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# 1. INTRODUCTION

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*Jeff Dlott, Kari Birdseye and Karen Ross*

Welcome to the voluntary self-assessment workbook for the Code of Sustainable Winegrowing Practices. The Code of Sustainable Winegrowing Practices (SWP) is a project of the Wine Institute and California Association of Winegrape Growers (CAWG). This workbook was developed under the guidance and leadership of the Sustainable Winegrowing Joint Committee that includes more than 50 members from the Wine Institute and CAWG, along with representatives from Cal EPA and independent consultants.

The primary audience for this workbook is California winegrowers and vintners. It is our intent that the workbook content also be useful to a wider audience including employees, suppliers, winegrape and wine buyers, neighbors and local community members, members of the environmental and social equity communities, policy makers, regulators, and the media.

A key desired outcome for the SWP project is the widespread development and execution of sustainability strategies in the California winegrowing community. Business strategy is often defined in terms of an operation's **mission** (the business purpose and fundamental reason for existence), **vision** (future desire, long-term goals), and **values** (core ideals, beliefs and actions). It is important for all businesses committed to corporate social responsibility, from the small family-operated vineyard and winery to the multinational corporation, to clearly define and implement a sustainability strategy.

The following section presents the mission, vision and values for the Code of SWP project.

## **Sustainability Mission**

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The mission for the development and implementation of this workbook is to provide winegrowers and vintners with a tool to voluntarily:

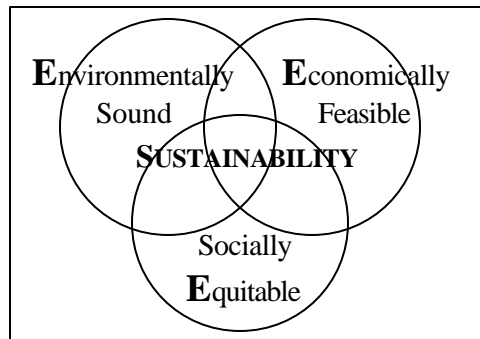
- ? Assess the sustainability of current practices;
- ? Identify areas of excellence and areas where improvements can be made; and
- ? Develop action plans to increase an operation's sustainability.

The overall, long-term mission for the Code of SWP project includes:

- ? Establishing voluntary high standards of sustainable practices to be followed and maintained by the entire wine community;
- ? Enhancing winegrower-to-winegrower and vintner-to-vintner education on the importance of sustainable practices and how self-governing will enhance the economic viability and future of the wine community; and
- ? Demonstrating how working closely with neighbors, communities and other stakeholders to maintain an open dialogue can address concerns, enhance mutual respect, and accelerate results.

