

Vineyard Economics Seminar

Saving \$\$ in the Field

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Introduction

- Solar Energy
- Alternative Fuels
- Lodi Rules/Sustainable Farming Practices
- Environmental Quality Incentives Program (EQIP)
- Carl Moyer Tractor Replacement Program
- Mechanization

Solar Energy

- Vino Farms installed a 30 kW solar array to irrigate 221 planted acres as well as a 22 acre restoration site
- Total Price of \$285,000
- PG&E Rebate & Tax Credits equal \$150,000
- Federal and State 5 year depreciation schedule
- Roughly it will cost \$55,000 out of pocket



Solar Energy

- Payback period is 5-9 years
- Annual electric rates rose 5.1% from 1970-2000
- During the 35 year lifespan of the solar array our energy savings will be roughly \$950,000

B20 BioDiesel

- BioDiesel is a clean burning alternative fuel
- It is produced from any fat or oil such as soybean
- B20 BioDiesel is 80% diesel and 20% fat or oil, we use soybean



B20 BioDiesel cont.

- BioDiesel is only alternative fuel to have fully completed the health effects testing requirements of the 1990 Clean Air Act
- It is only alternative fuel certified by the EPA and B20 cuts emissions by nearly 50%
- It is more expensive than diesel by about \$.35-.40
- There is a tax credit of \$.50 for every gallon purchased during the year

Lodi Rules/Sustainable

- This is the first 3rd party certified sustainable program in the winegrape industry
- Lodi Rules uses the definition provided by the American Agronomy Society in 1989
- **Sustainability:** a sustainable agriculture is one that, over the long term, enhances environmental quality and resource base on which agriculture depends; provided for basic human food and fiber needs; is economically viable; and enhances the quality of life for farmers and society as a whole.

Lodi Rules/Sustainable cont.

- It consists of 75 farming practices divided into 6 categories, including HR practices
 - Ecosystem Management
 - Education: Training and Team Building
 - Soil Management
 - Water Management
 - Vineyard Establishment
 - Pest Management
- It uses the 3 E's of sustainability
 - Economic viability
 - Environmental soundness
 - Social Equity or responsibility

Lodi Rules/Sustainable cont.

- Is it more expensive to farm sustainably?
- It can be, but not much, but here is why
 - More skilled and highly paid management team
 - Highly trained tractor drivers, a field workers
 - Fees to participate in the program, small amount but there are fees
 - Use more expensive chemicals that are better for the environment
 - In our case we provide benefits to our employees that are unmatched in this industry

EQIP

- This is a program that provides financial and technical assistance to conserving air, water, and related natural resources controlled by the USDA and NRCS
- Provides grant money to replace furrow irrigation with drip, following Integrated Pest Management Practices, (IPM) dust control, restoration, ect.
- Tractor Replacement Program

Carl Moyer Program

- Tractor and engine replacement program
- Pays between 30%-70% of the replacement cost if you meet requirements
- The EQIP and Carl Moyer Program can work together and pay upwards of 90% of a new tractor

Mechanization

- Mechanical Pruning
- Mechanical Leaf-pulling
- Weed-spray
- IPM Thresholds

Conclusion

- Solar Energy is a viable practice the winegrape industry with the rebates and tax credits available
- B20 BioDiesel is something that we can use to put a dent into our carbon footprint
- Lodi Rules is a sustainable program that is gaining momentum and could be the wave of the future of the winegrape community
- EQIP program can be used to cover some the extra costs that farming sustainably brings on
- The Carl Moyer program can be used to cover some of the replacement costs
- Mechanization can be used to lower your labor cost per acre.