- the inherent flaw in every grass-fed, holistic, regenerative proposition.

Sure, regenerative grazing may beat industrial bovine strip mining on a couple of fronts -- but it's all still rooted in the same <u>inefficiency</u>⁶ of <u>animal metabolism</u>. Plant-based meat technology provides the means to reverse the whole unsustainable system -- and with a 60 to 70% global increase in projected meat demand in the next two decades, the plant-based meat sector is growing just in time.

With about half of the world's ice free land already recruited for animal farming⁷, reliance on any animal system sets our food system on the wrong track. It's the sheer scale of global demand for meat: The global population of mammals, birds, reptiles, amphibians and fish is less than half what it was just 40 years ago, largely due to the impact of animal-based food production. Cattle raised for food currently outweigh every remaining wild terrestrial vertebrate on Earth -- mammal, bird, reptile and amphibian -- by more than a factor of 10. Pigs raised for food outweigh every remaining wild terrestrial vertebrate on Earth by more than a factor of two. And chickens raised for food outweigh every remaining wild bird Earth by more than a factor of three.

Rather than continuing to sacrifice global wildlife and biodiversity to satisfy our craving for animal meat, plant-based meat fills the market demand with positive repercussions for the planet. Whether from Impossible Foods or from others in the burgeoning plant-based meat sector, this transformative change is not only possible -- it's inevitable.

— UN Environment, 2018





GLO BAL AWAKENING



— EAT Lancet Commission Report, 2019



Shared Progress

Today, most leading climate scientists, environmental scientists and thought leaders recognize the uniquely destructive impact of animal-based food production, and the urgency of a global transition from animals to plants at the center of our food system. But education, advocacy and <u>international consensus</u> isn't enough. A solution was needed to bridge the gap between identification of the problem, and measurable progress against that problem.

We received the 2019 United Nations Environment Planetary Health Champion of the Earth Award, the highest environmental honor awarded by the United Nations, co-recipients with another leading alternative meat provider. Our business was selected because we developed a "revolutionary" plant-based alternative to beef and for our efforts to educate consumers about environmentally conscious alternatives. Our entire business model is devoted to achieving key elements of the UN Sustainable Development Goals, such as Life on Land, Zero Hunger, Climate Action, Clean water, Biodiversity and Good Health and Wellbeing.

The UN recognition was an inspiring vote of confidence in our mission and our entire team. In May 2019, we joined the United Nations Global Compact, pledging our commitment to the organization's 10 principles of corporate sustainability. We believe in the importance of shared progress and feel that the technology platform we've developed is a critical tool for achieving the Compact's principles.

In 2019, the EAT-Lancet Commission on Food, Planet, Health, in partnership with over 30 leading scientists from around the world, launched a report that represents both a call to action and scientific consensus on healthy and sustainable diets. The dietary transformations advocated in the report are essential for averting ecosystem collapse, provided the right consumer products are

available. These transformations aren't possible without viable alternatives. Impossible Foods has demonstrated that it's absolutely possible to create and offer those alternatives.

In December 2018, World Resources International (WRI) released a synthesis report that provided a "menu of options" for the world to reach a sustainable food future, while promoting economic development and attacking global poverty. This report was unprecedented in its holistic consideration of the enormous opportunity to balance the carbon scales with transformation of land uses (i.e. pulling land from livestock in service of a return to nature and carbon sequestration).

The report points out that the footprint of industrial animal agriculture vastly outweighs the food value: In the United States, ruminant animal meats (mostly beef) provide only three percent of calories, yet occupy 41% of the United States' land area, at the enormous expense of the greatest reservoirs of carbon sequestration and biodiversity: forests and grasslands. Their report offers several scenarios. Under the most ambitious scheme, titled "Breakthrough Technologies," they find that 80 million hectares (Mha) (200 million acres) of reforested land would capture 4 gigatons of carbon per year — a huge step toward atmospheric stabilization. They also note the possibility of 585 Mha of reforested land, feasible only if there are tools for whole-sale dietary transformations, which would effectively negate all agricultural production emissions. We think it's possible to go even farther.

