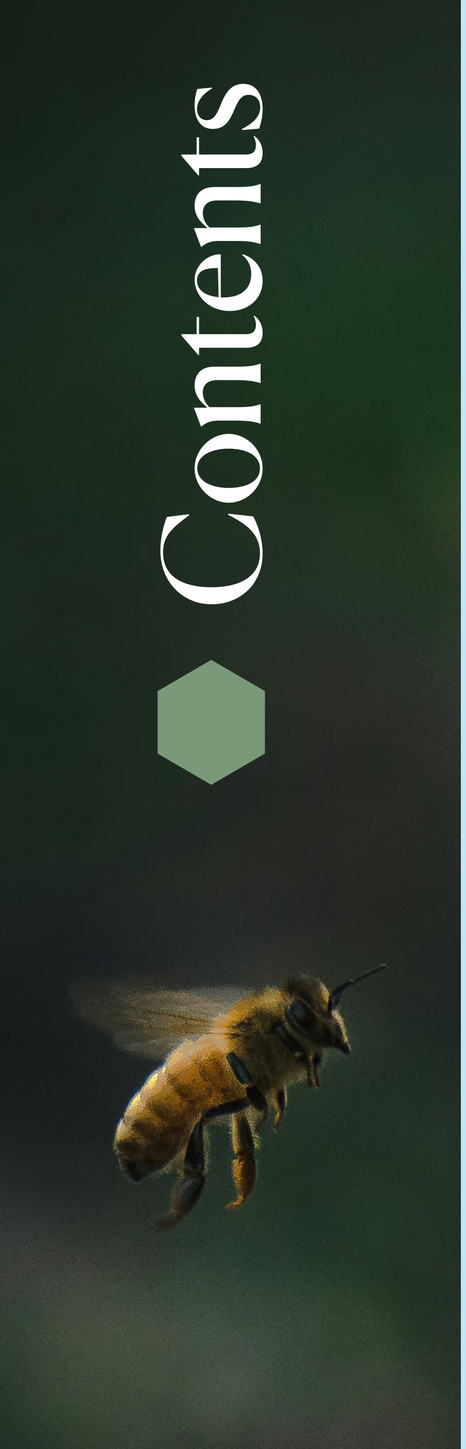
BEEWISE

Impact Report 2024

Contents



About us

CEO statement

Saar Safra
Beewise CEO and Co-Founder

Dear fans of bees (and …food),

When my co-founders and I founded Beewise over six years ago, global bee colony collapse rates were already alarmingly high—hovering in the upper 30% range. Even then, we believed these numbers represented an urgent and existential threat to global food security; unfortunately, things have only worsened since..

2024 was particularly devastating: reports indicate that the United States experienced an average colony collapse rate of 62%, significantly intensifying crop shortages and disrupting entire agricultural ecosystems. This sharp rise in bee mortality underscores just how urgent and essential our founding mission has become.

If you attended any agricultural trade shows this year, you likely witnessed the rapid rise of data-driven, autonomous technologies—applied everywhere from tractors to crop-sorting machinery. Yet pollination has lagged behind. Until recently, growers had no choice but to rely on a hive design that hasn't fundamentally changed since the 1800s.

Traditional hives require labor-intensive, manual inspections and in-field interventions, offering no visibility into hive health. This leaves both beekeepers and crop growers blind to the challenges their bees are facing. As a result, colonies remain highly vulnerable to threats like temperature extremes, pesticides, and diseases—without any means of remote monitoring or treatment.

Lately, we've seen efforts to retrofit conventional wooden hives with sensors. While these upgrades offer limited insights into metrics like sound, and weight, and more, they don't address the root problem; even with accurate data, beekeepers must still perform labor-intensive, in-field, costly treatments—a model that is neither scalable nor sustainable. It's no surprise, then, that colony collapse rates continue to exceed 60% year after year.

That's why we developed Active Beekeeping—a leap forward that leverages AI, precision robotics, and computer vision to enable remote inspections, hive grading, and, most importantly, real-time interventions. For example, growers can now close hive entrances directly from their phone to shield bees from pesticide exposure—delivering a truly remote and integrated pest management solution. Beekeepers can feed their bees remotely, provide them water, and a plethora of other treatments, all administered remotely from their phone.

We are just at the beginning of what Active Beekeeping can achieve. As the technology matures and research scales, new capabilities will emerge. One thing is clear: Active Solutions are the only viable path forward in a world facing growing labor shortages, worsening colony collapse, and increasingly unpredictable climate conditions.

I look forward to watching pollination technology continue to evolve—onward and upward.

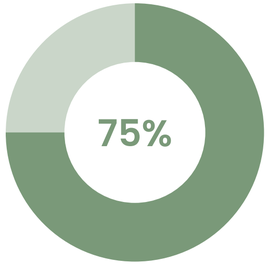
Sincerely,
Saar Safra

Reporting period & standards

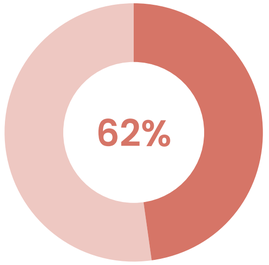
Our third annual Impact Report covers our activity from January through December of 2024, and aligns with industry-specific standards of the Sustainability Accounting Standards Board (SASB) for Agricultural Products and Software & IT Services.

Our mission

At Beewise, we are on a mission to save bees in order to feed the world.



75% of the crops the world consumes are **pollinated by bees**



But **62% of bee colonies collapsed** last year.*

We are here to help.

Commercial beekeeping has seen few major innovations since the invention of the standard Langstroth hive in the 1850s. Until now. Since 2018, our team has brought our expertise from across a broad range of technological disciplines to work to reverse colony losses in order to protect the global food supply.

Beewise's Momentum at a Glance

280K hives placed annually

1,240+ BeeHome™ devices in the field

250K+ acres pollinated annually

136 employees across 5 countries

50+ engineers and researchers on our team

This transformation is urgently needed. Climate change's extreme weather, as well as monoculture-related health threats, such as pesticides, pathogens, and parasites, are devastating honey bee populations. Exacerbating the problem is the fact that beekeepers are not well-positioned to treat their colonies because of challenges intrinsic to their profession. Apiary locations can be hundreds of miles apart, which means that a given hive might only receive a visit once every couple of weeks. As a result, bees, already under heightened stress, aren't receiving the right care at the right time.

