# Farming The Sun For Solar Power

James Riddle

# Agenda

Why Solar – TVA/KUB/Seven Springs Farm Video

99 kW System - The Winery at Seven Springs Farm

Previous Limitations and Current Opportunities

Proposed REAP Grants for Seven Springs Farm

Links for Learning

Summary

Questions For Discussion

# Introduction

Why Solar

https://www.tva.com/Energy/Valley-Renewable-Energy

# 99 kW System - The Winery at Seven Springs Farm

**System Cost & Incentive Review**

Total Cost $199,704*
USDA Grant $49,926
Treasury Tax Credit@ 30% $59,911**
System Cost after Grants & Tax Credit $89,867
Federal Tax Depreciation Basis $169,749
Year One Deprecation $169,749
Year One Depreciation Cash Value $59,412
Tax Bracket Assumption 35%
Grant Tax Implications $17,474
Year One Revenue $13,480
Year One Cost after Tax Credit, Depreciation, Revenue $34,449

*Additional $13,278.02 provided by Seven Springs Farm = Total costs for tax purposes $212,982.02

**Actual Treasury Tax Credit@ 30% $63,894.61

# Overview of Previous Limitations and Current Opportunities

Limited to $200,000.00 – Current Program Limit is $1 million

Grant of 25% - Current Grant 40%, increasing to 50% with stipulations

Investment Tax Credit (ITC) of 30% - Current ITC w/kickers up to 70% (50% realistic)

ITC non-transferable/saleable – Current ITC is marketable

Energy Purchase (Buy Back) Limited to 50kW – No longer available

Program Knowledge - Energy Efficiency Grants

# Proposed 2024 REAP Grants for Seven Springs Farm

300 kW array with battery storage – eliminate current and **projected** energy costs

- Provide current and projected solar power for Winery Business Incubator, Hydroponics Facilities and White Oak Reforestation Initiative.
- Apply as a Rural Small Business (Rick and Donna Riddle DBA Seven Springs Farm) and not as an agricultural producer because 50% of our income does not come from farming activities.

Energy Efficiency Grant for Technology (STARS® - Selective Tartrate Removal System) and Enhanced Building Energy Efficiency.

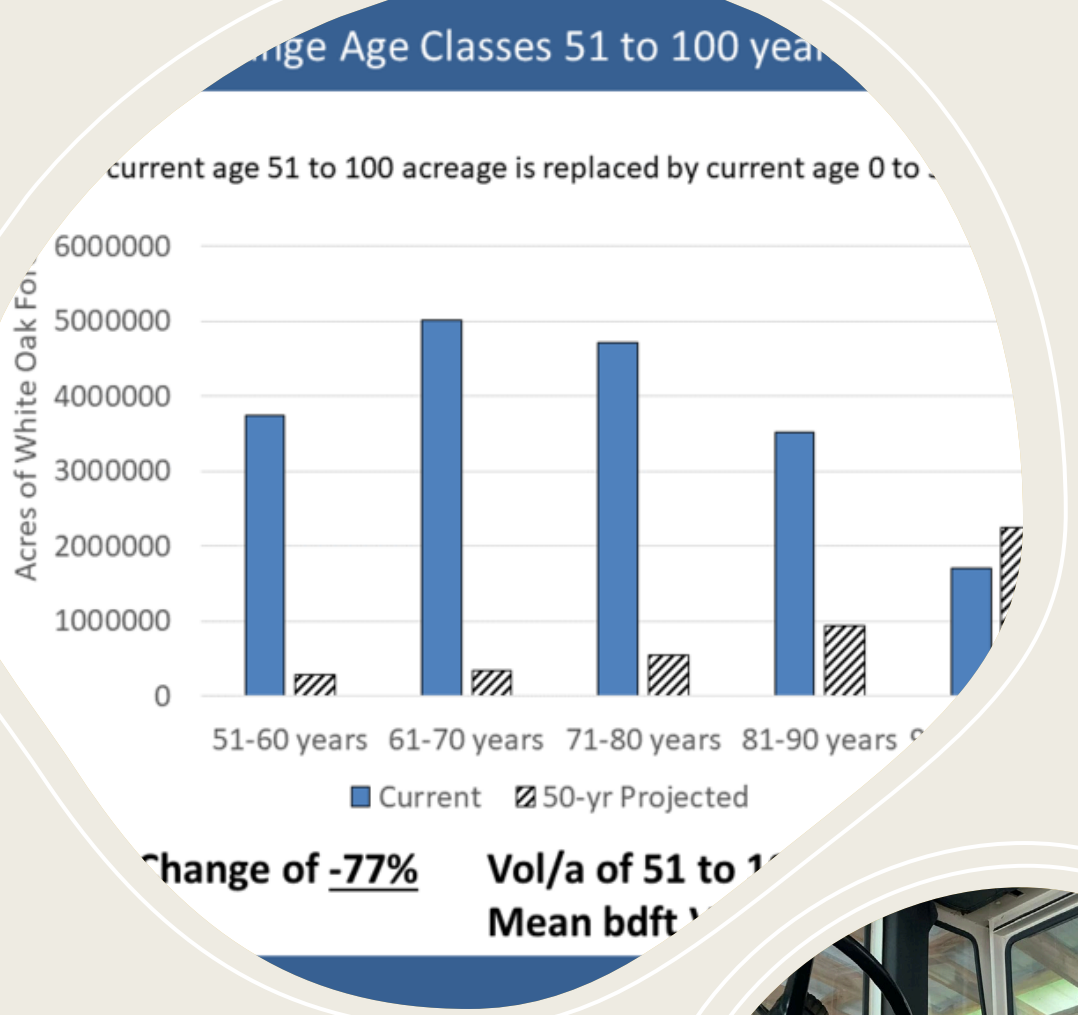
2025 and Beyond?

