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Going Green Down Under: Environmental Communication and Green Product Marketing in the South Eastern Australian Wine Industry

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GOING GREEN DOWN UNDER: ENVIRONMENTAL COMMUNICATION AND GREEN PRODUCT MARKETING IN THE SOUTH EASTERN AUSTRALIAN WINE INDUSTRY

By
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A DISSERTATION

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GOING GREEN DOWN UNDER: ENVIRONMENTAL COMMUNICATION AND GREEN PRODUCT MARKETING IN THE SOUTH EASTERN AUSTRALIAN WINE INDUSTRY

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The consumption of wine has served as an international communication expedient for thousands of years. From classical symposiums of ancient times to religious ceremonies practiced for centuries, wine has played a significant part in countless social gatherings across the ages and continents. Recent growth in international wine trade, however, has impacted an increasingly disrupted natural environment through amplified carbon output, overuse of synthetic chemicals, topsoil erosion, and water mismanagement. Vintners, or winemakers, have been tasked by the implementation of new legal standards, as well as the urging of ecologically aware prospective consumers, to instill a winemaking process that is green, or environmentally friendly, in order to demonstrate the employment of proactive measures for the long-term sustainability of an unstable Earth. As New World wine producers, Australia commands specific attention as many vineyards in this particular geographic area are actively advancing green wine production standards. Fueled by the emergent field of environmental communication, this dissertation investigates the sustainable practices being implemented by South Eastern Australian vintners during their winemaking process to offset environmental degradation and examines the new marketing discourse communicated via wine bottle labels to construct an environmentally friendly image. Ultimately, this research
compares the green product marketing strategies between organic and non-organic wineries to determine the extent to which ecological messages are being promoted on wine bottle labels as a form of environmental communication.
DEDICATION

This work is dedicated to my nephew Shane Michael, who made me an uncle, and my brand new niece Mckenna Clare, whose final days *in utero* perfectly mirrored the final days of writing this dissertation. You two are the best reward – Family.
ACKNOWLEDGMENT

Weighty gratitude is extended to the Wine Spectator foundation whose generous grant allowed for this original research to be conducted literally a world away. I remain humbled by the opportunity.

Although one name stands as the author of this work, the piece would not be such without the tireless input, support, and guidance from my dissertation chair, Dr. Diane Millette, whose midnight hours kept perpetual vigil over the maturation of both this document and this scholar. Incidentally, a ceaseless thank you is also in order to my committee members who never tired of lively conversation regarding the research topic of wine. A sincere thank you to Dr. Bob Hosmon for making opportunities possible and navigation through this process seem effortless, Dr. Steve Stein for being onboard before I even had the chance to ask, Professor Sam Terilli for sound judgment and social science clarity, and Professor Sanjeev Chatterjee for advancing insight through global experience. Sopratto, I would like to thank Dr. Susan Elliott who has served as my inspiration for more than two decades. Consider the elephant eaten.
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PERSPECTIVE

We know more from nature than we can at will communicate.
Ralph Waldo Emerson

Where there’s wine, there’s civilization. There’s no barbarism. In the Near East, in Babylon and Ancient Greece, they drank wine. It wasn’t always good, but it existed. It went hand in hand with progressive societies. Wine meant an absence of barbarism.
Hubert de Montille

Wine is man’s most successful effort to translate the perishable into the permanent.
John Arlott

The significant problems we face cannot be solved with the same level of thinking we used when we created them.
Albert Einstein

Where there is no wine, there is no love.
Euripides
CHAPTER I. INTRODUCTION

The consumption of wine has served as an international communication expedient for thousands of years. From classical symposiums of ancient times to religious ceremonies practiced for centuries, wine has played a significant part in countless interpersonal gatherings across the ages and continents. Historically, the winemaking process, which includes the cultivation of grapes and their fermentation into wine followed by the distribution of the finished product, was contained within a particular region (Estreicher, 2006; Halliday, 1994; Santos, Blanco, & Fernandez, 2006). As time progressed and commerce spread to the far corners of the world, however, wine diffusion propagated to reach mercantile networks expanding to ever-greater markets (Bryant, 2007; McCoy, 2005; Smith, 2007; Thach & Matz, 2004).