Additionally, because experienced beekeepers are scarce, it is often unskilled labor providing the majority of hive care. **The net result is that annual colony losses have drastically risen from the single-digits beekeepers experienced a few decades ago.** Since bees are facing a complex, interrelated set of problems, a holistic, real-time, in-field solution is necessary to keep bees alive and healthy. This can only be achieved at scale with what are referred to as Active Beekeeping Solutions.

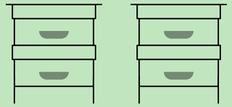
At Beewise, we use AI and robotics to perform Active Beekeeping for healthy hives and superior pollination. **In the last two years, we have saved more than 300M bees and we are working to save more every day.**

*Loss rates were measured during the 2024-25 pollination season.

Our vision

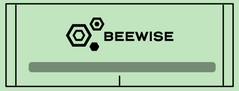
We envision a future with widespread availability of Active Beekeeping Solutions for beekeepers and growers globally. Active Solutions rely on advanced technologies, such as AI, precision robotics, and computer vision, to enable remote monitoring and detection of threats, including pesticides, disease, and parasites. Further, compared to Passive Solutions, Active ones take action to treat issues in real-time, in the field, fixing issues before they spiral out of control. The end results are healthier colonies, improved crop yields, and enhanced biodiversity.

Beekeeping is Evolving



Dumb
No technology

Passive
Sensors



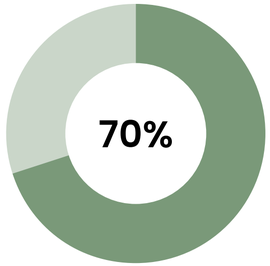
Active
AI + Robotics

Our solution

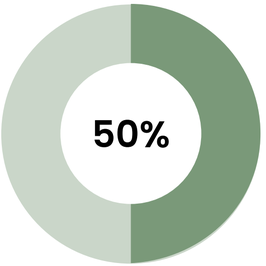
Active beekeeping for improved outcomes

We are the **world's leading pollination-as-a-service platform.** Our service is based on the BeeHome™, a smart hive that uses **AI and robotics** to deliver Active Beekeeping, which is remote and automated, at scale. We designed it with one goal in mind: **saving bees.**

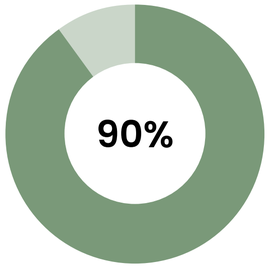
Compared to traditional wooden beehives, the BeeHome™ delivers:



Reduction in colony losses, based on a year with 42% colony loss rates

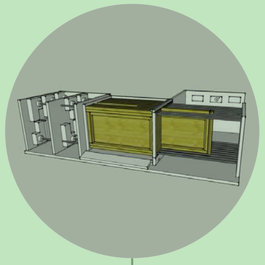


Improved honey yields, due to year-round chemical-free mite treatment



Reduction of manual labor through the automation of time-consuming, repetitive tasks

Grounded in user feedback



2018

2019

2020

2021

2022

2023

2024

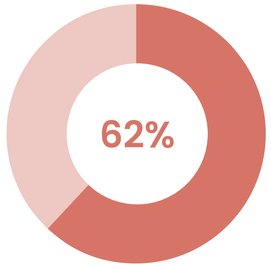
Over the years, the BeeHome™ has evolved significantly, guided by lean product design and bringing new models rapidly to market. Our approach has been to make design decisions based on what we are hearing from those who are on the front line of the fight to save bees. We have found successful product market fit by continuously soliciting feedback from growers, beekeepers, researchers, and, of course, the bees.

Our advisory board is made up of experts and thought leaders from the commercial beekeeping and agricultural industries. The group includes Zac Browning, fourth-generation commercial beekeeper and chairman of the board of bee health organization Project Apis m.; Ray Olivarez, a leading California queen breeder and honey producer; and Dan Cummings, the chairman of the board of Blue Diamond Growers, the largest almond company globally.

Based on feedback, our latest model, the BeeHome™ 4, is both smaller and lighter than previous iterations. It can be moved with conventional forklifts, stacks on standard semi-rig trailers, and fits into existing beekeeping workflows by accommodating standard wooden frames. These design features increase hive mobility, which enables beekeepers to care for millions of bees more efficiently and ensures growers have a smoother pollination season.

The state of global bee populations

The worst year on record



Last season, **more than 62% of commercially managed honeybee colonies in the US collapsed.**

This is the highest loss rate on record and 15 percentage points higher than the 13-year average.

Master beekeepers and pollinator health experts tell us that there is a perfect storm of stressors on bees that continues to worsen year over year. Just a few of these complex, interrelated factors include:

↑ *A Florida beekeeper inspects flooded wooden hives in the aftermath of Hurricane Helene.*

Climate change

Extreme weather impacts bees in multiple ways: altered flowering times affect available nutrition; fires and storms destroy hives and forage, and can create conditions ideal for invasive pests. This year we experienced multiple formerly "once-in-a-lifetime" climate events, from hurricanes in the South East to fires on the West Coast. In Florida, Hurricanes Helene and Milton damaged or destroyed 200,000 commercial beehives, critical pollinators for the state's $3.3 billion orange crop.

↑ *This image, courtesy of Project Apis m. illustrates the size difference between Varroa destructor and Tropilaelaps mites.*

Pests & disease

Deadly mites and pathogens significantly impacted pollinator health, devastating hives around the world this year. A collaboration between North American universities found that Varroa was the main cause of bee mortality, accounting for 85% of hives that did not survive the winter. Tropilaelaps is an even deadlier mite than Varroa and, while not yet detected in the US, it is already wreaking havoc on bees in Asia and Europe. Organizations including Project Apis m. and the USDA have sounded the alarm about its imminent arrival stateside.

↑ *USDA footage from the August 2024 Park Fire in California.*

Insufficient forage

The prevalence of monoculture has led to fewer available plant species for forage throughout the year. Bees require a diverse diet to optimize their health, and, with increasing biodiversity losses globally, they can struggle to find adequate nutrition, often leading to starvation. A UN report found that 40% of pollinators around the world currently face extinction due to habitat and plant biodiversity loss.

