



Select Harvest U.S.A.

**Stewardship of Our Land,  
Resources and People, Starts  
from the Ground Up**

SUSTAINABILITY 2022

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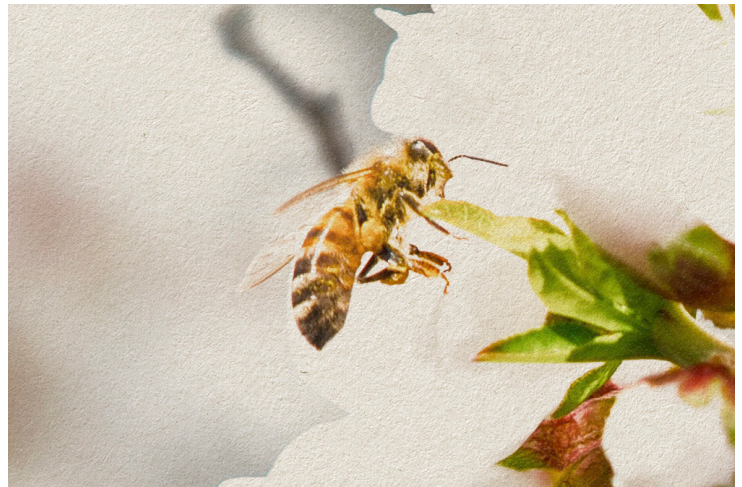
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# Creating Healthy Ecosystems

## Certified Bee Friendly Farming

In 2019, Select Harvest USA began working with the Pollinator Partnership's Bee Friendly Farming Certification program. By 2021, 10,152 acres of our owned and managed orchards were certified. We then took the program to our 100+ independent almond grower-partners and, by the end of the 2021/22 crop year, had helped certify over 8,122 additional bee friendly acres.

Select Harvest will continue to support our grower community with outreach, education, program administration and resources to improve their farming practices and seek certification under the Bee Friendly Farming program. By end of the 2024/25 crop year, we aim to have 20,000 grower acres certified under Bee Friendly Farming.



**18,274**  
— Acres —

BEE-CERTIFIED

**2,064**  
— Acres —

PERMANENT BEE HABITAT

**3,046**  
— Acres —

MANAGED COVER CROPS

## Regenerative Agriculture

Regenerative agriculture involves a variety of different farm management practices, all focused on achieving a singular outcome: healthier soils. When soils are healthy, they provide valuable benefits like improved water penetration and retention, higher fertility and enhanced carbon sequestration. Regenerative agriculture makes a tangible impact on farm operation, and has long been a part of our management practices.



### Industry Leading Proprietary Shell Composting Operation

Rather than truck in compost from outside sources, in 2013 we decided to make our own. Our industry leading compost program helped us eliminate orchard waste and reduced our reliance on fertilizers by 20%.

When almonds are harvested, two outer layers are removed in order to yield the nut within. The outermost layer (the hull) is provided to livestock growers as a feed supplement. The remaining layer (the shell) is a dry and fibrous material that has historically been used for livestock bedding, mulched into orchards or spread on roadways to reduce dust. Today, 100% of our shells go to compost.

In a process that took years to perfect, we are able to convert this material into nutrient-rich compost to nourish our trees, reduce our fertilization needs, build biodiversity into our soils and enhance the soil's water-handling properties. By composting this waste product, Select Harvest USA has effectively closed the gap in zero-waste almond farming.

### Carbon Sequestration

Composting, cover crops and Whole Orchard Recycling all help to reduce carbon in our atmosphere by leveraging plants' natural usage of carbon dioxide as a key building block in their growth. By returning organic plant material to the soil, we enhance the soil's ability to capture carbon from the atmosphere – the process of carbon sequestration.

While Select Harvest USA has not yet achieved our goal of becoming carbon neutral, we believe we are as close as any in our industry to doing so. For that reason, we have committed to undertaking a carbon cycle study and closely examining the carbon impact of all aspects of our farming practices.