The convergence of wine production and transcontinental dissemination has pressed regional vineyards to accent their capital in order to enter international markets and compete in the global arena (Campbell & Guibert, 2007; Moulton & Lapsley, 2001; Reid, 2001). However, this growth in international wine trade has impacted an increasingly disrupted natural environment through amplified carbon output, overuse of synthetic chemicals such as pesticides, fertilizers and herbicides, excessive topsoil erosion, and water mismanagement to name only a few of the prevalent issues (Sandler & Pinder, 2003; Sommers, 2008; Walsh, 2009).

As seen in the literature (Camilleri, 2008; Colman, 2008; Dodd, Pinkleton, & Gustafson, 1996; Overby, Woodruff, & Gardial, 2005), vintners, or winemakers, have been tasked by the implementation of new legal standards, as well as the urging of ecologically aware prospective consumers, to instill a winemaking process that is green,
or environmentally friendly, in order to demonstrate the employment of proactive measures for the long-term sustainability of an unstable Earth.

This incongruous demand for heightened quantity and enhanced awareness of ecological degradation has altered the environment of wineries worldwide, having a critical effect on the conservational standards being employed on site at vineyards and in the production of wine across the globe (Dolan, 2003; Orth, 2005; Zucca, 2008). In the hope that product diversification might augment consumer recognition, research shows that following a worldwide trend of pro-social behavior and green awareness, in recent years organic and biodynamic wines have been rising in popularity (Gleason, 2006; Goode, 2006; Joly, 2007; Kilbourne & Carlson, 2008; Thogersen, 2002). Leading the industry, in 2004 Australia hosted the first International Biodynamic Wine Forum, which amalgamated biodynamic and organic wine producers from around the globe (Halliday, 2006; Oliver, 2005). As New World wine producers, the South Eastern wine zone of Australia deserves specific attention as this particular geographic area lays claim to the largest production of wine in the country whilst many vineyards actively advance green production standards.

Recent ecological developments among international winemakers in a progressively more competitive industry have resulted in a new marketing discourse fueled by the emergent field of environmental communication (Cox, 2007; Day & Monroe, 2000; Depoe, 2007; Leong, McComas, & Decker, 2008; Milstein, 2009; Senecah, 2007). This dissertation investigates the marketing of sustainable practices being implemented by South Eastern Australian vintners during their winemaking process and examines how said practices are being communicated via wine bottle labels
to construct an environmentally friendly image. This research compares the green product marketing strategies between organic and non-organic wineries to determine the extent to which ecological messages are being used on wine bottle labels from the South Eastern wine zone of Australia as a form of environmental communication.

In order to achieve the above, this dissertation will be broken down to the following chapters: Chapter II, Review of Literature, will synthesize the extant literature pertaining to key concepts and historical perspectives of both the field of environmental communication and the Australian wine industry, as well as examine approaches toward environmental communication studies. Chapter III, Methodology, will offer a clarification of the sample selection of wineries from the South Eastern Australian wine zone and review the procedures for data collection and analysis. Chapter IV, Results, will provide an overview of selected winery descriptive demographics while also presenting the data findings of this project’s research questions. Finally, Chapter V, Discussion, will review the implications of the study’s results as well as recognize limitations of the research while proffering recommendations for future investigation. Throughout the document, figures are presented to clarify pertinent information; and, after an exhaustive listing of references and resources, relevant appendices are found at the conclusion of the work.
CHAPTER II. REVIEW OF LITERATURE

This chapter examines the field of environmental communication (EC), providing an historical perspective of the discipline as well as discussing the analytical framework of Institutional Theory. Next, background about the Australian wine industry, including descriptions of sustainable practices, certifying bodies, and wine bottle labels is described. Finally, approaches for studies of EC are reviewed, resulting in the rationale and specific research questions for this study.

Terms Related to Environmental Communication

Key to understanding the discipline of environmental communication are the quintessential concepts described herein.

*Environment.* Definitions of the word *environment* often refer to the term as “all external conditions and factors, living and non-living (chemicals and energy), that affect an organism or other specified system during its lifetime” (Depoe, 2007, p. 2). According to Depoe, “This definition positions ‘environment’ as a relational term, encompassing both interaction and effect between an organism (human or non-human) and its surroundings, including other organisms” (p. 2). Consistent with this definition, an organism’s environment could be microscopic, or, instead, very large, depending on the context or situation.

