



Made the right way.

2022 ESG Report



We are investing in the future of farming.

Together we can lead the way, sustainably.

Langtry Farms is committed to preserving its resources through a program of sustainable farming practices. Our commitment to sustainable farming is a result of our connection to the land and an appreciation for the people who farm it. As land stewards we are responsible for adapting our farming practices to promote our sustainability goals.

Our sustainability goals are informed by both science and common sense. Our farming practices focus on avoiding activities that generate carbon and negatively impact our environment and

natural resources. We are also implementing sustainable technology solutions to improve our operations, reduce resource intensity, and improve outcomes.

We are also recognize that the future success of Langtry Farms and our community depend on partnering with others who share our determination and willingness to invest resources in sustainable farming practices.

Sincerely, Langtry Farms

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165,000 OAK TREES PLANTED

**2,000 ACRES OF SUSTAINABLY
FARMED VINEYARDS**

1,000 SHEEP HELPING US FARM

100 OWL PERCHES INSTALLED



Get to know Langtry Farms:

Langtry Farms is a grower of wine grapes in the Napa Valley, Guenoc Valley, and Lake County AVAs of California's North Coast. From these vineyards the Langtry Farms winemaking team is able to craft unique wines that are a true representation of its high elevation volcanic soils.

Langtry Farms welcomes guests five days a week to its tasting room located within its winemaking facility. Please come to visit and experience firsthand our grape growing and winemaking with a history that dates back to 1888.



Sustainable Farming Timeline



1888 Celebrated actress and cultural icon **Lillie Langtry** invests in adjoining ranches in Guenoc Valley, California.



2022 John Deere JDLink technology is installed to remotely monitor emissions reducing equipment to maximize efficiency and reduce downtime. Langtry Farms joins Ag Funder as a Limited Partner to invest in agricultural technologies that are driven by ESG objectives.



2009 Wastewater from winemaking is processed using a custom designed and constructed pretreatment bioreactor and aeration system resulting in recycled water for irrigating crops.



2021 Vineyards are redeveloped to more drought resistant rootstock to reduce irrigation water consumption. Langtry Farms joins Volo Earth as a Limited Partner to invest in early stage companies that are developing sustainability driven technologies.



2010 - 2012 Over 10,000 Oak Trees are planted for improving habitat. Approximately 4,000 acres are reserved for open space corridors. Erosion control plans are engineered and developed for all vineyards.



2019 Tule Weather Stations and water management systems are installed to provide real time integrated tracking of evapotranspiration and manage the utilization of water.



2014 - 2016 Cover crops are introduced via aerial and land based seeding programs for soil protection. LODI Rules are adopted to move all vineyards to sustainable farming certification. Owl boxes are constructed and deployed in each vineyard block to control pests.



2017 Sheep are introduced as a farming practice to suppress invasive plants. Natural crop loss practices are introduced including the use of trained hawks to minimize bird damage to grapes.

ESG Best Practices at Langtry Farms

Sustainability initiatives
**are driving our everyday
farming practices.**

ESG Best Practices at Langtry Farms:

Soil Health Management

Healthy soils result in healthy and verdant ecosystems. Talk to a farmer and they will tell you that soil management is not passive. You must work diligently on its behalf. Healthy soil sequesters carbon, lowers water consumption, and improves water retention which positively impacts the health of our watersheds.

Sustainable farming is built on the foundation of healthy soil. Langtry Farms sustainable farming practices directly impact the long term health of its soils. All practices from composting, cover cropping, alternate row discing, active and real time water management, natural weed control, and root stock selection are designed to work together to promote soil health.



Healthy soil is the foundation of
sustainable farming.

Stewardship means
**giving the land more
than we take.**



ESG Best Practices at Langtry Farms:

Tule Irrigation Water Management Technology

If water is fuel that makes the world grow, Tule Water Management technology is the dashboard that helps Langtry Farms know how much fuel is in the tank and how healthy our farming engine is.

Tule Weather Stations measure evapotranspiration, which is the process by which water is transferred from the land to the atmosphere through evaporation from soil or plants. By precisely measuring the evapotranspiration we are able to track exactly how much water our vineyards are using each day. A significant impact of measuring evapotranspiration is maintaining the health of our vines by monitoring daily water stress through real time monitoring of soil moisture.

Active water management in real-time is an important contributor to our water conservation efforts.