### Cover Crops Promote Biodiversity and Encourage Pollinator Populations

While our cover crop program is aimed at providing forage for our pollinators and are one of the most impactful things an almond farmer can do for bees, cover crops provide several key soil benefits as well. When an orchard is terminated, the plant material is mowed, mulched and left in our orchards to decompose. This provides additional food for the microflora introduced with our composting program, further bolstering the biodiversity of our soils. Additionally, the dead root systems enhance water penetration, aiding irrigation efficiency.



### Whole Orchard Recycling

A typical almond orchard has a useful lifespan of 20 to 25 years, after which it must be removed and replanted to return to productivity. Historically, the process of removing the mature trees requires deeply ripping into the earth, disrupting the microorganisms and releasing carbon that had been locked in the soil. The branches and stumps are then burned as waste, releasing more carbon dioxide and pollutants into the air. We believed there had to be a better way.

Select Harvest USA has begun incorporating principles of Whole Orchard Recycling, which involves the grinding or chipping of the woody biomass of orchard trees upon removal and integrating the material into the soil. This returns organic matter into the soil, provides a long-term nutrient source, helps sequester carbon and avoids burning of the biomass. At present, we are composting the bulk of our orchard biomass, grinding stumps to return to soil and refining protocols that work within our orchards. We expect to have Whole Orchard Recycling fully-implemented by 2025.



# Respecting Our Resources

## Technology Driven Water Wise Irrigation

Technology is the key to unlocking water efficiency, thanks to advancements in in-field monitoring such as pressure bomb testing and our deployment of 16 weather stations that help us decide where and when to irrigate. Micro fan and drip irrigation emitters paired with pressure regulators and variable speed pumps ensure precision control over water application. All validated by soil moisture probing.

Since 2000, Select Harvest USA has cut water use by 25% per acre. That's enough water to supply nearly 48,000 average US households for an entire year. And we're not finished – our goal is to reduce water use by an additional 10% by the year 2030, which we expect to achieve through emerging technologies like automation, AI-powered monitoring and scheduling protocols.

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**Since 2000, Select Harvest USA has cut water use by 25% per acre.**

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**25%**

REDUCTION IN WATER USE PER ACRE SINCE 2000

SAVINGS EQUIVALENT TO

**47,975**

AVERAGE US HOUSEHOLDS' ANNUAL WATER-USE

**10%**

ADDITIONAL REDUCTION ANTICIPATED BY 2030



## 5.97 Megawatts of On-Site Renewable Energy

Utilizing solar energy has long been a priority for Select Harvest USA. Our buildings, our carports – even our fields – are all home to solar arrays, installed to help offset our electrical needs. And we're currently working to convert the majority of our pumping stations from diesel to solar-powered electric.

All of our solar installations combined to produce 5.97 megawatts of electricity in 2021, enough to cover 100% of the electrical needs at our hulling and shelling facility, 100% at our inshell facility, 63% at our kernel processing facility and 60% of our irrigation needs.

### 100% Solar and Renewable Energy by 2030

While innovation, expansion and equipment changes mean that our energy needs are constantly changing, our goal is to reach 80% electrical offset in our kernel processing facility by 2025, and we are assessing the feasibility of 100% offset by 2030. At present, our tractors and farm equipment remain the last bastion of fossil fuel use. When viable electric equipment becomes available, we will eagerly explore their adoption as a means of eliminating fossil fuel use in our orchards. Until then, we are working to see a 50% reduction in fossil fuel use by 2030.

### Electric Vehicle Conversions

To leverage the availability of on-site solar energy, over half of our facility vehicles have been converted to electric power. This includes forklifts, lifts and personnel movement. We're even exploring electric tractors. We estimate that our electric fleet reducing our fuel consumption by 2,900 gallons of fuel annually.



HULLING/SHELLING:

**1.54**  
**Megawatts**

OFFSETS 100% OF  
ELECTRICITY NEEDS

KERNEL/VALUE-ADD FACILITY:

**1.09**  
**Megawatts**

OFFSETS 63% OF  
ELECTRICITY NEEDS

INSHELL:

**393**  
**Kilowatts**

OFFSETS 100% OF  
ELECTRICITY NEEDS

IRRIGATION:

**2.95**  
**Megawatts**

OFFSETS 60% OF  
ELECTRICITY NEEDS

## Responsible Fertilizer, Pesticide and Herbicide Use

An operation of the scope and sophistication of Select Harvest USA utilizes fertilizers, pesticides, fungicides and herbicides in a wide variety of applications, from crops and sanitation to food safety and production.