A more literal definition of environment is “that which surrounds; but it connotes far more” (Killingsworth, 2007, p. 59). In the field of environmental communication, scholars explain that the word environment reflects “anthropocentric, or human-centered, cultural views of and relations with the living Earth” (Milstein, 2009, p. 346). Thus,
environment is a descriptive term, “but one that is never free of ethical and normative implications” (Heath, Palenchar, Proutheau, & Hocke, 2007, p. 40). Although the word environment now signifies a wide range of concerns, Milstein’s (2009) description of the term as “a symbol we dominantly use … to describe the natural world … that surrounds us and is separate from us” (p. 346) best fits the purpose of this study.

*Communication.* In its most fundamental form, *communication* between humans occurs through the use of a mutually understood set of symbols. Berlo (1960) explains that in order to express a message, the process of communication revolves around a complex interaction of variables and communicative events that enable interaction. Human communication can occur between people (e.g., interpersonal, speech), between groups (e.g., organizational, intercultural), between countries (e.g., international, developmental), within oneself (e.g., intrapersonal, self-talk), or even without speaking (e.g., non-verbal, subliminal). Mediated communication (i.e., mass media communication), like human communication, is continuous and dynamic, involving the assignment of meaning through symbolically encoded messages. The central thrust of mediated communication, however, is characterized by its use of technologies (e.g., computer, television, voicemail) to facilitate communication.

As a process of exchange, whether verbal or non-verbal, which involves the transmission of a message from the source, through a channel and to a receiver, the term communication can be narrowly defined as “measurable reduction of ambiguity in a receiver” (Steinfatt, 2009). If it is agreed that “true communication occurs only within systems” (Killingsworth, 2007, p. 60), communication may more broadly be defined as the transfer of information.
According to Carbaugh (2007), “Communication mediates the relations between people and nature … affirming both as powerful sources of knowledge” (p. 69). Since human communication is a form of symbolic action where beliefs, attitudes, and behaviors relating to nature and environmental problems are mediated by communication, then the public sphere emerges as a discursive space for communication about the environment (Cox, 2010). Milstein (2009) writes, “Communication about the environment is embedded within social systems and within the power that is negotiated within these systems” (p. 346). An example of such a system regarding communication and the environment is the social use of language. However, “by the very act of using language, we become alienated from the environment. … With each new layer of mediation, moving from speech to media that go beyond filtering and even seem to replace the natural or social world, we can expect further alienation” (Killingsworth, 2007, p. 60). For the purpose of this study, it is fundamental to distinctly understand communication as it directly relates to the environment.

*Environmental Communication.* Environmental communication is communication about environmental affairs (Meisner, 2009). Schwarze (2007) defines environmental communication “primarily as a set of instrumental practices that privilege the study of those practices over constitutive and structural communication issues” (p. 93). Milstein (2009) explains this concept is “a meta-field that cuts across disciplines. Research and theory within the field are united by a topical focus on communication and human relations with the environment” (p. 345). Depoe (2010) adds that as a profession, environmental communication is a vehicle to “advocate for change, raise awareness,
collaborate to address environmental issues, change behavior, and pass [political, economic, and technological] legislation” (para. 3).

Senecah (2007) rationalizes, “EC, by the very nature of its focus, must be transdisciplinary and integrative” (p. 22). Related to the fields of literary ecocriticism and the rhetoric of place (Killingsworth, 2007), environmental communication consists of the many diverse forms of the communication field, including interpersonal, group, rhetoric, public, organizational, intercultural, and mass media that make up the social discussion and debate about environmental issues and problems (Meisner, 2009; Senecah, 2007).

Robert Cox (2010), an instrumental figure in the academic advancement of EC who has “played a key role in defining and raising environmental communication awareness and credibility” (Senecah, 2007, p. 21) has determined seven major areas of study within the field. They are: (1) environmental rhetoric and discourse, (2) media and environmental journalism, (3) public participation in environmental decision making, (4) social marketing and advocacy campaigns, (5) environmental collaboration and conflict resolution, (6) risk communication, and (7) representations of nature in popular culture and green marketing (Cox, 2010).

Cox (2007), who served as three-time president of the Sierra Club, the largest environmental group in the United States, presents four main tenets, or broad agreements, of environmental communication: (1) environment imbricates material and social/symbolic processes, (2) social/symbolic representations of environment embody interested orientations toward their object(s), (3) social, economic, and ideological contexts both enable and inhibit the production of representations of environment, and (4)
dominant systems of representations of environment influence societal deliberation about and/or response to environmental signals, including signs of deterioration of human health, climate, or ecological systems.