ESG Best Practices at Langtry Farms:

Recycled Wastewater Management & Targeted Drip Irrigation

Langtry Farms recycles its wastewater generated during the winemaking process. Water that is used to wash barrels, stainless steel tanks, and sanitize the bottling line is diverted to a pre-treatment bioreactor. After pretreatment, the water is stored in a pond and mechanically aerated. After aeration, the water is recycled and irrigated back into the vineyards.

The main objectives of our wastewater treatment process are to reduce the organic matter content and biological oxygen demand. The process produces a more stabilized effluent while lowering nitrogen levels. The recycled water benefits our farming practices and helps conserve water.



Water can move
mountains on our behalf
if we treat it nicely.



A hungry sheep is a
wolf to weeds.

ESG Best Practices at Langtry Farms:

Cover Crop Soil Protection & Organic Weed Control

A comprehensive cover crop strategy is an essential practice for maintaining soil health. Cover crops reduce the potential for erosion and increase filtration for supplying irrigation water. Langtry Farms sources over 1,000 local sheep to process the cover crops and as a sustainable alternative for suppressing competitive and invasive plants.

Sheep grazing returns essential nutrients to the soil such as nitrogen which is important for the maintaining soil health. Sheep manure provides organic fertilization, pest removal, improved soil structure and increased permeability and filtration. Sheep graze the cover crop to remove competitive and invasive plants and return vital nutrients improving soil health and the health of the cover crop.

ESG Best Practices at Langtry Farms:

LODI Rules Certification

LODI Rules serves as an independent, third party audited certification process that is rigorous, scientifically sound and designed to result in sustainable viticulture practices. LODI Rules Certification includes carefully investing in and implementing sustainable practices in the following areas:

- › **Water Management:** Quality and Consumption
- › **Ecosystem Health:** Biodiversity and Land Stewardship
- › **Supporting Community:** Engaging and supporting the needs of families within the agricultural community who make sustainable viticulture feasible.
- › **Investing in People:** Making sure our vineyards are a safe and mutually rewarding environment to work.
- › **Soil Integrity:** Building organic matter and maximizing water penetration.
- › **Pest Management:** Utilizing natural predators to reduce invasive pest driven harm to birds, bees, water, livestock and people.
- › **Generational Farming:** Collaborating with the agriculture community to preserve farm health and land integrity for generations to come.
- › **Quality Assurance:** Supporting our industry with exceptional grapes for fermenting into wine.

If this was easy,
we couldn't call it farming.



Working land is
living land.

ESG Best Practices at Langtry Farms:

Active Wildlife Conservation & Habitat Preservation

For the last ten years, Langtry Farms has worked diligently and invested significantly in establishing and improving open space around its vineyards. In total, there are over 4,000 acres of land that are within the vineyard growing areas that have been preserved for habitat of both plants and animals.

Langtry Farms has planted over 10,000 oak trees in stream setbacks and open spaces to help improve habitats within these 4,000 acres. Each year the farming team works diligently to remove competitive and invasive plants and animals including bull frogs from these habitats.

Quiet please.
The future of ESG is growing.



Investing in the future means
investing in entrepreneurs.

The Future of ESG at Langtry Farms:

Volo Earth & Ag Funder Partnerships

Langtry Farms has joined VoloEarth and AgFunder as a Limited Partner. We believe that emerging ESG centric technologies can be tested and ultimately implemented at scale within our farming operations.

VoLo Earth's mission is to address our planet's climate crisis at its roots by providing first-in funding and hands-on leadership to early-stage climate tech companies. The VoLo Earth team strives to grow, propagate, and capitalize on climate solutions with an intent to deliver superior investment returns and quantifiable carbon benefit.

AgFunder is one of the most active FoodTech and AgTech investors globally. AgFunder is a pure-returns focused fund, but sustainability and impact form a core part of their thesis. All of the AgTech companies in their portfolio are advancing at least one of the United Nations 17 Sustainable Development Goals. We believe that technology will serve as a key resource for executing on our sustainability goals.