Today's beekeepers

In addition to worsening environmental challenges, commercial beekeepers continue to deal with three major operational challenges inherent to their profession:

Distance

Typical commercial beekeepers manage thousands of hives that are often spread over hundreds of miles and sometimes even over multiple states. As a result, they can only visit a limited number of hives at any given time.

Timing

Due to distance and scarce labor, most hives only receive a beekeeper visit every few weeks. Rarely are the hive's problems treated in time–help is often too little, too late.

Expertise

Labor shortages, particularly a lack of experienced beekeepers, lead to generalized and inconsistent care, often done by inexperienced workers. The net effect is poorer bee health.

Updates from the field

Beekeepers report unprecedented losses

2024 brought immense challenges for pollinator populations globally. No matter who you asked, beekeepers reported the highest colony loss rates on record. Beekeeping research nonprofit, **Project Apis m., found that U.S. commercial beekeepers reported an average colony loss rate of 62% from June 2024 to February 2025.**

The industry has called for urgent research and collaboration to better address these unusually high losses and the potential impacts on pollination and food supply. T**he USDA has begun collecting samples from beekeepers and is in the process of analyzing them for pathogens and parasites.** At Beewise, we are committed to collecting vital hive data, partnering with beekeepers, and supporting the important work done by researchers nationwide, to better understand these troubling losses.

> The future of beekeeping must be remote, automated, and holistic.

Concerns around pollination service shortages

We saw the effects of increased colony losses on the availability of pollination firsthand, during the 2024-2025 pollination season. We received reports that a**pproximately 60,000 acres of almond orchards received no commercial pollination at all this year**, marking a first in the contemporary history of commercial growing. While the losses in 2024 were tragic, we see it as even more validation of our conviction that the future of beekeeping must be remote, automated, and holistic, in order to combat colony losses at scale and stabilize pollination availability.

The Beewise team was able to meet all of our pollination obligations, **growing by over 100% year-over-year both in terms of acres pollinated and colonies placed.** However, the number of last-minute requests for bees we received indicated to us that there was not an adequate supply of bees to meet the demand from growers and farmers, pointing to the severe pollination services shortage experienced in the market.

Emerging trends in the industry

The impact of bee shortages were visible all across the industry this year, from research findings, to criminal activity, to economic indicators.

Study finds 65% of plants globally do not receive sufficient pollination

A study from Rutgers University found that the majority of crops are not meeting their full production potential due to insufficient pollinator visits. The researchers analyzed crop yields from over 1,500 fields across six continents and data from over 200,000 “bee visitations” to crops’ flowers, making it one of the most comprehensive datasets on crop pollination to date. With 75% of the food crops we rely on globally dependent on pollinators, this study shows how the decline in pollinator populations is already causing reduced crop yields and threatening the world’s food supply.

California hive thefts spike

In 2024, California experienced a record number of 3,492 colonies reported as stolen, equating to a $1.2 million loss to beekeepers, according to data from the California State Beekeepers Association. Since 2013, California has seen an 87% increase in hive thefts, correlated with rising colony loss rates during the same period. These stolen hives not only affect beekeepers’ operations and bottom lines, but also leave growers who depend on these hives with limited options to secure sufficient pollination for their crops.

Economic impact of pollinator losses

According to a survey of U.S. commercial beekeepers by Project Apis m., 2024’s colony losses equate to approximately $428 million in lost income from almond pollination contracts, and $225 million in colony replacement costs. The survey responses were from beekeepers who account for 68% of the country’s total bees. Some experts believe these estimates may be low, because the survey does not include future lost income from honey production or non-almond pollination contracts.

The honey integrity act is introduced in congress

A bipartisan group of U.S. senators and representatives, working with the American Honey Producers Association (AHPA), have introduced a bill to promote fairness in the honey market. The legislation aims to combat honey adulteration, ensuring consumers can trust that the honey they purchase is natural, wholesome, and healthy. It also seeks to create a fairer marketplace for honest American beekeepers who have long faced unfair competition from adulterated products. If passed, the legislation may help beekeepers stay competitive in the U.S. honey market, even as their operational costs increase.

Company updates

New Product Line:

In 2024, we launched a new corporate beekeeping program offering, “Bees for Buildings.”

This program allows companies and organizations, such as California master developer Sunset Development, to place BeeHomes™ on their campus in order to strengthen the health of their green spaces in line with their role as environmental stewards. We look forward to continuing this partnership and others like it, and, as a result, increasing awareness around pollinators and their role in supporting local ecosystems.

Scaling our Impact

In 2024, we continued to expand our BeeHome™ manufacturing in order to maximize the impact we have on saving bees. The result was growing our fleet of BeeHomes™ to 1,240, going into the 2024-2025 pollination season, growing our impact by providing more colonies with optimized, AI and robotics-powered care. We also partnered with additional growers and added new commercial beekeepers to our network.

Beewise partners with kind almond acres initiative

The KIND Almond Acres Initiative is an industry-leading program piloting scalable, regenerative agriculture solutions on a 500-acre ranch in Madera, California. We are honored to contribute to this work for the third year, demo-ing our BeeHomes™ for growers and media and educating them about the positive impact they can have on bee health while experiencing superior pollination from healthier hives. We are proud to support KIND’s goal of sourcing all of its almonds from farms that are bee-friendly and sharing learnings to shift the almond industry towards more sustainable practices.

Research results

Mite Treatment

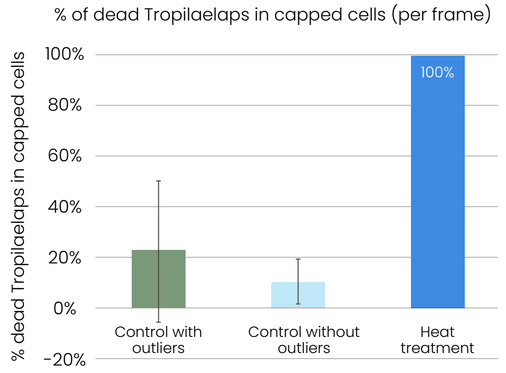
This fall, Auburn University researchers, in partnership with bee health nonprofit, Project Apis m., presented findings at national bee conferences on the Beewise Heat Chamber's ability to kill 100% of Tropilaelaps, a deadly mite that is wreaking havoc on honeybee colonies in Asia, and the USDA warns may arrive in the United States soon.