Cox’s (2007) first tenet of EC explains that “our ideas, beliefs, attitudes, policies, and practices involving the natural world and environmental problems are mediated by systems of representation – by human communication” (p. 12). His second tenet states “there is undoubtedly broad agreement that our symbolic mediations are interested; that is, they arise from and embody social locations, perspectives, aspirations, and objectives” (p. 13). The author’s third point is that “even as sociosymbolic representations of environment are inevitably interested, their productions occur in and through a range of institutional cultures and communication practices” (p. 13). And, finally, Cox’s fourth tenet of environmental communication expresses that “social communication, more than natural biological changes alone, determines a civilization’s course when confronting environmental decline” (p. 14). These four tenets are basic to the field of environmental communication and have, contemporaneously, come to serve as the fundamental foundation of the discipline.

Advancing EC even further, Cox (2007) suggests four normative assumptions for the study of environmental communication. They are: (1) environmental communication seeks to enhance the ability of society to respond appropriately to environmental signals relevant to the well-being of both human civilization and natural biological systems, (2) representations of environment, including governmental information, scientific advisory systems, and decision processes, should be transparent and accessible to members of the public, (3) individual and societal opportunities and capacities to study, interact with, and
share experiences of the natural world and to engage others’ communication about such experiences is inherently good and should be nurtured, and (4) scholars, teachers, and practitioners have a duty to educate, question, and critically evaluate when social/symbolic representations of environment and communication practices are constrained for unsustainable policies toward human communities and the natural world.

As witnessed through the above tenets and normative assumptions, “environmental communication should concern itself with issues beyond the production of mere opinion, belief, or conviction about environmental issues. … Such a discipline must analyze, produce, and ultimately model judgment in its scholarship, pedagogy, and service” (Schwarze, 2007, p. 96). According to his publishers, Cox’s (2010) *Environmental Communication and the Public Sphere* remains the only comprehensive introduction to the growing field of environmental communication. “This groundbreaking book focuses on the role that human communication plays in influencing the ways we perceive the environment. It also examines how we define what constitutes an environmental problem and how we decide what actions to take with regards to the natural world” (n.p.).

As a field of study and environmental discourse, EC is “a diverse synthesis of communication and environmental theory that examines the role, techniques, and influence of communication in environmental affairs” (Meisner, 2009, p. 1). Moreover, environmental communication is “flexible and contingent, composed of overlapping discourses, which come from recognition of the validity of a variety of issues, problems, and framings” (Agyeman, 2007, p. 120).
The discipline of environmental communication seeks to marry the two concepts of environment and communication in a manner that creates a complimentary and unique relationship. As such, “most environmental communication scholarship exhibits a strong commitment to understanding the constitutive dimension of communication, and contributions to the discipline advance nuanced explanations of the relationship” (Schwarze, 2007, p. 93) between environment and communication. Certainly this form of communication about the environment represents a kind of paradigm shift for communication scholars used to purposeful rhetorics, interventionist communication campaigns, and human control and dominance. “Such a stance opens up new possibilities for communication, especially communication beneficial to the earth-human relationship” (Cramer & Foss, 2009, pp. 313-314).

Striving to improve human relations with nature, “scholars who study environmental communication are particularly concerned with the way people communicate about the natural world because they believe that such communication has far-reaching effects at a time of largely human-caused environmental crises” (Milstein, 2009, p. 345). Cramer and Foss (2009) purport that “in order for EC to be effective … there needs to be a fundamental shift in the human-nature relationship” (p. 298). Depoe (2007) surmises that more researchers are becoming attuned to this critical need and that is why, “scholars from communication and a host of other disciplines have explored environmental issues and themes in their own research programs” (p.1).

Some environmental communication scholars are specifically concerned with how nature speaks and enters into a dialogue with humans and, subsequently, how nature speaks through humans (Cramer & Foss, 2009; Rogers, 1998). Many EC scholars revisit
“the core issues surrounding ideologically oriented scholarship in communication studies” (Schwarze, 2007, p. 89). Environmental communication authors work to dismiss the notion that humans have full control over nature and instead proffer the notion of an interconnected web between humans and the environment. Plec (2007) maintains, “EC scholars have played a prominent role in deconstructing images of the environment in media and popular culture. … and they continue to play important roles as interventionists who enable dialogue and nurture critique of competing representations” (p. 53). Therefore, one of the tasks for scholars of EC has been to expose and examine the functioning of power both within and beneath discourses on the environment.

