

# Checklist of Voluntary Greenhouse Gas Emission Reduction Measures



A Tradition of Stewardship  
A Commitment to Service

An addendum to the Entitlement Application and a supplement for Initial Studies as required by CEQA

PROJECT NAME	Robert Sinskey Vineyards		
PROJECT ADDRESS	6320 Silverado Trail		
APPLICANT	Robert Sinskey		
CONTACT INFO	pinot@robertsinskey.com	707-944-9090	
	email	phone	

- |   | yes                                 | no                       | I don't know             |
|---|-------------------------------------|--------------------------|--------------------------|
| 1 Have you designed to U.S.G.B.C.™ LEED™ or Build It Green™ standards?<br>If yes, please include a copy of their required spreadsheets. | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 Do you have an integrated design team?<br>If yes, please list: <u>SEE ATTACHED</u>  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**3 SITE DESIGN**

- |   |                                     |                          |                          |
|---|-------------------------------------|--------------------------|--------------------------|
| 3.1 Does your design encourage community gathering and is it pedestrian friendly?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.2 Are you building on existing disturbed areas?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.3 Landscape Design  |                                     |                          |                          |
| 3.31 native plants?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.32 drought tolerant plants?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.33 Pierce Disease resistant planting?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.34 Fire resistant planting?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.35 Are you restoring open space and/or habitat?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.36 Are you harvesting rain water on site?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.37 planting large trees to act as carbon sinks?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.38 using permeable paving materials for drive access and walking surfaces?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.4 Does your parking lot include bicycle parking?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.5 Do you have on-site waste water disposal?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.6 Do you have post-construction stormwater on site detention/filtration methods designed?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.7 Have you designed in harmony with existing natural features, such as preserving existing trees or rock outcroppings?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.8 Does the project minimize the amount of site disturbance, such as minimizing grading and/or using the existing topography in the overall site design (such as cave design)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.9 Is the structure designed to take advantage of natural cooling and passive solar aspects?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**4 ENERGY PRODUCTION & EFFICIENCY**

- |   |                                     |                          |                          |
|---|-------------------------------------|--------------------------|--------------------------|
| 4.1 Does your facility use energy produced on site?<br>If yes, please explain the size, location, and percentage of off-set:<br><u>SEE ATTACHED</u> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.2 Does the design include thermal mass within the walls and/or floors?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.3 Do you intend to commission the performance of the building after it is built to ensure it performs as designed?                                | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.4 Will your plans for construction include:   |                                     |                          |                          |
| 4.41 High density insulation above Title 24 standards?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.42 Zones for heating and cooling to provide for maximum efficiency?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.43 Energy Star™ or ultra energy efficient appliances?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.44 A "cool" (lightly colored or reflective) or a permeable/living roof?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.45 Timers/time-outs installed on lights (such as the bathrooms)?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, please explain: <u>SEE ATTACHED</u>   |                                     |                          |                          |

**5 WATER CONSERVATION**

- |  |                                     |                          |                                     |
|--|-------------------------------------|--------------------------|-------------------------------------|
| 5.1 Does your landscape include high-efficiency irrigation?                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.2 Does your landscape use zero potable water irrigation?                             | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.3 Is your project in the vicinity to connect to the Napa Sanitation reclaimed water? | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.4 Will your facility use recycled water?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.41 If no, will you prepare for it by pre-installing dual pipes and/or purple lines?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.5 Will your plans for construction include:  |                                     |                          |                                     |
| 5.51 a meter to track your water usage?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5.52 ultra water efficient fixtures and appliances?                                    | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.53 a continuous hot water distribution method, such as an on-demand pump?            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| 5.54 a timer to insure that the systems are run only at night/early morning?           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

yes no I don't know

6 MATERIAL RECYCLING

- 6.1 Are you using reclaimed materials? 

X		
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 If yes, what and where: Salvaged barn board at interior and exterior.
- 6.2 Are you using recycled construction materials-
- 6.21 finish materials? 

X		
---	--	--
- 6.22 aggregate/concrete road surfaces? 

X		
---	--	--
- 6.23 fly ash/slag in foundation? 

X		
---	--	--
- 6.3 Will your contractor be required to recycle and reuse construction materials as part of your contract? 

		X
--	--	---
- 6.4 Does your facility provide access to recycle-
- 6.41 Kitchen recycling center? 

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- 6.42 Recycling options at all trash cans? 

--	--	--
- 6.43 Do you compost green waste? 

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- 6.44 Provide recycling options at special events? 

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7 NATURAL RESOURCES

- 7.1 Will you be using certified wood that is sustainably harvested in construction? 

		X
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- 7.2 Will you be using regional (within 500 miles) building materials? 

		X
--	--	---
- 7.3 Will you be using rapidly renewable materials, such as bamboo? 

		X
--	--	---
- 7.4 Will you apply optimal value engineering (studs & rafters at 24" on center framing)? 