In addition, our internal research team tested the ability of the Beewise Heat Chamber to kill Varroa mites, a deadly pest responsible for the bulk of US colony losses in recent years. Results showed 99% of Varroa mites were killed in capped brood, all without any chemicals or human labor.

Pollination:

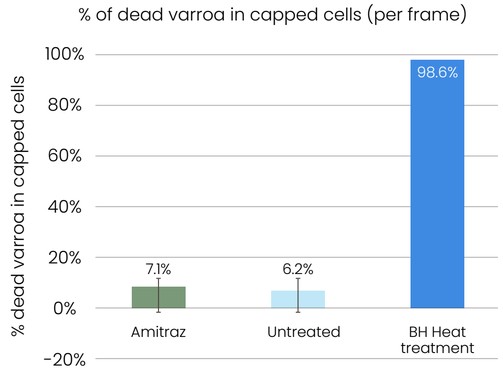
In partnership with a leading global grower and the Volcani Institute, we conducted a field experiment comparing bee activity at hive entrances in BeeHomes™ to traditional wooden hives placed in the same orchard during the almond pollination season. The end result showed bees are 40% more active at BeeHome™ hive entrances during pollination's cold winter temperatures. The BeeHome's™ superior insulation and around-the-clock, optimized care enable colonies living in BeeHomes™ to spend more time out visiting trees versus working inside to warm up the hive in the borderline temperatures for bee flight commonly associated with almond bloom.

Differences in Tropi Levels



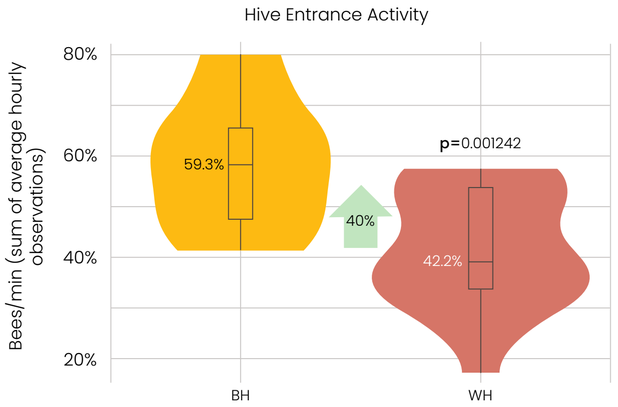
In this analysis, treatment with Beewise Heat Chamber killed 100% of Tropi.

Differences in Varroa Levels



In this analysis, treatment with Beewise Heat Chamber killed 99% of Varroa.

Differences in Hive-Entrance Activity of 40%



In this analysis, activity at the hive entrance is significantly higher in hives from the BeeHome group.

Industry recognition

Noteworthy Awards Received in 2024

Beewise in the News

Inc.

"How a Buzzy Startup Made the iPhone of Beehives to Protect Pollinators: Beewise's AI and robotics-powered BeeHome™ has the potential to fortify the global food supply by keeping bees healthy."

FORTUNE

"The BeeHome™ has a heat chamber that kills predatory Varroa mites that try to enter the hive. Its sensors also provide beekeepers with vital information on the health of their colonies, and the hive can automatically supply nutrients when the bees' food chain is compromised."

CNBC

"Able to work around the clock, the new BeeHomes™ are a time saver for beekeepers, who can use an app to remotely manage operations from their desk or home while advanced hardware in the field monitors and takes care of the bees."

Quantifying bees saved

A BeeHome™ 4 contains

8 **bee colonies.**

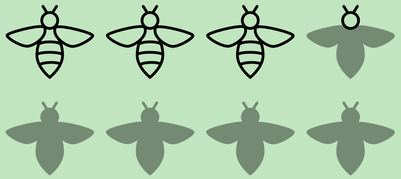
Each colony has an average of

33,000 **bees**

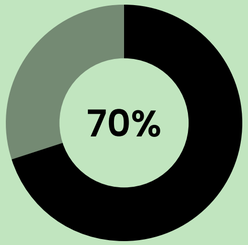
throughout the year for a total of

264,000

bees per BeeHome™.



If they were housed in wooden hives, approximately **62% of those 8 colonies would have perished this year.**



In a BeeHome™ 4, those **colony loss rates** are **reduced by 70%.**

On average, that means that all of the **1,240 BeeHome™ 4s** in operation saved **4,305 colonies** in 2024.

Beewise saved more than:

142M **bees.**

We estimate that during the 2023 - 2024 almond pollination season alone, an approximately 60 day window.

Beewise saved more than

707 **colonies**

Equating to more than

23M **bees.**

Impact on climate

Active Beekeeping is not only good for bees, but also for the environment.

With the BeeHome™, a beekeeper makes fewer trips to their hives every month, resulting in less mileage traveled by truck and fewer hours used operating a forklift. This leads to a significant reduction in emissions related to transportation and labor. Compared to traditional wooden beehives, we estimate each BeeHome™ avoids approximately **40 kg of CO2** emissions annually. Over the **15-year** lifetime of a BeeHome™, this results in savings of approximately 600 kg of CO2. Our current BeeHome™ portfolio is **1,240** strong, and therefore **744 metric** tons of CO2 will be avoided altogether over the lifetime of our portfolio of BeeHomes™.

-40 kg
of CO_2 emissions annually

-600 kg
of CO_2 over the lifetime of a BeeHome™

744 metric
tons of CO_2 over their lifetime of our 1,000 BeeHome™

SDGs

The Sustainable Development Goals (SDGs) developed by the United Nations represent a holistic approach for nations and organizations to address global sustainability challenges.

We have identified six SDGs that Beewise's work supports. Each SDG has specific targets and indicators; we describe our activities for each of these categories below.

SDGs

Goal:

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

Target	Our Activity
2.1 Sufficient food all year round.	Beewise saves honeybee colonies, which are the most commonly used commercial pollinators. Wider access to better pollination helps sustain food security by raising crop yields.
2.3 Double the agricultural productivity.	By keeping more bees alive, Beewise helps raise agricultural productivity with improved pollination and greater yields from the same plot of land.
2.4 Implement resilient agricultural practices that increase productivity and production.	Beewise helps mitigate the negative effects of climate change on bees by protecting them from threats and providing a better environment through the BeeHome™.