According to Plec (2007), scholars of EC “are uniquely positioned to interrogate misnomers … that conceal agency and purpose, hence concealing the ways power is mobilized through discourse” (p. 51). Scholars argue that the role of environmental communication “should be to increase the quality of enlightened decision-making so that societies can be more fully functional in their identification, assessment, and management of risks” (Heath et al., 2007, p. 46). Heath et al. (2007) assert that “environmental communication scholars and practitioners can and should serve the vital social role of bringing ethical concerns to bear on the lines of scientific investigation” (p. 45). Plec (2007) declares, “EC is and should continue to be among the sites where conversations about complicity and implication, power and argumentation, theory and practical implementation continue to inform communication research and scholarship” (p. 50).

A current problem confronting this scholarship is a confusing and varied use of terms associated with environmental communication. As a result, while many notable scholars in the field have employed similar words, alike terms have been conceptualized
in different ways. Cox (2010) defines environmental communication as “the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; the symbolic medium that we use in constructing environmental problems and in negotiating society’s different responses to them” (p. 37). Meisner (2009) explains that “by pragmatic Cox means the instrumental function of educating, alerting, persuading, mobilizing, solving, etc. By constitutive he means the creative function of helping to shape our perceptions of nature, environmental issues, and ourselves” (p. 1). Additionally, EC’s pragmatic approach grants the application of the discipline to solve real-world environmental issues while its constitutive aspect allows EC to be established as a relevant area of research and study by composing representations of nature as subjects for human understanding. Since this dissertation is concerned with the communication of sustainable practices at vineyards in South Eastern Australia, Cox’s (2010) definition of environmental communication as stated above most clearly suits the purpose of this research.

*Environmental Communication Historical Perspective*

According to environmental scholar Bryant (2007), “The skewing of facts makes a very important contribution to our overall understanding of the discourses that shape our perceptions of environmental issues” (p. 60). In an attempt to rectify these misstated facts, in 1996 a group of scholars called the Environmental Communication Working Group presented a formal appeal to what is now the National Communication Association (NCA) Legislative Council to create the Environmental Communication Commission. “The Council unanimously approved the new academic area, and what is
now referred to as the Environmental Communication Division is generally considered a flagship organization of the EC community” (Senecah, 2007, p. 22).

The early course of EC, however, was charted long before the 1996 NCA meeting. “Environmental communication is thought to have emerged as a distinct field in the United States in the early 1980’s from the tradition of rhetorical theory” (Milstein, 2009, p. 345). Christine Oravec’s seminal piece “in the communication discipline’s premier Quarterly Journal of Speech (1981) singularly resonated and inspired. … Oravec demonstrated with rigor and eloquence that environment was not simply a topic subset of other fields. … Rather, environment was the umbrella under which everything else fit and was connected” (Senecah, 2007, pp. 22-23). Oravec’s essay entitled “John Muir, Yosemite, and the Sublime Response” marked for many “the beginning of the environmental communication field” (Cox, 2007, p. 6).

Although other “scholars often cite the 1984 publication of a generative rhetorical study [also by Christine Oravec] as definitively announcing the field to the rest of the communication discipline” (Milstein, 2009, p. 345), by the early 1980’s environmental communication was announcing its presence in the academic world. During that decade, however, “communication departments had little interest in investing departmental resources in environmental topics and very few courses were offered in communication programs” (Senecah, 2007, p. 23). According to EC scholar Senecah (2007) who proffers a concise history of the field in her recent essay, “Environment remained an odd topic to most of our communication colleagues, and suspicious to others. ‘Environment’ was seen as synonymous with ‘environmentalist’ and ‘environmentalism.’ This
suggested a political, moral, or activist agenda that seemed too biased for objective researchers” (p. 23).

