



# *Regenerative Energy: Co-Locating Solar Energy and Regenerative Agriculture*

*Kentucky Interim Committee on Natural Resources and Energy*

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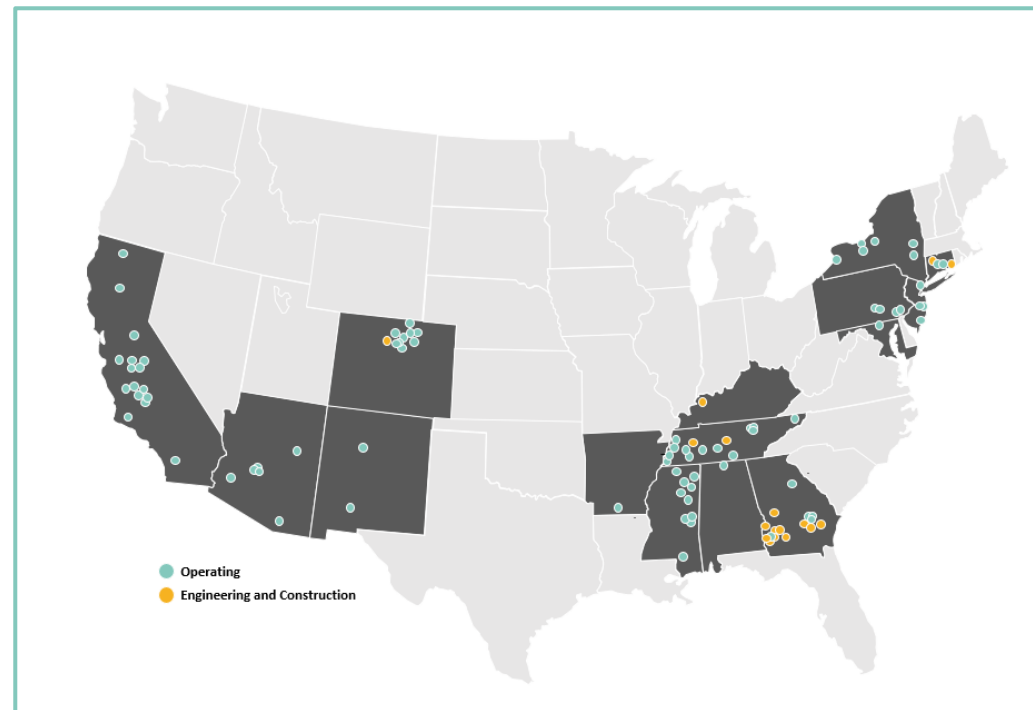
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## Silicon Ranch is the long-term asset owner for its entire portfolio

- **Develop:** Customer Driven development to secure favorable sites with optimal interconnection characteristics
- **Design:** Customized design to optimize performance and maximize annual energy production
- **Construct:** Deep experience constructing world-class solar facilities in variety of conditions
- **Own:** Aligned incentives with customers and longstanding relationships with communities
- **Operate:** In-house O&M team advances robust designs to drive superior performance and extend the facility's lifespan

- **Own and operate 135+ solar facilities in 15 states**
- **Approximately 20,000 acres under ownership**



# Taking the Long View on Solar Land Management

- **Subtle Yet Significant Insight:** Rather than view our land and vegetation as a liability to be abated, we view them as valuable natural resources—a biological asset—that we can harness to sequester carbon and restore biodiversity
- **Multi-Functional Property:** Reducing carbon emissions by producing clean solar energy, removing greenhouse gases from the atmosphere through carbon sequestration and keeping land in agricultural production to help meet the global food demands of the future







# Outcome-Based Platform Co-locating Clean Electricity Generation and Regenerative Agriculture





# Video from Rachel Hendricks of Cabriejo Ranch



Notes:

JULY 2020

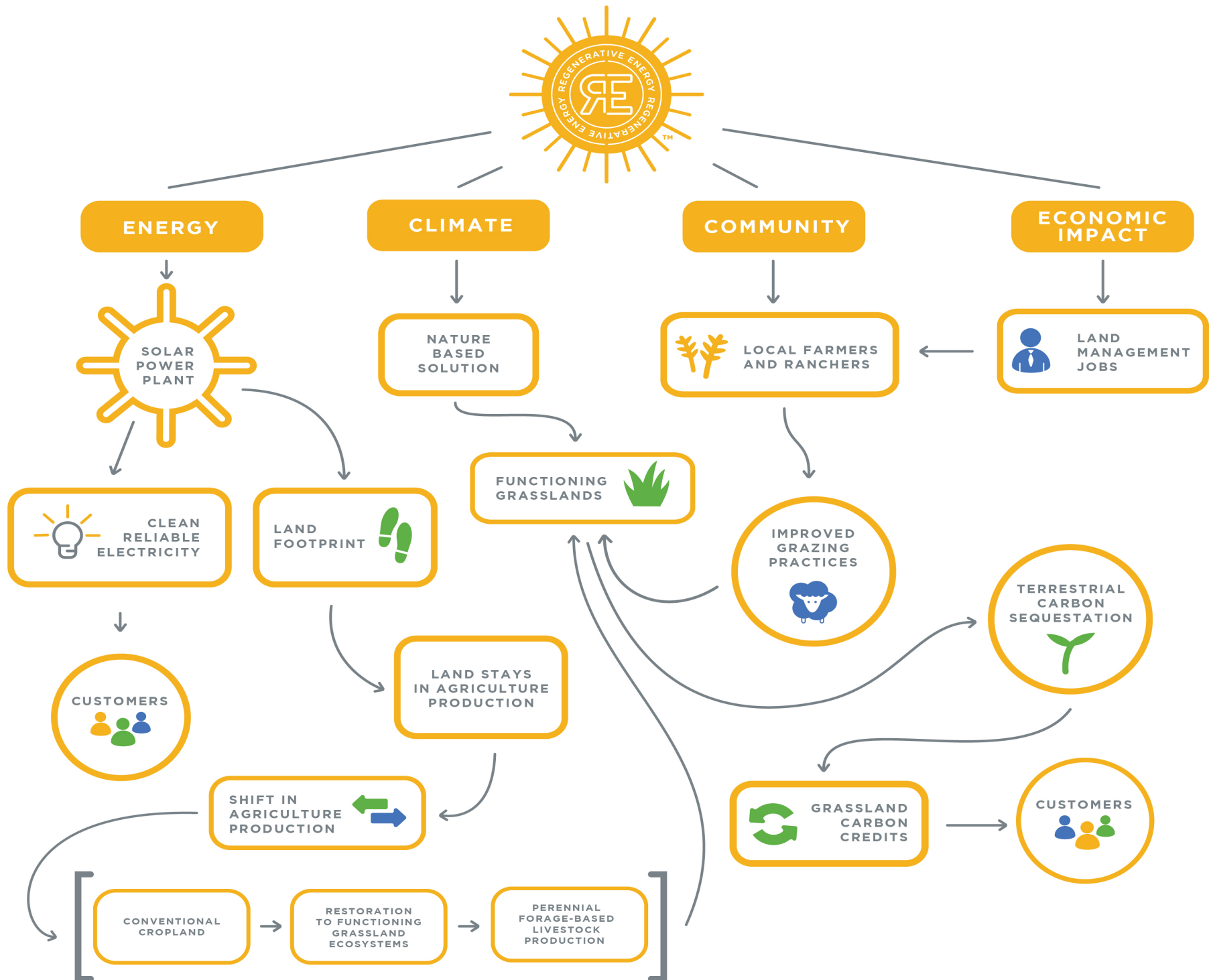
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# Video from Rachel Hendricks of Cabriejo Ranch









# RE EcoMetrics: Quantifying and Verifying Outcomes

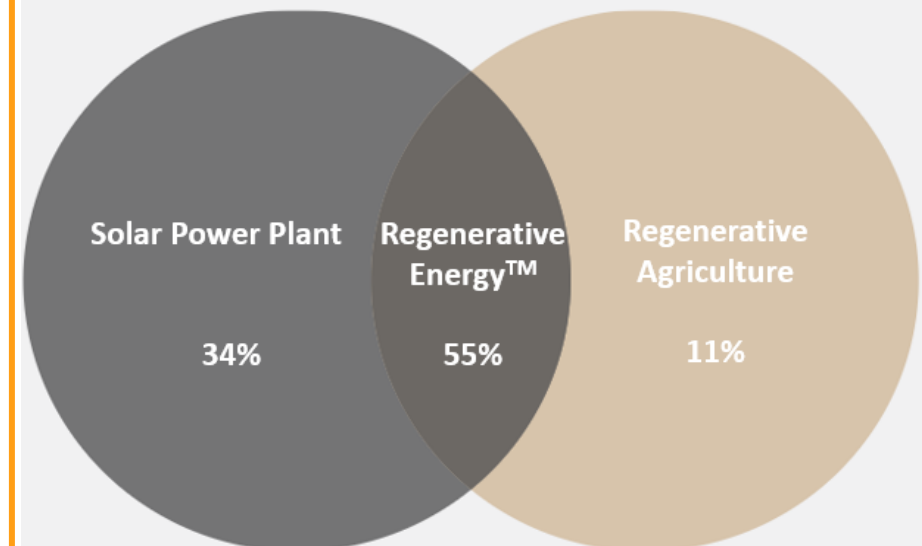
## Working with Restore the Earth Foundation, Silicon Ranch Has Customized Methodology to Assess and Capture Full Value of Environmental, Economic and Social Impacts

- RE EcoMetrics yields an audit-ready report that forecasts expected outcomes of a Regenerative Energy™ project
- Methodology aligned with Social Value International Framework and International Integrated Reporting Council Framework
- Silicon Ranch and its partners can use this report to (i) support CSR, ESG and climate disclosure reporting requirements, (ii) provide transparency for financial decision-making, strategic planning and stakeholder engagement, (iii) account for SROI value and impact of a company's energy procurement choices and (iv) demonstrate action toward sustainability goals

Stakeholder Workshops to Collect Data



Aggregate Value to Stakeholders by Project Component





# RE Carbon Program: Quantifying Carbon Sequestration

*“We don’t have to wait for technological wizardry: regenerative agriculture can substantially mitigate climate change now.... We have proven that regenerative agriculture can sequester carbon from the atmosphere and reverse climate change.”<sup>(1)</sup>*

--Mark Smallwood, Executive Director, The Rodale Institute

- **Verification Protocols:** Monitoring, quantifying, and verifying soil organic matter via Savory Institute’s Ecological Outcome Verification assessment methodology
- **Carbon Registries:** Working with strategic partners to develop and utilize state of the art technology for soil carbon quantification
- **Continuous Improvement:** In partnership with NREL and three universities, Silicon Ranch is finalist for DOE funding to research and develop CattleTracker™ and a solar specific carbon protocol to accelerate positive ecological and economic outcomes of Regenerative Energy™ projects



1. Rodale Institute. "Regenerative Organic Agriculture and Climate Change: A Down-to-Earth Solution to Global Warming."





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