

Environmental

Limoneira's Mission is to preserve and promote its tradition, heritage and legacy in agriculture, community development and stewardship to maximize value for its shareholders

Limoneira's objective is to provide high quality products and services.

While in pursuit of that objective we will adhere to the highest standards of integrity and fairness in our relationships with employees, customers, shareholders, suppliers and our community.

Furthermore, it is our obligation to:

- Protect and expand our asset base to assure long-term profitability
- Be responsible trustees in the protection and improvement of our environment
- Provide leadership and resources for the betterment of our community
- Encourage and support the development of our employees

Risks Related to Our Agribusiness Division

Adverse weather conditions, natural disasters, including earthquakes and wildfires, and other natural conditions, including the effects of climate change, could impose significant costs and losses on our business.

Fresh produce is vulnerable to adverse weather conditions, including windstorms, floods, drought and temperature extremes, which are quite common and may occur with higher frequency or be less predictable in the future due to the effects of climate change. Unfavorable growing conditions can reduce both crop size and crop quality. In extreme cases, entire harvests may be lost in some geographic areas.

Limoneira's Vendor Code of Conduct:

Limoneira's Board and Management expect the Company's vendors and supplier's products and services to adhere to the environmental standards implemented by Limoneira:

- The use of recyclable materials to the extent practicable.
- The implementation of sustainable energy sources to the extent practicable.
- The reduced use of water where practicable.
- The fair and equal treatment of employees and without discrimination based on gender, age, race and sexual orientation

Climate Change Risks

Adverse weather conditions, natural disasters, including earthquakes and wildfires, or other natural conditions, including the effects of climate change, could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects.

Limoneira's Climate Change Strategy

Sustainability involves a number of complex interactions and relationships that intersect. They involve, but are not limited to, our planet, our communities, our employees and our business practices.

Limoneira's Sustainability Matrix classifies our stewardship initiatives according to whether they benefit resources, nature or people.



Climate Change Performance

Solar

- Limoneira has 7 solar installations across the company
- These projects produce a total 7M KW annually and will reduce 86,830 tons of CO2 over a 25-year period

- Limoneira is generating clean energy and capturing savings too. As energy costs continue to rise, we have locked in our electrical rates. The projects reduce our electrical costs from Southern California Edison by approximately 70%
- Our solar projects enable us to be 50% off the grid and we have a goal of being 100% off the grid by 2025
- Over two thousand Hanwha Q Peak solar modules have been installed on the roof of Limoneira's new packinghouse which offset approximately 680 tons of CO2 and 420lbs of NOX annually.

Tesla Battery Project

- Tesla's 400kWh scalable energy storage system reduces energy costs and improves reliability for demand charges and shifts energy use from peak to off peak times.

Healthy Soils

- Landfill gases have an influence on climate change. The major components are CO2 and methane, both of which are greenhouse gasses. In terms of global warming potential, methane is over 25 times more detrimental to the atmosphere than carbon dioxide
- Landfills are the third largest source of methane in the US
- A 10-acre facility on Limoneira property receives over 200 tons a day of organic green waste that would otherwise be transported to landfills
- The end-product produced at this facility helps us and other growers to significantly reduce the use of water, herbicides and fertilizers
- Reduction in agricultural inputs: Fertilizers (primarily nitrogen reduced by 20%) | Herbicides reduced by 20% | Water reduced by 33%
- Limoneira has undertaken a project in conjunction with the Ventura California Resource Conservation district to measure the impact that compost and mulch have on soil health metrics, water use, tree health, GHG emissions and resilience to pest pressures in citrus production.

The project will provide a platform for California Central Coast citrus growers to learn about and adopt soil health practices that build economic and ecological resiliency within citrus operations.

The project site is a 45-acre block that has in recent years, been leased to conventional row crop growers. These growers managed the land with intensive tilling and chemical and fertilizer inputs, producing seasonal row crops without reinvesting in soil health, structure or nutrients. The years under this management regime has degraded the soil's structure and capacity to hold nutrients, retain water, and sustainably support crop growth. Additionally, dramatic water and nutrient runoff along a barranca that drains into the Santa Clara River has taken place.

A perennial citrus orchard that integrates soil conservation practices to rebuild soil health, reduce reliance on chemical inputs and lay the groundwork for long-term sustainability has been introduced to the project area.