Environmental communication pioneers began to construct legitimacy for the field by the end of the decade. “In 1988, they participated in and championed the first SCA [now NCA] panel that had an environmental theme” (Senecah, 2007, p. 23). “During the course of that inaugural seminar, participants recognized the power and influence of communication processes within all aspects of environment” (p. 23). As stated by Senecah, the group of academicians “reinforced the value of understanding the dynamics by which symbol-using humans work out their relationship with each other to socially construct attitudes, beliefs, policies, and behavior concerning the environment” (p. 23). Furthermore, “everyone agreed on the need to build an EC literature to inform understanding and practice, and to create opportunities to include environment in communication courses and programs” (p. 23).

The Conference on the Discourse of Environmental Advocacy was launched in 1991, which soon evolved into the biennial Conference on Communication and Environment (COCE). Consequently, papers presented at these meetings “served as the beginning of a definable EC literature as well as a chronicle of the history of the field and those who have contributed to it” (Senecah, 2007, p. 24). During this time, many universities began to develop programs and add environmental content to existing classes to increase environmental awareness and knowledge (Kilbourne & Carlson, 2008). All of this action led to the official 1996 appeal to the NCA Council, which was critical to the official recognition of EC as a distinct unit within the communication discipline. “The appeal asserted the pervasiveness of environmental issues in every facet of individual and
global life, demonstrated the profound short- and long-term societal and environmental implications of human communication processes for constructing and addressing them, and sounded a compelling call for a response from the communication discipline” (Senecah, 2007, p. 25). As a specific field, environmental communication was officially recognized.

The last decade has been crucial for the growth and integrity of the academic field of environmental communication. “The EC community has spent the last several years necessarily building its credibility within its home discipline. It needed to develop defensible methods for valuing EC activity for promotion and tenure” (Senecah, 2007, pp. 31). As a result, “many individual ECers have built impressive and productive bridges between EC and other disciplines, organizations, and arenas … We have a need to inventory our individual and collective strengths to build confidence, establish mentoring, and create opportunities” (Senecah, 2007, p. 30). One way that the EC community has built that confidence is through the development of scholarly journals. As of 2010, EC related journals have evolved into a respected academic platform that now consists of numerous publications. Some of these journals are: Applied Environmental Education and Communication, Environmental Communication Yearbook, Environmental Communication: A Journal of Nature and Culture, Green Theory and Praxis: The Journal of Ecopedagogy, International Journal of Sustainability Communication, Journal of Environmental Education, Public Understanding of Science, Science as Culture, and, Science Communication (Environmental Communication Network, 2009). Additionally, the online entity Environmental Communication Network
provides an easily accessible Internet resource for scholars, teachers, and practitioners to share ideas, announce departmental postings, and relay information relevant to EC.

Recently, scholarly debate has surrounded the emerging field of environmental communication regarding the future vision of the discipline. Cox (2007) asks: “Should such a field have an ethical duty? That is, should environmental communication be considered a ‘crisis discipline’” (p. 6)? This proposition has resulted in an excited discourse amongst leaders in the academic field. Some scholars agree with Cox’s (2007) ultimate appraisal that EC should indeed be considered a crisis discipline because it deals with such pressing issues as climate change, endangered species, and toxic pollution (Heath et al., 2007; Peterson, Peterson, & Peterson, 2007; Plec, 2007). Others are not convinced about the crisis, but support the ethical duty on behalf of EC practitioners to help a society that has caused ecological collapse to make more informed decisions (Carbaugh, 2007; Depoe, 2007; Killingsworth, 2007; Schwarze, 2007; Senecah, 2007).

Proponents for calling EC a crisis discipline, Heath et al. (2007) surmise “environmental communication is normative in tenet and process because it seeks to understand contextual specific risks that might manifest into crisis” (p. 36). Relating environmental communication to the crisis discipline of conservation biology, Cox (2007) states, “certainly we share certain characteristics of other crisis disciplines. We tend to have an ‘eclectic multidisciplinary structure’ (Soule, 1985, p. 727), and we ‘take many of our questions, techniques, and methods from a broad range of fields’ (p. 727), not just from the general field of communication” (p. 12). Advocating the crisis, Cox (2007) states, “I want to argue that the field of environmental communication arises at a moment of conjunctural crisis, defined in not insignificant ways by human-caused threats
to both biological systems and human communities, and also by the continuing failure of societal institutions to sufficiently engage these pressures” (p. 7).