Goal:

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

Target	Our Activity
8.2 Higher levels of economic productivity through diversification, technological upgrading, and innovation.	Beewise's precision technology allows beekeepers to tend to their hives remotely and automate much of their manual labor. It is estimated that US beekeepers spend up to 60% of their time traveling to care for their hives; Beewise eliminates more than half of those visits, reducing costs and travel time for beekeepers.
8.3 Support decent job creation and encourage the formalization and growth of micro, small and medium-sized enterprises.	Beewise helps keep family-owned beekeeping businesses in operation by improving their margins via reducing colony losses. Beekeepers who partner with Beewise have access to using the BeeHome™ with no up-front cost, so they can invest back into growing their business.
8.8 Protect labor rights and promote safe and secure working environments.	By enabling remote treatment of bees, Beewise significantly reduces vehicle travel time, heavy lifting in the field, and the occupational hazards of working near bees.

SDGs

Goal:

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Target

9.4 Make industries sustainable with resource use efficiency and adoption of clean and environmentally sound technologies.

Our Activity

Beewise helps growers to sustainably increase their productivity, while helping beekeepers to reduce 50% of their transportation emissions and 90% of manual labor. The BeeHome™ is also 100% solar-powered.

Goal:

Make cities and human settlements inclusive, safe, resilient and sustainable.

Target

11.3 Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

Our Activity

With Bees for Buildings, Beewise brings healthy bees and increased pollination activity to urban environments. This results in boosted green spaces, better air quality, pollution mitigation, and improved habitats for urban species that eat or nest in pollinated plants.

SDGs

Goal:

Take urgent action to combat climate change and its impacts

Target

13.1 Strengthen resilience and adaptive capacity to climate-related hazards.

Our Activity

The BeeHome™ is a climate adaptation solution that protects bees from extreme weather, loss of forage, and other climate change-related threats. As climate change makes agricultural production increasingly volatile, Beewise is ensuring food security for humans by keeping more bees alive and ensuring growers have access to sufficient pollination to maximize their yields. Pollination by Bees for Buildings in urban areas increases plant biomass, effectively supporting carbon-sinking goals.

Goal:

Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, , and halt and reverse land degradation and halt biodiversity loss

Target

15.1 Reduce the degradation of natural habitats, halt the loss of biodiversity and prevent the extinction of threatened species.

Our Activity

Reducing bee colony loss helps enhance the biodiversity of flora and fauna in the wild areas surrounding managed hives, ultimately having a positive effect on natural habitats.

Operational impact

We take our role as environmental stewards very seriously. As a mission-driven company, we recognize it is crucial to consider not only the impact we are having on bees and our customers, but also the impact of our own operations. As we scale, we have also increased our efforts to minimize the environmental footprint of our production processes, products, and operational activities.

Energy

We consider greenhouse gas (GHG) emissions in our decision-making throughout our operations, from employee air travel to our corporate fleet. We track our Scope 1, 2, and 3 GHG emissions and work to identify areas to reduce our climate impact.

Scope 1

Employees use our corporate fleet for commuting and client visits. We have 29 vehicles, and 10% of them are hybrid vehicles.

Total energy consumed by our corporate fleet in 2024: 4,569 Gigajoules (GJ)

Scope 2

At our Israeli office, the only location we manage directly, we source electricity from a mix of 30% solar and 70% from a local electricity supplier that uses mainly natural gas.

Total electricity purchased for consumption at the Israeli office in 2024: 729 GJ

Scope 3

We track employee air travel in all of our office locations.

Total emissions due to air travel in 2024:
544 tons of CO2 e or equivalent (e)

Total GHG Emissions

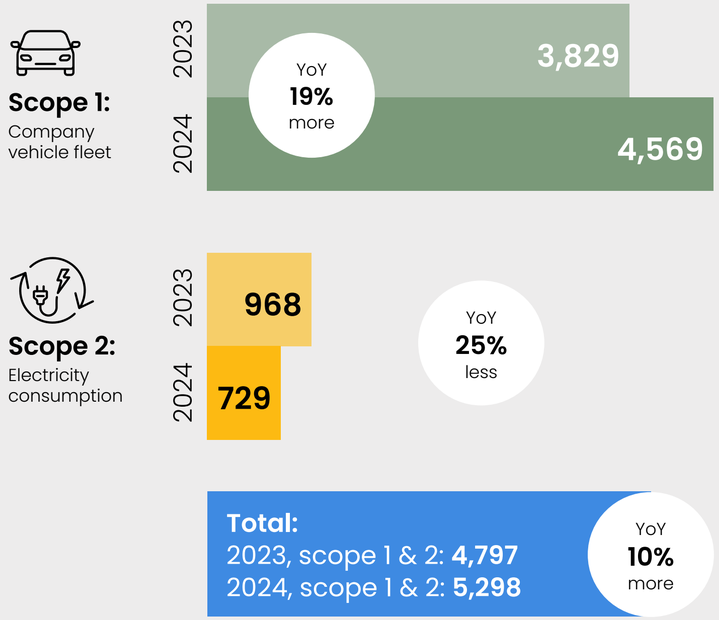
Tons of CO2e

	Scope 1: Company vehicle fleet	Scope 2: Electricity consumption	Scope 3: Flights	Total
2023	274	79	440	790
2024	309	69	544	922
YoY %	13% more	14% less	24% more	17% more

Beewise's total GHG emissions i**ncreased by 17% from 2023 to 2024.** This occurred in the context of fine-tuning operations in our new manufacturing facilities in Mexico, which involved additional travel, and increasing BeeHome™ production.

Total Energy Consumed

Gigajoules



Beewise's total energy consumption **increased by 10% in 2024**, a year in which we more than doubled our sales footprint.

Materials

We are attentive to the types and amounts of material we use to assemble our product, and we take care to work with local suppliers whenever possible. In the last quarter of 2023, we shifted the majority of our BeeHome™ production to a facility in Mexico to better serve our US market. We continued to fine-tune our operations in Mexico throughout 2024 and continue to do so.