Researchers at Harvard University's Animal Law and Policy Program are recognizing plant-based meat as a breakthrough Negative Emissions Technology – historically, an <u>aspirational technology</u>.

A 2019 paper by Harvard University's Dr. Helen Harwatt and colleagues shows why shifting from animal to plant-sourced protein should be adopted as an important climate mitigation strategy.

As Harwatt's paper stresses, not all greenhouse gases are equal when it comes to rapid climate repair. Short-lived climate pollutants (SLCPs), with global warming potentials many times more potent than carbon dioxide have short residence times in the atmosphere, so reducing those emissions (2.4 billion tons of methane) can make quick and meaningful progress toward international climate goals. Methane is the biggest opportunity. In the US, 94% of agricultural methane emissions come from livestock.

Eliminating beef production is a massive methane reduction opportunity. It's also an important carbon sequestration opportunity on the order of hundreds of gigatons of carbon -- which can be captured and stored by carbon-grabbing forests and grasslands.

New work by Harvard's Matthew Hayek and colleagues demonstrates how powerful that action can be. Were the world to adopt a wholesale shift from animal farming, the resulting carbon capture from forests and grasslands would be equivalent to 300 to 500 gigatons of carbon. In other words, that's about 15 years of fossil fuel burning, and a chance to literally 'turn the clock back on climate change' without compromising food security.

When negative emissions technologies are (infrequently) discussed in the press, they're generally dismissed as being too expensive and "not ready yet", but they'd be nice to have someday, kind of like a back-up terraformed planet. We don't have that kind of time. Why focus on developing and commercializing new carbon capture technologies when photosynthesis, the original carbon-capture

technology optimized by billions of years of evolution, is ready to be deployed, needing only a chance at the vast land area currently wasted on animal farming? So investment in negative emissions technologies needs to start putting meat at the top of the pile.

Life Cycle Assessment

With the launch of the new Impossible Burger recipe in January 2019, we worked with independent sustainability consulting firm, Quantis, to carry out an updated life cycle assessment (LCA) covering impacts from the farm gate to the final product, to understand the sources of our own environmental impact, and to rigorously compare the environmental impact of the Impossible Burger to that of a conventional beef burger.

Our LCA results show that compared to the original Impossible Burger 1.0, the Impossible Burger 2.0 has increased its already huge edge over the cattle-based competition. The supply chain and manufacturing impacts of an Impossible Burger are vastly lower: 87% less water use, 96% less land use, 89% fewer GHG emissions, and 92% less dead-zone creating nutrient pollution, compared to the same burger made using even the most environmentally efficient cattle-based production.

The results are clear: Even yield improvements that bring global or US beef production to state-of-the art efficiency will be consistently dwarfed by the resource and environmental efficiency of making beef from plants. Moreover, comparative GHG estimates don't even include the huge carbon sequestration potential of land spared from cattle grazing -- perhaps the most critical immediate GHG benefit.

To shed more light on how these numbers are developed, the LCA is available online on our website.





As a California-based company, we're acutely aware that water is precious. We're also determined to keep our own footprint as low as possible, which supports long-term business resilience.

Reuse, Recapture: Water Use In Manufacturing

Clean-in-Place (CIP) is a common process in food and beverage manufacturing, critical to production and food safety. It allows operators to clean tanks, pipes and general processing equipment without having to take everything apart and reassemble after a manual cleaning. As a process, it saves a lot of time, money and chemicals compared to doing everything by hand. It also provides ways to recapture and recycle -- which gets us closer to closing the loop on water use.

We're replacing our 2016 CIP equipment with more efficient equipment. Time, flow, temperature and level of cleaning chemicals can all be adjusted, but the most important step is recapturing the CIP output: Collect the water and solvents, filter them and reuse the resulting clean water. This investment in an infrastructure update saves on water costs and chemical costs over the longer term.