This study will measure and quantify the benefits of mulch and compost application to a citrus orchard with particular attention to ecosystem services, greenhouse gas emissions, and soil health. Mulches and composts have shown to benefit orchard systems by adding organic matter, maintaining soil moisture, and protecting against pests and invasive weeds.

Additionally, this will help us to enhance on-farm water use efficiency and improve water quality for tree uptake and runoff into the Santa Clara River. Furthermore, according to the COMET (Carbon Management Evaluation tool) planner, the application of mulch and compost over the duration of the project will sequester approximately 64 tons of CO₂ equivalent, turning the atmospheric carbon into a source of carbon usable to soil microbiology and root systems.

Limoneira Board's Oversight of Climate-Related Risks and Opportunities

Corporate responsibility is an important priority for the Board and the Company. We have a long history of strong commitment to being an ethical and responsible company acting with integrity and respect for each other, our communities and the environment. The Board of Directors considered such commitment when it approved the charter for the Nominating and Corporate Governance Committee on January 28, 2020. In the charter, the Board of Directors tasked the Nominating and Corporate Governance Committee with the responsibility for overseeing our environmental and social responsibility and sustainability programs and practices, including considering potential long- and short-term trends and impacts that environmental and social responsibility and sustainability issues may have related to our business.

The Nominating and Corporate Governance Committee is also responsible for overseeing the Company's public reporting on environmental and social responsibility and sustainability programs and practices. The Company's current programs and practices are comprehensively compiled in our publicly-released Sustainability Highlights Report. The Sustainability Highlights Report is available on our website at www.Limoneira.com.

Environmental, Social and Governance Highlights

The Company recognizes the increased emphasis by shareholders, business partners and other key constituents in recent years on environmental, social and governance ("ESG") programs that are embedded into day-to-day business policies and practices. The Company is proud of its commitment to doing the right thing for communities, the environment and its employees and has taken significant steps in recent years related to solar power, green waste recycling, integrated pest management and patented low-tech water projects and creating best-in-class benefits programs for its employees worldwide. The Company is committed to improved reporting around these and other programs that impact ESG visibility. At present, an executive-led cross-functional team has been tasked with taking meaningful steps in fiscal

2020 to improve the Company's ESG reporting metrics and to establish a series of long-term goals that demonstrate its commitment to further improvement.

Fleet Fuel Consumption- Farm Level Data

Approximately 20 to 40 trucks leaving Limoneira's Packing House daily depending on the season and the weather and they carry between 21,600 to 43,000 lbs.

Weekly round trips once a week to Nipomo from Santa Paula- 182 miles round trip. Daily trips to Fillmore from Santa Paula- 19 miles round trip. Fuel usage is 5 to 8 miles per gallon.

Santa Paula Packinghouse- Forklifts- LPH, Electric-25

Oxnard Packing House- Forklifts, LP2, Electric-8

Toyota, Nissan, Hyster

Distribution Points - Final destination, Vineland New Jersey,

Trucks: 2 per day in Fall and Winter, down to 1 per week in Spring, zero in Summer, 40,000 lbs per load.

Miles: Santa Paula to Vineland, NJ = 2,434 miles one way.

Fuel Usage: 6.5 miles per gallon

Water Withdrawal/Scarcity

The lack of sufficient water would severely impact our ability to produce crops or develop real estate.

The average rainfall in Ventura, Tulare, San Luis Obispo and San Bernardino Counties in California is substantially below amounts required to grow crops and therefore we are dependent on our rights to pump water from underground aquifers. Extended periods of drought in California may put additional pressure on the use and availability of water for agricultural uses, and in some cases governmental authorities have diverted water to other uses. As California has grown in population, there are increasing and multiple pressures on the use and distribution of water, which many view as a finite resource. Lack of available potable water can also limit real estate development.

Our water resources include water rights, usage rights and pumping rights to the water in aquifers under, and canals that run through, the land we own. Water for our farming operations is sourced from the existing water resources associated with our land, which includes rights to water in the adjudicated Santa Paula Basin (aquifer) and the un-adjudicated Fillmore and Paso Robles Basins (aquifers). We use ground water and water from local water districts in Tulare County and we use ground water in San Bernardino County. Following our acquisition of Associated, we began using federal project water in Arizona from the

Colorado River through the YMIDD. In February 2017, we acquired water rights with our purchase of 90% of PDA and in July 2018, we acquired additional water rights in Chile with our acquisition of San Pablo.