		X
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- 7.5 Have you considered the life-cycle of the materials you chose? 

X		
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8 INDOOR AIR QUALITY

- 8.1 Will you be using low or no emitting finish and construction materials indoors-
- 8.11 Paint? 

X		
---	--	--
- 8.12 Adhesives and Sealants? 

X		
---	--	--
- 8.13 Flooring? 

X		
---	--	--
- 8.14 Framing systems? 

X		
---	--	--
- 8.15 Insulation? 

X		
---	--	--
- 8.2 Does the design allow for maximum ventilation? 

X		
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- 8.3 Do you plan for a wood burning fireplace (US EPA Phase II certified)? 

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- 8.4 Does your design include dayling, such as skylights? 

X		
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9 TRANSPORTATION DEMAND MANAGEMENT

- 9.1 After your project is complete, will you offer your employees incentives to carpool, bike, or use transit? 

X		
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- 9.2 After your project is complete, will you allow your employees to telecommute or have alternative work schedules? 

		X
--	--	---
- 9.3 Does your project include design features that encourage alternatives modes of transportation, such as preferred parking for carpooling, ridesharing, electric vehicles? 

		X
--	--	---
- secured bicycle parking, safe bicycle access? 

X		
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- loading zones for buses/large taxi services? 

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- 9.4 How close is your facility to public transportation? 2.5 miles from Yountville NCTPA Vine

10 Are there any superior environmental/sustainable features of your project that should be noted?

Permeable Paving.

11 What other studies or reports have you done as part of preparing this application?

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

12 If your project involves an addition or modification to an existing building, are you planning to improve energy conservation of existing space (such as insulation, new windows, HVAC, etc.)?

X		
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If yes, please describe: SEE ATTACHED

13 Once your facility is in operation, will you:

- 13.1 calculate your greenhouse gas emissions? 

		X
--	--	---
- 13.2 implement a GHG reduction plan? 

		X
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- 13.3 have a written plan to reduce your vehicle miles traveled of your operations and employee's commute? 

		X
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14 Does your project provide for education of green/sustainable practices?

If yes, please describe: \_\_\_\_\_

15 Any comments, suggestions, or questions in regards to the County's efforts to reduce greenhouse gases?

\_\_\_\_\_  
 \_\_\_\_\_

Form filed out by: Katherine Polyzos

# ARKIN · TILT ARCHITECTS

Ecological Planning & Design

David Arkin, AIA, Architect Licensed In CA + NV



## CHECKLIST OF VOLUNTARY GREENHOUSE GAS EMISSIONS REDUCTION MEASURES

Robert Sinskey Vineyards

29 June 2010

### 2) Integrated Design Team:

- Owner: Robert Sinskey Vineyards
- Architects: Arkin Tilt Architects
- Civil, Landscape, and Water Treatment: Pastore Ryan Design and Engineering, Inc.
- Structural: Kevin Donahue Structural Engineer
- Mechanical, Electrical, Lighting, Plumbing, and Energy: Guttman & Blaevoet Consulting Engineers
- Contractor: Cello & Maudru Construction Company

### 4.1) PV system:

- Existing 95.3 kW, DC rated system.
- Main array will be relocated to new tank expansion roof, oriented due South at optimal angle.
- Secondary array will remain on existing parking lot trellis at South of building.
- PV array is estimated to offset 50% of facility's projected demand.

### 4.4) Energy efficient construction:

- Current building plans provide significantly more square footage of enclosed area without significantly increasing the building's energy consumption (based on energy analysis and building model calculations).
- Insulation will exceed T24 requirements; R-45 at roof, R-20 at walls.
- Heating and cooling will be zoned based on occupancy and location within building. For example, the offices on the Western edge of the building will be zoned independently of the offices on the Southern edge of the building, since loads will vary depending on the time of day. Similarly, the demonstration kitchen will be zoned independently of the office space, since loads will vary because of expected use and occupancy patterns. The demonstration kitchen will need to accommodate loads generated on a busy Saturday afternoon, including stoves, ovens, dishwashing equipment, and winery guests. Loads will be lower on a typical weekday in the office, with its small administrative staff and basic office equipment.
- Managing electrical loads and keeping demand low is of significant importance. Energy star and high efficiency appliances will be given strong preference over typical appliances. Heating and cooling demands will be met with high-efficiency, electric, air-source heat pumps.
- Proposed Zinacalume roofing meets energy star requirements.
- All bathrooms will be equipped with occupancy sensors.

### 12) Improving energy conservation of existing space:

- High efficiency, carefully zoned heating and cooling equipment will be used throughout the facility (both new and renovated space).
- Additional insulation will be provided at all roof areas.
- Overhangs and sunshades will be added to the building to improve passive solar performance.
- New insulated, double-glazed, high-performing windows will be installed throughout the facility.