**The way to get started is to quit talking and begin doing.**

Walt Disney

# Links For Learning

- Solar Investment Tax Credit: What Changed? | Department of Energy
- Federal Solar Tax Credit Resources | Department of Energy
- Inflation Reduction Act of 2022 | Internal Revenue Service (irs.gov)
- Federal Solar Tax Credits for Businesses | Department of Energy
- FACT SHEET: Four Ways the Inflation Reduction Act's Tax Incentives Will Support Building an Equitable Clean Energy Economy (treasury.gov)
- NMTC Public Viewer - InVision (cdfifund.gov)
- The IRA's Impact on Solar Incentives: What You Need To Know (pivotenergy.net)
- Inside the IRA: How does prevailing wage affect my solar tax credit? – pv magazine USA (pv-magazine-usa.com)
- The IRA Solar Tax Credit Increases Solar and Storage Project Incentives - HES Solar
- Best Solar Battery systems 2022 — Clean Energy Reviews
- NMTC Target Areas QA (cdfifund.gov)
- Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement Guaranteed Loans & Grants | Rural Development (usda.gov)




# Summary

To preserve agriculture in Tennessee as a way of life for us and future generations we must find ways to use funding opportunities and technology to add value to our products and reduce our cost of doing business by reducing our cost of goods sold.

We must address current and future Supply Chain Issues.

We must plan for future generations.

# Thank You

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[Seven Springs Farm to Table | A Family Farm in Maynardville (sevenspringsfarmtn.com)]

# Questions for Discussion


- If I understand correctly, if I apply anytime over the next 10 years I can receive a 40% (possibly 50%) REAP Grant, Marketable Investment Tax Credits of up to 70% (50% realistic), Federal Tax Deductions through Depreciation and amortization and tax free income through energy use offset for the life of the system. Is this true?
- Are there costs not covered by the REAP Grant that can be used as the basis for my Tax Credits and Depreciation?
- What are the scoring criteria for the REAP Grant?
- Does my Solar System have to be installed by a USDA Approved Contractor?
- Can you review again how I transfer and/or market my ITCs? Must this be done in the tax year the ITCs were incurred (i.e., do I file for the ITCs before the system is done if construction is incurred over multiple tax years?
- Can I transfer my Tax Credits to another individual or entity in exchange for cash? How do I do that? Can you explain recapture?
- How much energy savings does new technology or building enhancements have to provide before the costs are eligible for the REAP Energy Efficiency Grant?
- What construction costs can be included in REAP Grants and or REAP Energy Efficiency projects.
- How will the ITC Kickers be verified?
- If I have applied previously can I reapply to add additional capacity and battery storage? If so, how often can I reapply?
- Would the costs for an electric forklift be eligible if it is replacing a carbon fuel powered forklift? How do I calculate energy savings?
- Can the REAP Grant amount include projected energy use? Explain.
- Does my system have to be hooked up to the grid?
- What are my options if I can't obtain commercial credit because of cashflow or existing leverage to pay for the up front costs? Is the REAP Grant and Marketable ITCs considered as loan collateral and/or part of the cash flow equation?