California has historically experienced periods of below average precipitation. Though recent precipitation has brought relief to California's drought conditions, the last few years have been among the most severe droughts on record. Rainfall, snow levels and water content of snow pack had previously been significantly below historical averages. These conditions resulted in reduced water levels in streams, rivers, lakes, aquifers and reservoirs. The governor of California declared a drought State of Emergency in February 2014, which was lifted in April 2017. Federal officials oversee the Central Valley Project, California's largest water delivery system and 100% of the contracted amount of water was provided to San Joaquin Valley farmers in 2019 through 2017 compared to 75% in 2016 and zero in 2015 and 2014.

For fiscal year 2019, irrigation costs for our agricultural operations were \$0.3 million lower than fiscal year 2018. Costs may increase as we pump more water than our historical averages and federal, state and local water delivery infrastructure costs may increase to access these limited water supplies. We have an ongoing plan for irrigation improvements in fiscal year 2020 that includes drilling new wells and upgrading existing wells and irrigation systems.

We believe we have access to adequate supplies of water for our agricultural operations as well as our real estate development and rental operations segments of our business and currently do not anticipate that future drought conditions will have a material impact on our operating results. However, if future drought conditions are worse than prior drought conditions or if regulatory responses to such conditions limit our access to water, our business could be negatively impacted by these conditions and responses in terms of access to water and/or cost of water.

Strategies to Mitigate Water Withdrawal or Scarcity Risks

Safeguarding Water

Water is rapidly becoming as vital as oil, and the supply of this natural resource faces continual pressure from growing populations, economic activities, and the increasing need for agricultural food production.

Limoneira takes important steps to protect this valuable resource. Water quality and supply is maintained through rigorous lab testing, filtration systems, and a network of micro sprinklers.

Efficiency is the name of the game in treading lightly on the land and providing bottom line results.

As both a leading provider of agricultural products and a community builder, Limoneira recognizes that balance is essential to ensuring that demand is served. We work with a variety of stakeholders including governmental agencies, grower partners and community leaders on this important issue.

Water Probes are part of our innovative water management practices. Soil Moisture probes measure volumetric water content and are connected to data loggers utilized in the irrigation control system. Soil Moisture Stations log water data and send it to a main controller.

- Drones are used to monitor tree health
- Each station has a radio unit powered by a solar panel
- There are three sensors connected to each station under wetted areas at specified depths
- This system is designed with one water station per orchard block. The irrigation control system receives data from the sensor stations. It is uploaded from the controller to the internet and can be viewed remotely from a cellphone or a computer
- AGQ Vacuum Tubes are used to capture water as it passes through soil at three different depths (8",16",24" - 3 tubes per station)
- Captured water can be analyzed for fertilizer concentrations and other materials injected through the irrigation system at each depth
- Water with appropriate fertilizer quantity to desired root zone depths is monitored
- Moisture sensors can determine when orchards are at full water holding capacity, thus reducing run off and wasted water
- Dual line drip hoses are also used to enable water to penetrate down which create a deep and sturdy root system and help reduce weed and herbicide use

The link below contains sewer plant flows and all the meter readings for 2019. The first page is influent/effluent flows. Influent is the combined sewer flow from all Limoneira sewer lines into the sewer plant. Effluent is the total discharge of treated water that leaves the sewer plant. This sheet contains daily flows throughout the year as well as monthly totals at the bottom of each monthly column and the yearly total of both at the very bottom.

The next 2 pages (MGD inf and MGD eff) are daily flows converted to Million Gallons Per Day. Next are Monthly meter readings and totals for the year are listed at the bottom of each column. OF well is listed in gallons and the other data is in AC-ft or 100 Cu Ft units.

[DATA HERE](#)

Water Recycled and Reused

- Limoneira's new natural wastewater system uses patented technology and is a low carbon footprint project that has a series of gravity fed ponds that circulate and clean 30 million gallons of water annually with natural vegetation, local plants and fine gravels
- Ultraviolet Rays (UV) remove any bacteria in the water to achieve California Title 22 drinking water standards
- Water is currently used for landscape irrigation
- As recycled water becomes more of the norm in daily use and approved for food safety, we will use cleaned water to irrigate our orchards

Biodiversity

Limoneira is committed to biodiversity. [A video of a recent project is included here.](#)

Palm Oil

Limoneira Company does not use and has no intention of using Palm Oil in any of its products or processes.