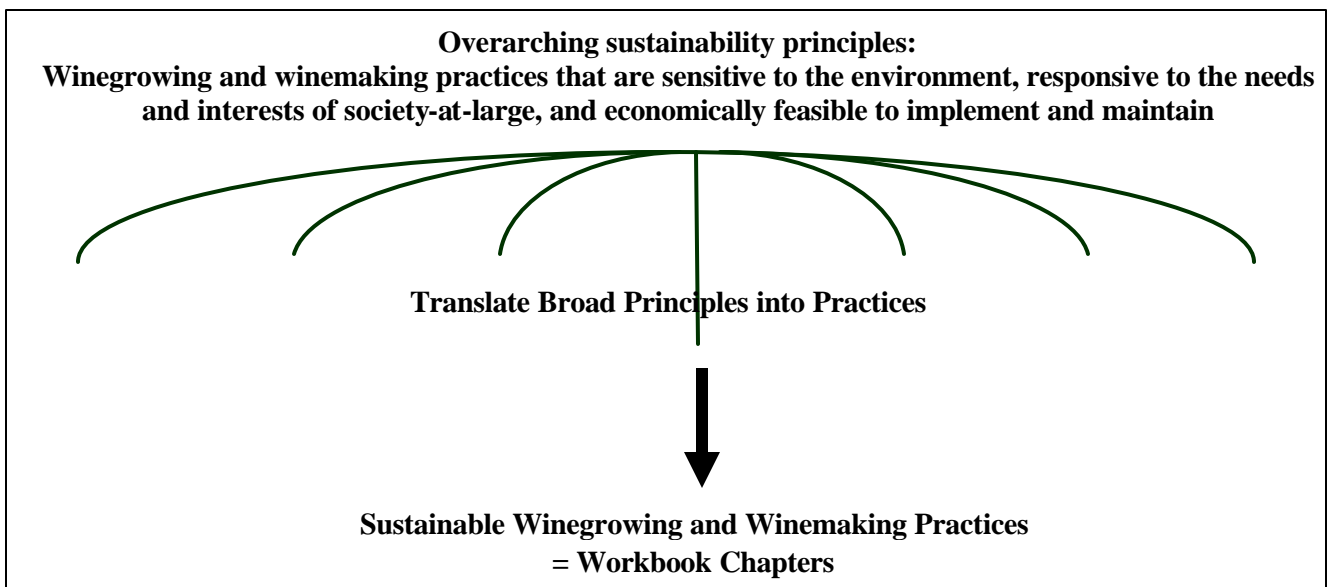
## Sustainability Vision

The vision of the SWP project is long-term sustainability of the California wine community. To place the concept of sustainability into the context of winegrowing, the project defines sustainable winegrowing as growing and winemaking practices that are sensitive to the environment (**E**nvironmentally Sound), responsive to the needs and interests of society-at-large (**S**ocially **E**quitable), and are economically feasible to implement and maintain (**E**conomically Feasible). The combination of these three principles is often referred to as the three “**E**’s” of sustainability (**Figure 1-1**).



**Figure 1-1.** Sustainability as defined by the three overlapping principles of Environmentally Sound, Economically Feasible and Socially Equitable.

These three overarching principles provide a general direction to pursue sustainability. However, these important principles are not easily translated into the everyday operations of winegrowing and winemaking. To bridge this gap between general principles and daily decision-making, the workbook’s 13 self-assessment chapters translate the sustainability principles into specific winegrowing and winemaking practices (**Figure 1-2**).



**Figure 1-2.** The relationship between the winegrowing sustainability principles and the workbook chapters.

## **Sustainability Values**

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This project is guided by the following set of sustainability values:

- ? Produce the best quality wine and/or grapes possible.
- ? Provide leadership in protecting the environment and conserving natural resources.
- ? Maintain the long-term viability of agricultural lands.
- ? Support the economic and social wellbeing of farm and winery employees.
- ? Respect and communicate with neighbors and community members; respond to their concerns in a considerate manner.
- ? Enhance local communities through job creation, supporting local business and actively working on important community issues.
- ? Honor the California wine community's entrepreneurial spirit.
- ? Support research and education as well as monitor and evaluate existing practices to expedite continual improvements.

In addition to this introduction, the development and use of sustainability mission, vision and values is addressed in the Ecosystem Management (Criteria 8-2), Human Resources (Criteria 14-1) and Neighbors and Communities (Criteria 15-1) chapters.

## **What the Workbook Is and Is Not**

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It is important to note that this workbook is a **voluntary self-assessment tool**. The workbook is **not**:

- ? A “how to” manual for winegrowing and winemaking;
- ? A set of “rules” that must be followed; or
- ? An external rating system to be used by others to judge your operation.

This workbook does provide the opportunity for you to voluntarily self-assess the relative sustainability of your vineyard and/or winery operations. The workbook is not linked to any outside certification system. However, due to the interest by some members of the wine community, the workbook is designed to be easily adapted to international environmental management system (EMS) standards such as the ISO 14000 family<sup>1</sup> and international sustainability reporting efforts such as the Global Reporting Initiative<sup>2</sup>.

The next chapter introduces the 13 self-assessment chapters and presents how to use the workbook.

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<sup>1</sup> For more information on ISO 14000 family see <http://www.iso.ch/iso/en/iso9000-14000/iso14000/iso14000index.html>

<sup>2</sup> For more information on the Global Reporting Initiative see <http://www.globalreporting.org>

## 2. HOW TO USE THIS WORKBOOK

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*Sustainable Winegrowing Joint Committee*

This chapter presents five key points to using the workbook.

### 1. Familiarize Yourself with the Workbook

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First, thumb through the workbook to get a feel for the scope and format. There are 221 self-assessment questions organized into the following 13 chapters beginning with chapter 3:

Chapter 3	Viticulture
Chapter 4	Soil Management
Chapter 5	Vineyard Water Management
Chapter 6	Pest Management
Chapter 7	Wine Quality
Chapter 8	Ecosystem Management
Chapter 9	Energy Efficiency
Chapter 10	Winery Water Conservation and Water Quality
Chapter 11	Materials Handling
Chapter 12	Solid Waste Reduction and Management
Chapter 13	Environmentally Preferred Purchasing
Chapter 14	Human Resources
Chapter 15	Neighbors and Community

Each chapter has a set of industry-specific criteria to self-assess sustainability performance of vineyard and winery operations. Each criteria has four performance categories. The categories represent **increasing sustainability** moving from right to left (**Table 1**).

### 2. Decide What to Assess

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You begin by selecting one or more vineyards and/or winery facilities to assess. If you manage multiple vineyards and/or winery facilities, it may make sense to select an operation you think would assess the highest and another that you think would assess lower the first time through the workbook.