Engineering projections show that we should see more water saved than discarded with the new CIP process, at a ratio of 3:2. This is a huge improvement over our prior system, which had no recycle capacity. Likewise, we'll improve our chemical-efficiency use significantly, with a projected ratio of 3:1 for recovered cleaning chemicals to discarded cleaning chemicals.

Climate Adaptation And Water Reductions: Water Use Innovations For Heme

We're always getting better at making heme. Every year, our production yield of the "magic molecule" for meat flavor improves significantly. Yield is the single biggest determinant of input use like water; the more leghemoglobin we get out of a fermentation run, the lower the respective impacts across water and energy (see: LCA)

Earlier this year, anticipating the large increases in production required for national accounts like Burger King, we doubled down on investing in water conservation to save resources and costs, including a reverse osmosis method implemented by our heme process engineering team to capture and reuse the water without compromising production or yields.

We produce heme via fermentation in large batches, similar to the way Belgian beer is made. After fermentation is complete, the protein is separated from the yeast and fermentate. Separation requires clean water to isolate the target heme protein before being used as the key ingredient in the Impossible Burger.

That's where reverse osmosis comes in: rather than introducing constant fresh water, reverse osmosis allows us to implement a continuous re-use of much of the necessary water. Once fully operationalized, reverse osmosis is projected to save over 30% of the total process water, with minimal change in energy use. To share these learnings, Impossible Foods is partnering with the UN Development Program to develop this project as a case study to support others in water use reduction strategies.



Reverse osmosis engineering initiative to increase water savings and build climate resilience into operations







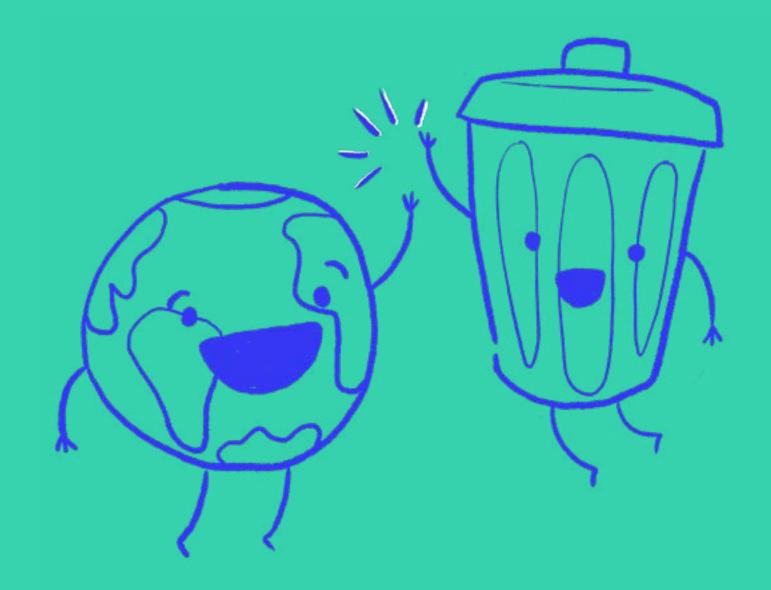
Our Manufacturing Team in Oakland is continuing on its path toward US Green Business Council (USGBC) Zero Waste Certification.

To achieve this certification, members of the Environmental Health and Safety team weigh, record and allocate all waste generated by the facility. Sometimes this requires cutting open packaging of product that has failed a texture or packaging spec. (Once, it required a dedicated team member to manually unload an entire roll-off of composting materials -- true mission dedication that we sincerely promise he'll never have to do again.)

Our rate of waste diversion from landfill averaged between 70% to 90% for most of 2018. When we changed our production line to roll

out the new Impossible 2.0 recipe, waste that went to landfill spiked. Effectively, it was a recommission of the manufacturing process, and the infrastructure and space available to hold the transition waste wasn't sufficient -- not enough staging room, and pick-ups from the municipal waste management company not quite often enough.