Waste

100% of Limoneira's green waste that would typically go to landfills is diverted to a processing center for processing into organic mulch that is spread on our orchards.

Waste to Energy

- Limoneira and partners are also transforming our existing green waste compost facility into a 26-acre Biogenic Energy Park that will convert organic waste into biogenetic renewable energy
- The collection and processing of organic waste will be converted to sustainably manufactured materials for energy conversion and fertility products as an alternative to landfilling
- The utilization of natural biological processes and other technologies will convert organic waste streams into electrical power, heat and low carbon fuel for private customers or public utilities
- Natural and biological processes will also be used to convert organic waste streams into nonchemical fertility products which support sustainable agriculture
- This waste to energy project helps meet Renewable Energy Standards and increases landfill diversion and reduces Greenhouse Gas Emissions by 29% through food waste recycling
- It also produces carbon credit energy and produces low-carbon fuels

Limoneira instituted a corporate recycling program in the early 2000's. All of the following items are recycled:

- Cardboard
- Paper
- Magazines
- Newspapers
- Glass containers
- Plastic bottles
- Metal containers

Food, landscape, bathroom, oil, chemical or liquid waste is disposed of according to environmental guidelines

Packaging

Limoneira sells citrus and avocados. Our citrus is either sold in bulk or in recycled packaging. Limoneira avocados are sold through Calavo.

Packaging Materials

Cartons - we use corrugated cartons with 20% recycled wood pulp. Any higher recycled content and the cartons crush in wet environments like our cold storage. We use kraft-brown cartons with relatively little ink. This material is highly compostable/biodegradable and is much more sustainable than our previous cartons which used a glossy pre-print label laminated to the entire surface of the top.

Bags - we primarily use recyclable polyethylene (PE) net bags. We have tried different plant-based materials (i.e., corn starch, palm fiber), but they do not hold up well in wet or high UV-light environments such as a grocery store produce shelf. We continue to follow developments in this field in great interest and will continue to try new prototypes to determine their actual viability.

Fruit Coatings - We coat our fruit with food-grade beeswax or vegetable-based wax. This is a change from the previous lac-resin based wax used previously. The new wax also does not contain any soy or morpholine (an emulsifier previously common).

Social Factors

Limoneira is committed to protecting the human rights, safety and dignity of the people who contribute to the success of our business. We also seek to support the welfare of the people who produce, process and harvest the products we sell.

We live by our Supplier Code of Conduct in how we approach our business. This Code is global in its scope, and applies to all suppliers and their facilities, as well as our manufacturing facilities. In order to align with international standards, it is derived from the policies, standards, and conventions of the United Nations (UN) and the International Labor Organization (ILO), as well as other leading independent standards such as the Responsible Business Alliance (RBA) and Worldwide Responsible Accredited Production (WRAP). Limoneira supports the United Nations "the Human Right to Water and Sanitation" in General Assembly Resolution 64/292 on 28 July 2010. It recognized the right of every human being to have access to sufficient water for personal and domestic uses.

Our Supplier Code of Conduct

Ultimately, the Code was established to protect the human rights and safety of the people who produce, process and/or harvest the products we sell, while recognizing and respecting the cultural and legal differences found worldwide. To this end, Limoneira:

Prohibits slave labor, human trafficking, illegal child labor, illegal prison labor, physical and sexual abuse, bribery or attempted bribery, and health and safety conditions posing immediate risk to life and limb

Expects our suppliers to comply, at a minimum, with the applicable labor and environmental laws and regulations of the country where the merchandise is produced

Encourages our suppliers to work to achieve “Above and Beyond Goals”

Allows suppliers to use legal prison labor, to support rehabilitation and restitution, under specific conditions, which are outlined in our Global Policy on Prison Labor

Verification

Because of the number of suppliers the Company has and their geographic dispersion, it is simply not practical to audit on an ongoing basis to confirm that all suppliers are in compliance with all aspects of our Supplier Code of Conduct. Accordingly, we take a risk-based approach with respect to targeting audits and otherwise seeking to confirm compliance.