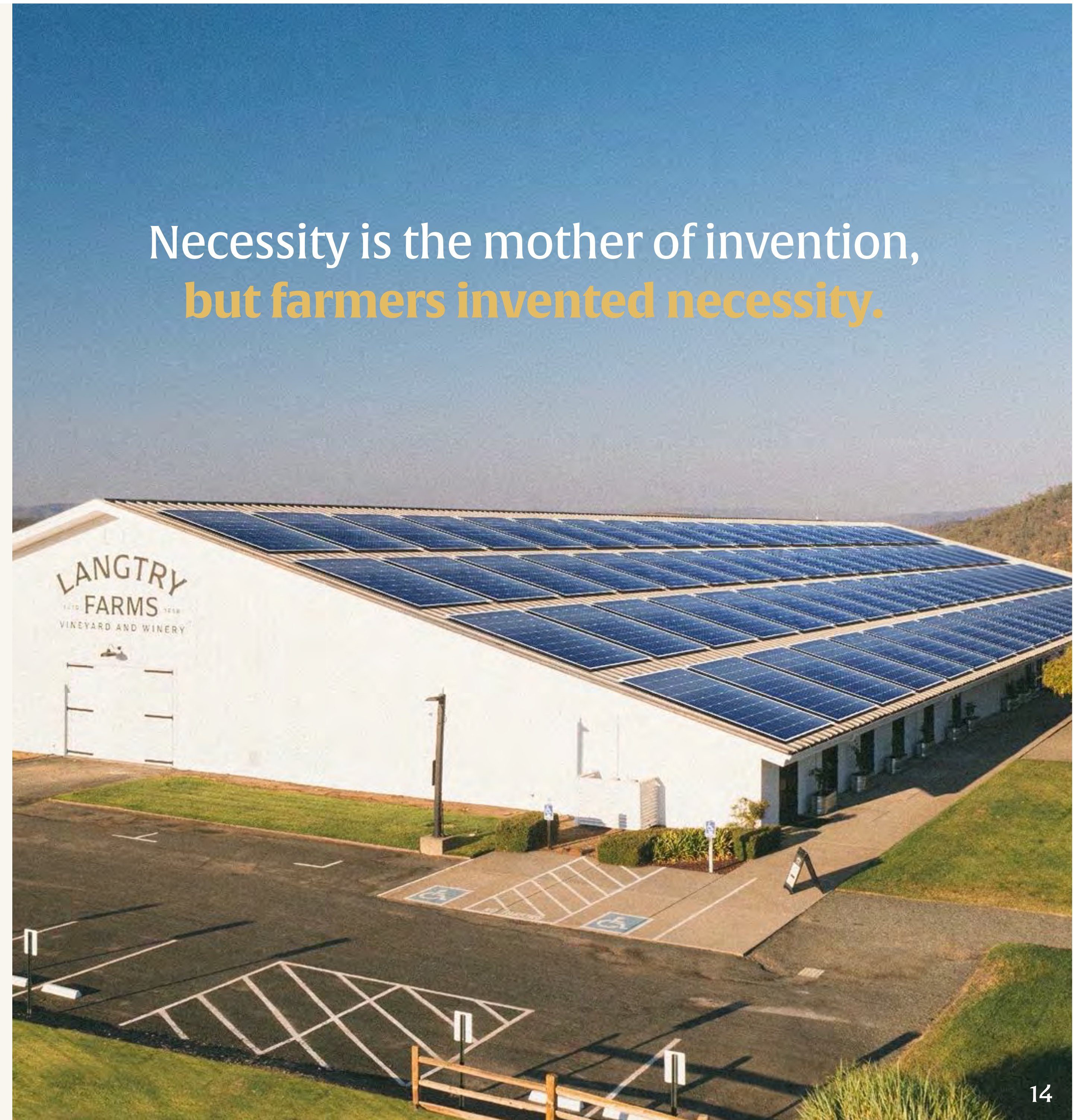
The Future of ESG at Langtry Farms:

Emissions Data Collection & Energy Consumption

Langtry Farms has designed and (is in the process of permitting and interconnecting) a 375 kW renewable energy (solar/ solar PV/ solar photovoltaic) plant to power its operations into the future. The solar project will deliver 570,517 kWh (or 570 MWh annually) of sustainable power. The solar energy plant will remove 446 tons of carbon annually from the environment.

Reducing carbon emissions and achieving sustainability objectives requires a holistic and strategically driven approach. It is necessary to understand carbon emission origins and causality, quantifying their accumulation, and appropriately qualifying their environmental impact. Langtry Farms is currently studying and planning for the implementation of emissions reduction and abatement strategies. These strategies will leverage non-fossil-based fuels and low-carbon fuels to reduce carbon emissions in our supply chain, reduce energy consumption, and assist us in mitigating greenhouse gas emissions in our own facilities and manufacturing processes.

Necessity is the mother of invention,
but farmers invented necessity.



Contact & Partnership Inquiries



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