### 3. Do Your Self-Assessment

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Read each question and decide if it is applicable to your vineyard and/or winery. **Not all the questions are applicable to every vineyard or winemaking facility.** After reading each category, decide which category best describes the operation(s) you are assessing. The workbook includes a set of self-assessment evaluation sheets to keep track of your assessment (see the **Evaluation Sheet** tab). An example is provided in **Table 2**.

Education boxes that contain supplemental information on specific sustainable practices follow many of the self-assessment criteria. Specific references, resources and internet links are included for many criteria. Additional resources and references are provided at the end of the workbook.

**Table 1.** Example of the four-category self-assessment continuum of increasing sustainability

Criteria	Category 4	Category 3	Category 2	Category 1
<b>3-9 Soil Compaction</b>	I choose or modify equipment to minimize compaction* (e.g. lightest equipment possible, track-layers, wider or bigger-diameter tires, tire pressures as low as possible) <i>And</i> Permanent cover crop or a non-tilled and reseeded annual cover crop is maintained <i>And</i> Equipment never enters vineyard during wet soil conditions.	I choose or modify equipment to minimize compaction* (e.g. lightest equipment possible, track-layers, wider or bigger-diameter tires, tire pressures as low as possible) <i>And</i> Annual cover crop is grown every year <i>And</i> Equipment use is minimized in the vineyard during wet soil conditions.	I choose or modify equipment to minimize compaction* (e.g. lightest equipment possible, track-layers, wider or bigger-diameter tires, tire pressures as low as possible).	I do not consider soil compaction* when choosing equipment and equipment is driven in the vineyard no matter how wet the soil even when there is a danger of getting stuck.

\* Tractor width is also an important factor in soil compaction. If the tire/track is only a foot or so away from the vine row it will compact the rooting zone of above-ground drip irrigated vineyards more than narrower tractors.

If the question is not applicable to your vineyard or winery operation, please check this “not applicable” box.

**Table 2.** Example self-assessment evaluation sheets from chapters 3 and 9.

4. SOIL MANAGEMENT			Category				
Criteria	V/W	Pg #	4	3	2	1	N/A
4-8 Organic matter	V						v
4-9 Soil compaction	V			v			

9. Energy Efficiency			Category				
Criteria	V/W	Pg #	4	3	2	1	N/A
9-3 Tanks and Lines	W		v				
9-4 Motors , Drives and Pumps	V/W			v			

**Both Vineyard & Winery Criteria**

**Winery Criteria**

You will find combined evaluation sheets that have all the self-assessment criteria (both vineyard and winery), vineyard only self-assessment sheets, and winery only self-assessment sheets that you can use in the **Evaluation Sheet** tab near the end of the workbook to keep track of your assessment.

#### 4. Develop Your Action Plan

Once you have completed the self-assessment portion of the workbook, the next step is developing an action plan for your vineyard and/or winery operation. Your evaluation sheets will show which areas of your vineyard and/or winery operations may need some changes to maximize performance or prevent environmental problems. Pay special attention to all issues that have a one or a two rating. These are areas for potential improvement. To develop an action plan, you will need to analyze your situation, decide what you want to do, and when it can be done. You decide what actions to take over the next five years. Remember, this is **your** action plan—it must suit you and your operations. The educational boxes and resource links in the workbook may be helpful in developing your action plan.

A detailed description of the process, examples, and a blank action plan sheet are provided under the **Action Plan** tab near the end of this workbook.

#### 5. Submit Your Self-Assessment Evaluation and Provide Feedback

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The Sustainable Winegrowing Joint Committee is interested in receiving your self-assessment evaluation as well as feedback on the workbook. **Comments, Corrections & Suggestions** sheets are included in the workbook to facilitate this feedback.

The Sustainable Winegrowing Joint Committee would also like to **confidentially** receive the self-assessment evaluation sheets. The submission of this information is **voluntary**. This confidential information will be used by the project for the following purposes:

- ? Provide feedback to regional winegrower and vintner associations on areas of excellence and areas that need improvement to target educational programs and other resource investments.
- ? Improve the workbook self-assessment questions to accurately capture useful information on sustainable practices.
- ? Establish statewide baseline information on the adoption of sustainable practices by winegrowers and vintners.
- ? Document beneficial sustainable practices and innovation that can be rapidly adopted by other vineyards and wineries.

In the near future, portions of the workbook including the evaluation sheets, comments, corrections, and suggestions sheets, and an electronic method to confidentially submit your evaluation sheets will be available online. Please check the Wine Institute (<http://www.wineinstitute.org>) and CAWG websites (<http://www.cawg.org>) for details.