Despite that difficult learning experience, we remain on our path to USGBC certification in 2020, requiring 90% average landfill diversion and a robust suite of waste reduction tactics and training programs. Anticipating the inevitable unexpected challenges, our team is focusing on resilience to minimize future landfill diversion in the face of production surges and system changes.



We're early in our journey, but we strive to be among the most inclusive, diverse and supportive places to work.

In early 2019, we were accepted to join the CEO Action for Diversity & <u>Inclusion</u>™. CEO Action is the largest CEO-driven business commitment to advance diversity and inclusion within the workplace. We've pledged our business to three core commitments:

- 1. Continue to cultivate workplaces that support open dialogue on complex, and sometimes difficult, conversations about diversity and inclusion
- 2. Implement and expand unconscious bias education
- 3. Share best known actions those that work and those that don't work

In order to monitor, maintain and improve representation, we actively track gender statistics across the company. For 2018 through now (the first quarter of 2019), women constitute 48% of the company's workforce, 52% of the leadership roles that are director-level and above, and 25% of the executive team. We've also formalized diversity and inclusion training for our management team.

We also welcomed the first woman to our board in early 2019 -- long overdue and a huge win for the team. Vanessa Wittman brings more than 30 years of experience in finance and tech, from start-ups to big multinationals -- a sterling addition by any measure.

This year also saw the formation of our first Employee Resource Groups (ERGs): Impossible Pride and Women of Impossible. These ERGs have the formal support of the executive team, as well as active executive sponsors.

Impossible Pride Charter

Our goal for Impossible Pride is to follow that lead and ensure diversity and acceptance at all levels of the company. As an employee resource group, Impossible Pride exists to provide guidance to our leadership and help ensure that everyone — particularly individuals who identify as a member or ally of the LGBTQ+ community — feels welcome to be their authentic selves and feels included here at Impossible Foods.

Women of Impossible Charter

Women at Impossible exists to uplift and support anyone and everyone who identifies as female. We aim to help each other and to inspire the larger Impossible community by understanding and learning from each others' experiences -- and fostering a positive, productive, and healthy environment for all employees, regardless of gender.

Community

We are committed to addressing hunger in our own community. Last year, we donated over half a million pounds of Impossible Burger to local communities in need through Feeding America.

In late 2018, the most destructive wildfire in California state history struck Paradise, in what is now called the Camp Fire Complex. To support our northern neighbors, we donated our product to residents displaced by the fire. The owner of the <u>Sexy Panda food truck</u> spent weeks in the Chico area distributing a multitude of donations, including 30,000 Impossible sliders to evacuees.





















































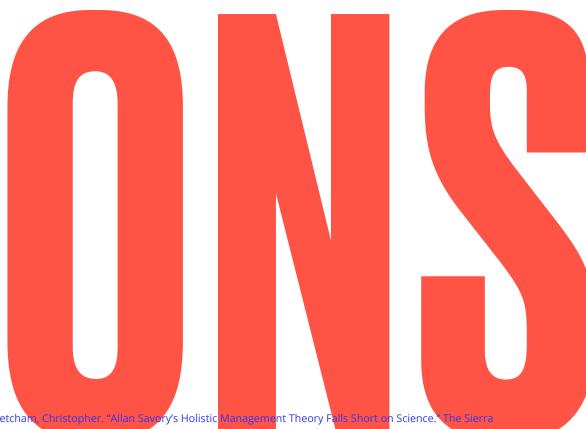












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THE MELTDOWN IN BIODIVERSITY HAS HAPPENED SLOWLY AND WITHOUT NY HIGH-DRAMA EVENTS TO CAPTURE PUBLIC AWARENESS OR MOVE GOVERNMENTS OR EVEN NGOS TO TAKE Y NEEDED ACTION. THE GOOD NEWS IS THAT THE SOLUTION IS CLEAR - WE NEED TO MASSIVELY DECREASE CONSUMPTION OF ANIMAL PRODUCTS.