We carefully and comprehensively evaluate all chemical uses in our orchards and facilities, and implement strict application protocols to reduce the risk of contamination, unintended outcomes and environmental safety. Just as important, we have worked to eliminate the most environmentally-impactful chemicals and become more efficient in chemical use across the board, reducing the amount we use and doing more to mitigate their potential environmental impacts.

### Integrated Pest Management (IPM)

A driving force behind our reduction in chemical use has been our comprehensive Integrated Pest Management (IPM) program. Instead of spraying for pests as a first response, we now rely on passive pest control tools to reduce the likelihood of an outbreak, followed by trapping and monitoring systems to help us determine if – and where – an outbreak is occurring.

IPM enables us to pinpoint chemical applications to a specific pest in a specific location, and helps inform the selection and timing of chemical applications based on environmental factors to reduce the risk of unwanted outcomes like chemical drift. This is especially important given the chemistries of today's chemicals, which result in faster degradation and limited lethality. While meant to protect the environment, these chemicals often require multiple applications for the intended effect. Additional application events can raise the risk of unintended environmental impacts; thus, making our IPM just as important as using safer chemicals.

# Promoting Healthy Communities

## Investing in People is Good Business

We don't underestimate the power and importance of a strong community. We're committed to investing in education, infrastructure and causes that make a difference.

In fiscal year 2021/22, Select Harvest USA donated over \$60,000 in support of community-based programs. These programs include local scholarship programs, 4H and FFA, Boys and Girls Clubs and Turlock-based Jessica's House supporting those dealing with loss and grief. We also support various fundraisers and community events that our team members and their children participate in with product donations and sponsorships.



**\$20,000**  
**Contributed**

TO JESSICA'S HOUSE  
(5-YEAR ONGOING COMMITMENT)

**\$5,000**  
**Contributed**

BOYS AND GIRLS CLUBS  
COMMUNITY POOL

PARTICIPATION IN:

- Ag scholarship funds
- Concordia University Softball program
- FFA • 4H
- Community Fundraising



# Focused on the Future

At Select Harvest USA we understand the importance of future focused action. We also recognize that new technologies, new approaches to problem solving, and good old fashioned ingenuity can quickly take things that may seem out of reach today and make them commonplace tomorrow. This is why we are continually evaluating our sustainability programs, exploring, testing and adapting. Today we have several initiatives underway that we believe will become key components to our stewardship of our lands and communities.



## Greenhouse Gas Emissions

Reducing our global GHG emissions are central to the efforts to mitigate the impacts of Global Warming. Adopting solar power, electric vehicles, regenerative farming practices and composting waste shells have all helped reduced our carbon footprint. But by how much? And how much further do we have to go before we're carbon neutral. What are our biggest carbon emitters? We can guess at many of these, but we really won't understand them without a comprehensive, science-based accounting of our GHG emissions. This is why we are taking the first step in this process and have committed to a full scope 1, 2, and 3 emissions footprinting by the end of 2023 with strategic evaluation, goal setting, and reduction programs to follow.

## Bees

We're continuing to invest in protecting our pollinators. We are testing new cover crop plantings, piloting the addition of mason bees, working on adding new habitat and partnering with our grower community to certify additional acres under the Bee Friendly Farming program. We aim to exceed 30,000 certified acres under our umbrella and doubling our use of cover crops by 2025.

## Whole Orchard Recycling

WOR may seem simple at first glance: grind up the woody mass of the orchard trees and reincorporate this organic matter back into the soil before replanting a new orchard. But how this can impact soil health and nutrient availability can determine how well a young orchard thrives. Is there such a thing as too much woody biomass? Does the size of the chips impact soil health? Does compost enhance growing conditions or might it make the soil too 'hot'? How much carbon do we sequester doing WOR? We have a lot to learn and have trials planned to monitor, test new techniques and develop a system that works for both our environmental goals and our production needs. By 2025 we aim to have WOR fully integrated – diverting woody waste from other disposal options – keeping that organic matter and sequestered carbon in our fields.



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