Materials used

Kilograms

Metal

2023
160,385
2024
250,880
56% more YoY

Batteries

2023
4,026
2024
9,520
136.5% more YoY

Plastic

2023
52,800
2024
33,180.00
37% less YoY

Solar panels

2023
2,640
2024
7,000.00
165% more YoY

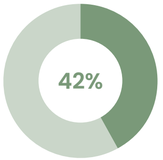
Cardboard for packing

2023
10,500
2024
0
Eliminated

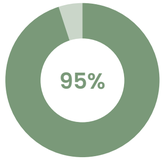
Local suppliers

We strive to purchase goods and services from local suppliers to support local economies and prevent pollution-intensive, long-distance shipments as much as possible.

In 2024, we spent 100% of our US procurement budget on local suppliers.



In Mexico, we spent 42% of our procurement budget on local Mexican suppliers, and we continue to optimize for localization as we streamline operations in this new facility.



In Israel, we spent 95% of our procurement budget on local suppliers.

Manufacturing waste

We make efforts to reduce our waste and increase recycling at our offices and assembly sites. In 2024, we moved all of our manufacturing away from our owned and operated facilities.

Cardboard
0 tons

Metal
0 tons
non-hazardous industrial waste

Hive waste
4 ton
non-hazardous agricultural waste

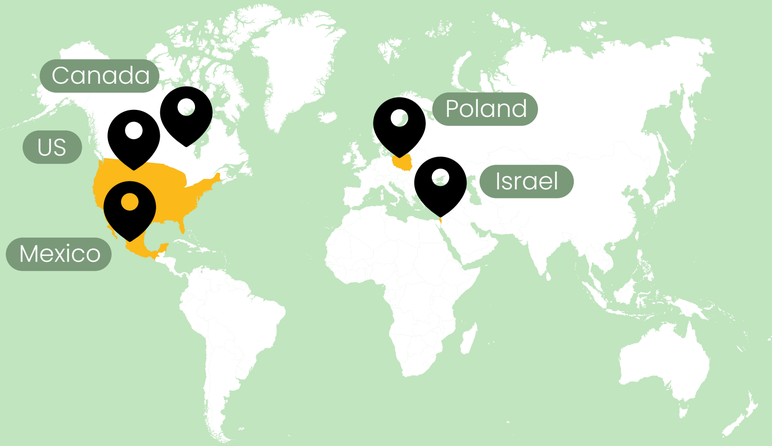
We do not produce hazardous waste.

People & practices

We are on a mission to save bees to feed the world. Our employees around the world dedicate their talent, creativity, and knowledge to building innovative solutions that are changing agriculture for the better. Our policies and practices guide us in our work to ensure we are operating in a responsible manner, aligned with our company values and mother nature.

The people behind the mission

Our employees around the world are united in our commitment to save the bees and safeguard the global food supply



Our growing team comprises

136 employees

5 locations

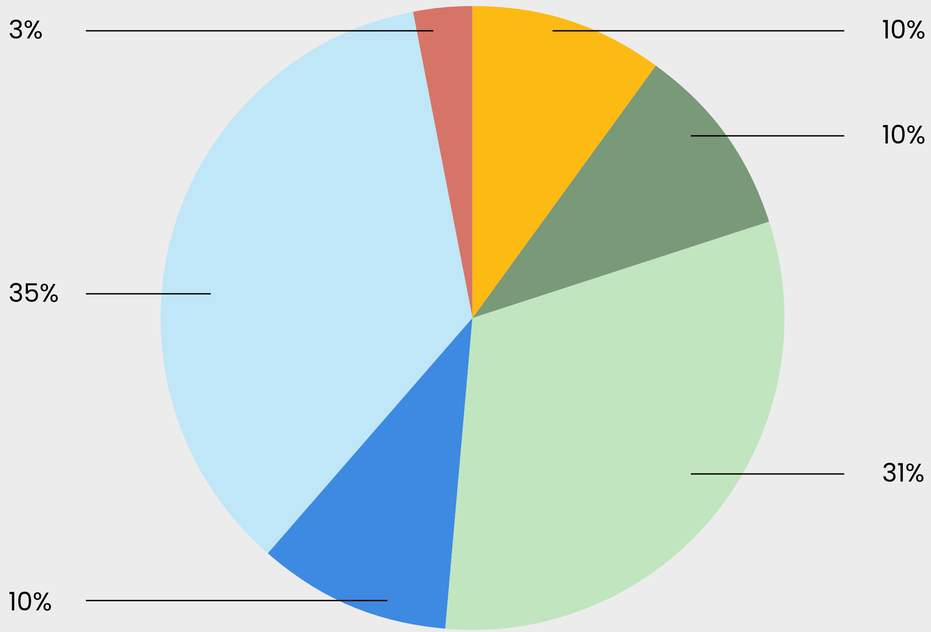
more than **50** engineers & researchers

Our diverse team has a wide range of expertise, spanning artificial intelligence, precision robotics, software development, and hardware design. In addition, we have experts in apiology and botany on staff, as well as experienced professionals in global operations and supply chain management.

We encourage a culture of innovation through our diverse team, expansive employee support, and professional training programs. We are used to working with bees in nature, where it is crucial to react quickly and efficiently. These habits also inform our workplace culture of agility, which we believe is critical for innovation.

Diversity

North american full-time employee racial diversity graph



Group:

- Asian
- Black
- Hispanic / Latinx
- Middle Eastern / North African
- White
- Two or More Races

We come from a wide range of disciplines, working together, united by our mission.

Our varied professional expertise, as well as our diverse ethnic, religious, and national backgrounds, contributes to an open and collaborative workplace, with the interdisciplinary exchange of ideas. To support our culture of inclusion, we aim for an equal representation of women and men throughout the company.

To that end, we encourage a diverse candidate pipeline and train hiring managers to reduce implicit bias in recruitment. We have goals in place regarding the ratio of women to men in leadership roles. We also offer a range of benefits that support working parents and encourage a healthy work-life balance for all employees. In 2024, we grew by 10% via new hires and our turnover rate was 32.5%.

Company-wide, full-time employee gender diversity

Employees	♂ Women	♀ Male	♂ % Women	♀ % Male
Senior Management	2	5	29%	71%
Middle management	6	18	34%	75%
Non-management	31	61	32%	66%
Total	39	84	32%	68%

Our leadership

Saar Safra,
CEO & Co-Founder

Saar was formerly CTO of Ad4Ever, which was acquired by aQuantive and then Microsoft. He also founded ActiveBuilding, acquired by RealPage. Saar has an MBA from the University of Washington.