For those suppliers that are in full compliance with our Code of Conduct, subsequent audits may be less frequent, as a way to reward suppliers and to encourage continued compliance long term.

We recognize there is always room for continuous improvement and that some suppliers will need assistance to come into full compliance with our Code. For suppliers with audits that reveal the need for improvement, Limoneira requires Corrective Action Plans, re-audits to determine progress. Limoneira also offers other capacity building services that improve management systems to address the root causes of previous violations of the Code. Limoneira prefers to work with suppliers and/or their facilities to correct Code violations rather than apply sanctions that may cause further hardship to workers and their families who depend upon the employment.

Depending on the severity or lack of remediation of a Code violation(s), we do reserve the right to terminate our relationship and/or purchase order(s) with a supplier and/or their facility and have done so.

Employee Engagement

In 2019, Limoneira continued our programs to educate our employees on the importance of our Code through updated training and in-person seminars to review our Code requirements.

Ethical Charter on Responsible Labor Practices

Limoneira supports the efforts of the Produce Marketing Association and the United Fresh Produce Association to create an industry-wide framework on the responsible production and procurement of fresh fruit, vegetables and flowers. This mission is captured by the Ethical Charter, of which Limoneira is one of many endorsers representing the fresh produce industry that includes growers, labor agencies, packers, distributors, foodservice operators, marketers and retailers.

Limoneira's policy is based on The United Nations Charter sets forth the "inherent dignity" and the "equal and inalienable rights of all members of the human family." Upholding these human rights principles as "the foundation of freedom, justice, and peace in the world" is fundamental to every undertaking of the United Nations.

Limoneira Managers are trained annually on proper workplace procedures which includes our Mission Statement, Philosophy and workers rights. Limoneira's Human Rights Policy will be included in all future management training sessions.

Prior to engaging suppliers, Limoneira shares the company's human rights policies and requests documentation on environmental performance, labor practices and human rights performance

Limoneira through its communications and on its website addresses the risks of Human Trafficking and Slavery.

Limoneira's prohibits the use of child labor in its supplier policy and through communications.

OECD-FAO Guidance for Responsible Agricultural Supply Chains is part of Limoneira's Corporate Policy

The OECD-FAO Guidance for Responsible Agricultural Supply Chains (OECD-FAO Guidance) provides a common framework and globally applicable benchmark to help agri-businesses and investors contribute to sustainable development identify and mitigate adverse impacts. The guidance is relevant for all enterprises across the entire agricultural supply chain, from the farm to the consumer across a wide range of food and non-food commodities.

One of the key value-adds of the OECD-FAO Guidance is the framework on risk-based due diligence. The framework provides a step by step approach on how companies can integrate due diligence into their operations and supply chains. By implementing the recommendations of the OECD-FAO Guidance companies can systematically identify, assess and mitigate potential negative impacts associated with their business.

This OECD-FAO Guidance and due diligence framework was developed in collaboration with supply chain experts, business, civil society, unions and policy makers. It is a practical approach which Limoneira implements into our business models and processes.

Limoneira will add language to the company's 2020 annual report and any revisions/updates to the company's sustainability report based on the information provided above.

Limoneira company has identified risks in its annual report. Environmental risks are mitigated through new environmental procedures and processes.

Risks related to business relationships or human rights violations are discussed with partners, employees and suppliers. Limoneira employee and supplier training highlights these risks and methods for mitigating such risks.

Limoneira has processes in place and actively monitors security related to company data, company operations and employee welfare.

Limoneira undertakes management training with all managers annually to ensure compliance with company policies.

Each manager is encouraged to participate in professional development programs. Employees are evaluated annually and professional development training and resources are identified for employees by their managers.

All Limoneira employees are evaluated annually. As part of this evaluation process, employees self-report on satisfaction, engagement and personal development.

Limoneira is a signatory of the produce marketing association and united fresh's ethical charter which states the following:

Working Hours Employers manage working hours in accordance with applicable laws, recognizing that agricultural labor needs vary by season, crop and task, and workers are sometimes needed for shorter or longer time periods than a standard workweek. Employers provide rest periods if needed to support a safe and healthy workplace. Employers inform workers about their expectations regarding hours of work and gain their agreement at time of hiring

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To view additional documents on our **Corporate Governance**,
[please click here.](#)