Tai Nicolopoulos,
VP Marketing

Tai previously led marketing at CircleUp, SeedInvest by Circle Internet Financial, and Knotel. She received her BA and MA in Psychology from Stanford University.

Eliyah Radzyner,
VP Revenue & Co-Founder

Eliyah is a professional beekeeper. Prior to Beewise, he co-founded agriculture bootstrap Arugga. He has a BS in Agriculture and Biology from the Hebrew University of Jerusalem.

Rami Aviram,
CFO

Rami Aviram was previously CFO at ENDYMED. He is a CPA, and holds both a BSc in Information Systems and Economics and an MA in Economics from Haifa University.

Nir Shachar,
VP R&D

Nir previously led R&D at XACT Robotics. He has a BS in Engineering and MBA from the Technion Israel Institute of Technology, and an MS from Ben-Gurion University.

Supporting our employees

We are committed to providing employees with the tools and support they need to thrive.

Parental Leave (2024)

	♀	♂	Total
Employees that were eligible for parental leave this year	2	8	10
Employees that took parental leave this year	2	0	2
Employees that were due to return for parental leave this year	1	0	1

Return to work rate
100%

We provide health insurance for free to all employees. All employees are eligible for healthcare plan coverage at 100% for medical, dental, and vision care.

To support a healthy work-life balance, we offer unlimited paid time off, so employees can unwind and recharge, always bringing their best selves to work.

Our generous parental leave plan provides support to our employees during one of life's most important transitions, ensuring they have time to bond with their growing families without added stress. This benefit reflects our commitment to a healthy work-life balance and reinforces our culture of care and respect.

We ensure all personal health information and data is private and accessible only to those eligible to view it according to law.

We ensure fair and equal remuneration and we use standard best practices to assess professional background and relevant years of experience when determining salaries.
of experience when determining salaries.

Training & education

We encourage our employees to grow professionally and personally.

Our talent experience, engagement, and development strategy is designed to constantly expand our training offerings and provide new learning opportunities to employees, throughout their career trajectory.

In 2024, each employee received an average of 9 hours of training.

At Beewise, we consider open communication and collaboration to be critical for professional success. We believe that managing an individual's career development should be a collaborative process between an employee, their manager, and Beewise leadership.

Training hours provided (all locations)

By employment category	Total Hours	Average Training Hours Per Employee
Senior	**58**	**8**
Middle	**289**	**12**
Non-management	**772**	**8**
Total	**1,119**	**9**

Safety & governance

The health and safety of our people is a top priority at Beewise.

We work with an external professional safety expert to identify and monitor workplace safety issues and minimize risk. The safety expert conducts regular examinations of our facilities and work processes. They share the results of these reviews with senior management in regular reports, including recommendations for remediations when necessary.

We encourage employees to report hazardous situations to their manager or the General Manager of a site, and there are strict policies in place to protect employees against any possible reprisals. The external safety expert investigates all health or safety instances, and we provide training sessions to relevant employees to prevent recurrences, when relevant.

In 2024, there were zero work-related injuries to employees.

Governance

To ensure proper management, we have a corporate governance system in place, and a wide range of policies that guide our practices at work. Senior management and the CEO receive guidance from the Board of Directors, which has seven members, including five non-executive members.

The Beewise Code of Ethics reflects our values as a company and provides guidance to employees regarding ethical business conduct and behavior, anti-harassment, conflicts of interest, and more. Every employee receives the Code, and we conduct training once a year through a third-party organization.

In alignment with our values of transparency and open communication, we interact regularly with our stakeholders. For employees, this includes regular all-hands, three-month check-ins for new hires, and an annual employee performance and satisfaction survey. For our investors, customers, partners, and the media, we publish annual reports, and provide regular updates through our website, email newsletter, and blog.

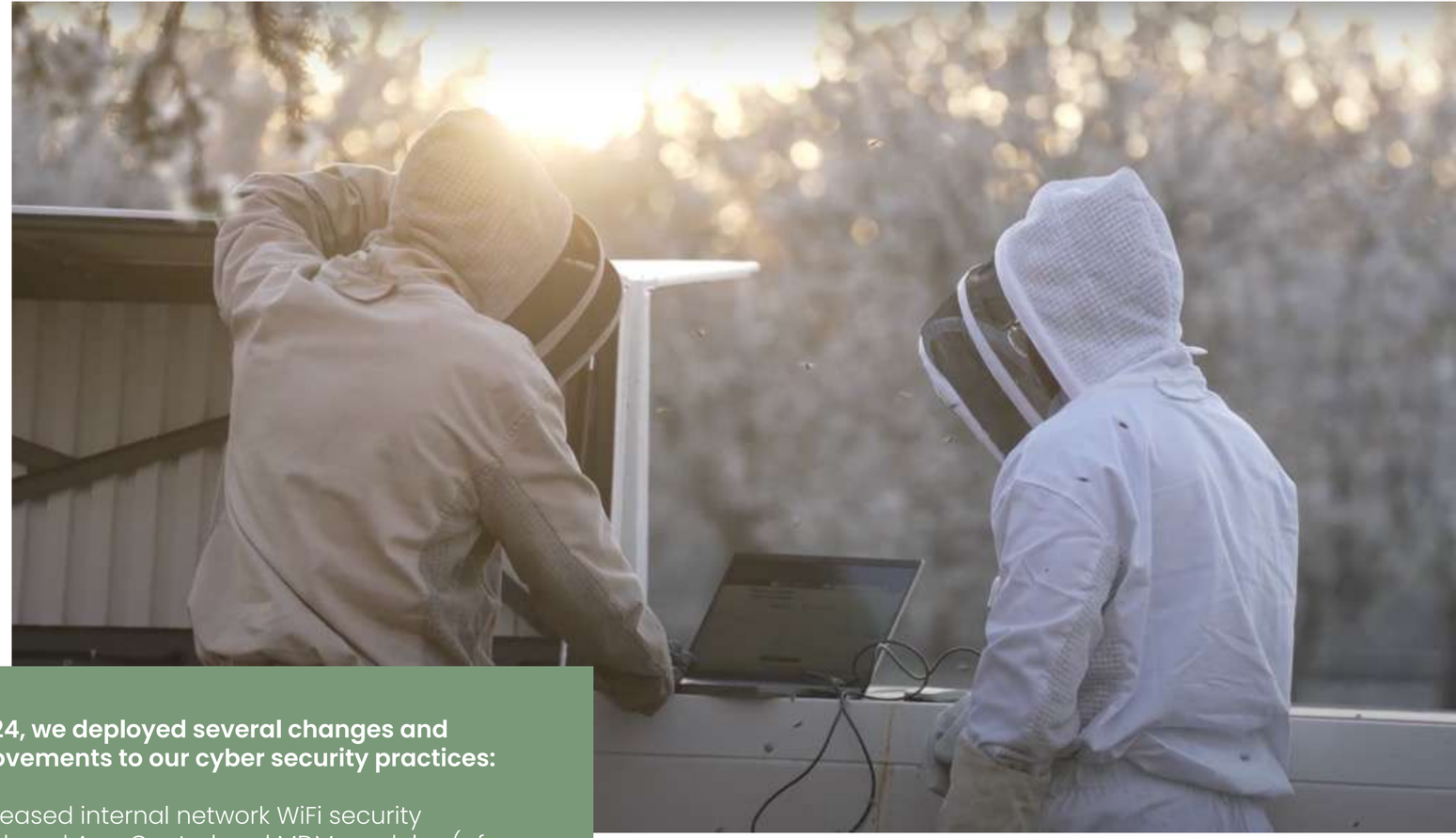
In 2024, we developed business continuity plans for our business departments. We developed these plans with an external expert consultant and included detailed information on how each department would resume business functions in the event of a natural disaster or any other threats to business operations. We developed business continuity plans for HR, Operations, Finance, and Product, across various geographic locations.

Privacy & data security

We are committed to the highest standards of data security and privacy.

We take a proactive approach to protect the data of our employees and customers, and have implemented a variety of policies and programs to identify and address data security risks. We make all employees aware of our security and privacy policies and practices, providing information and training during the onboarding process.

We follow all relevant regulations for our core products and services regarding monitoring, blocking, content filtering, and censoring. In 2024, we had no cybersecurity incidents.



In 2024, we deployed several changes and improvements to our cyber security practices:

- Increased internal network WiFi security
- Deployed App Control and MDM modules (of ManageEngine EndPoint Central) to all clients
- Enforced mandatory MFA to critical systems
- Conducted Management Table-top drill for DR and BCP
- Created and implemented new security policies such as Use of Gen AI by employees
- Implemented continuous Phishing Campaigns (updated monthly) to keep employees aware and alert

In addition, we continued conducting annual reviews and testing and added Critical Systems configuration reviews and tools evaluations.

Conclusion

Looking ahead

Plans for 2025 include research partnerships with both academics and bee health non-profits, as well as further commercial expansion to extend our impact on bee health, food security, and biodiversity.

- Deepen research partnerships with bee health academics and non-profits in the areas of Varroa management and pollination outcomes
- Continue to innovate our product around new, more efficient BeeHome™ form factors
- Produce the world's first honey from AI and robotics-powered hives, at scale
- Expand relationships with the US agricultural ecosystem
- Continue serving sustainability leaders in the built environment through expanding Bees for Buildings

SASB tables

Topic	Accounting metric	Category	Unit of measure	Code	Response
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) C2-e	FB-AG-110a.1	Page 24
	Discussions of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion & Analysis	n/a	FB-AG-110a.2	Page 24
	Fleet fuel consumed, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AG-110a.3	Page 24
Energy Management	(1)Operational energy consumed, (2)percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	FB-AG-120a.1	Page 24
Water Management	(1)Total water withdrawn, (2)total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic meters (m3), Percentage (%)	FB-AG-140a.1	Not relevant to Beewise
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion & Analysis	n/a	FB-AG-140a.2	Not relevant to Beewise
	Number of incidents of non-compliance associated with water quantity and/or quality permits, standards, and regulations	Quantitative	Number	FB-AF-140a.3	None
Food Safety	Global Food Safety Initiative (GFSI) audit (1)non-conformance rate and (2)associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-AG-250a.1	Not relevant to Beewise

SASB tables

Topic	Accounting metric	Category	Unit of measure	Code	Response
	Percentage of agricultural products sourced from suppliers certified to a Global Food Safety Initiative (GGFSI) recognized food safety certification program	Quantitative	Number, Metric tons (t)	FB-AG-250a.2	(NRB)
	(1) Number of recalls issued and (2) total amount of food product recalled	Quantitative	Number, Metric tons (t)	FB-AG-250a.3	(NRB)
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) seasonal and migrant employees	Quantitative	Rate	FB-AG-320a.1	(1) TRIR = 0 (2) 0 (3) n/a
Environmental & Social Impacts of Ingredient Supply Chain	Percentage of agricultural products sourced that are certified to a third-party environmental and/or social standard, and percentages by standard	Quantitative	Percentage (%) by cost	FB-AG-430a.1	Not relevant to Beewise (NRB)
	Suppliers' social and environmental responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) major and (b) minor non-conformances	Quantitative	Rate	FB-AG-430a.2	(NRB)
	Discussion of strategy to manage environmental and social risks arising from contract growing and commodity sourcing	Discussion & Analysis	n/a	FB-AG-430a.3	(NRB)
GMO Management	Discussion of strategies to manage the use of genetically modified organisms (GMOs)	Discussion & Analysis	n/a	FB-AG-430b.1	(NRB)
Ingredient Sourcing	Identification of principal crops and description of risks and opportunities presented by climate change	Discussion & Analysis	n/a	FB-AG-440a.1	(NRB)
	Percentage of agricultural products sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage (%) by cost	FB-AG-440a.2	(NRB)

SASB tables

Table 2: Activity metrics

Accounting metric	Category	Unit of measure	Code	Response
Production by principal crop	Quantitative	Metric tons (t)	FB-AG-000.A	Not relevant to Beewise
Number of processing facilities	Quantitative	Number	FB-AG-000.B	Not relevant to Beewise
Total land area under active production	Quantitative	Hectares	FB-AG-000.C	Not relevant to Beewise
Cost of agricultural products sourced externally	Quantitative	Reporting currency	FB-AG-000.D	Not relevant to Beewise

Learn more

To learn more about Beewise, please visit

www.beewise.ag.

To inquire regarding potential sustainability partnerships with Beewise, please contact us at

hello@beewise.ag

1 (844) 352-BEES


Thank you
BEEWISE