Regardless of the crisis status, “the next phase of EC’s mission should be characterized by internal strengthening and external outreach and partnership building” says Senecah (2007, p. 32). Tying the field back to its home discipline, Killingsworth (2007) concurs, “our work must go beyond critique and serve the productive ends of communication as well. … What is required of us, I would argue, is that we commit ourselves to the work of re-minding people of the environment” (p. 62). Ultimately, it is this “ability of environmental communication scholars and practitioners to contribute to the enhancement of society’s communicative competence that invites an ongoing dialogue about the purpose of the work in which we engage” (Cox, 2007, p. 17), marking environmental communication as a distinctive discipline.

**Theoretical Framework**

In the *Encyclopedia of Communication Theory*, Milstein (2009) writes, “Central to environmental communication theory are these assumptions: The ways we communicate powerfully affect our perceptions of the living world; in turn, these perceptions help shape how we define our relations with and within nature and how we act toward nature” (p. 345). Carbaugh (2007) adds that environmental communication theorists “seek to understand environmental discourses that mediate relations between people and nature, to understand the places in which they are used, to act in favor of nature, of people, and thus to honor earth, through better knowledge about it” (p. 71).
Rogers (1998) argues that environmental communication theory must acknowledge more fully the “obdurate materiality” of the natural world. The scholar seeks to lay the groundwork for a transhuman, materialist theory of communication that would build the foundation for a dialogue between the human community and nature. Evidently, EC theory is “concerned about the quality of communication that leads to, results in, and emanates from scientific and academic investigation and debate” (Heath et al., 2007, p. 38).

As a framework, environmental communication “builds on a foundation of the intersubjective relationship between earth and humans, upon which the mixing of rational and so-called irrational appeals may be more effective” (Cramer & Foss, 2009, p. 300). Intersubjectivity is “construed as a relationship in which human subjectivity is not dominant over the subjectivity of the earth; rather, humans and the earth are mutual partners in knowledge and experience” (p. 300). According to Cramer and Foss, the concept of intersubjectivity is fundamental for enacting communication theory, especially those focused around the environment. The authors report:

> It is the willingness to engage in this interaction, to call into question beliefs, attitudes, and actions not questioned before that opens up possibilities for different approaches. This is a hallmark of the intersubjective approach to environmental communication theory … that it may restore the earth-human relationship and make communication more beneficial to both. (pp. 300-301)

Environmental communication theories range widely in their epistemological and methodological orientations. “Environmental communication theory draws from cultural theory, media theory, rhetorical theory, organizational theory, social movement theory, pop-culture theory, and many other areas” (Milstein, 2009, p. 345). As indicated by Milstein, “environmental communication researchers have accessed existing theories to
serve as conceptual frameworks for their questions and studies. … Some theories focus on explaining cultural views of everyday communication about the environment” (p. 345).

It is the challenge in the field of environmental communication to clarify the complex discourse between nature and humans by pulling from theories outside the discipline and applying them to EC studies. Kinsella (2007) surmises that established models of communication theory may “undermine their own relevance to ecology as well as their broader emancipatory intentions by centralizing the role of human agency, understating the degree to which the world informs the human agent” (p. 199). The author asserts that “traditional representational models understate the degree to which humans actively create the world through language” (p. 196). Consequently, theoretical framework applied toward the study of environmental communication should represent a less conventional approach.

_Institutional Theory_

Institutional Theory was largely developed in the mid-1990’s by W. Richard Scott (2008), however, “the roots of institutional theory run richly through the formative years of the social sciences” (p. ix; see also Bill & Hardgrave, 1981; Hodgson, 1994; Meyer & Rowan, 1991; Scott, 1995). Contemporarily, Institutional Theory has “captured the attention of a wide range of scholars across the social sciences and is employed to examine systems ranging from micro interpersonal interactions to macro global frameworks” (Scott, 2008, p. 2). The theory argues that social reality is a human construction created though interaction and identifies institutionalism as a core process in
the creation and perpetuation of social groups (Berger & Luckmann, 1967).

Institutionalism can be defined as the process by which actions are repeated and given similar meaning (Scott, 2008). Although the theory has had many adaptations, from economics (Oliver, 1991) to political science (DiMaggio & Powell, 1983) to sociology (Selznick, 1948), the framework stemming from the institutional school of organizational theory (Beverland & Luxton, 2005) is most applicable for the purpose of this study. This is because environmental uncertainty, measured by the number of ecological changes in an organization’s community such as the international wine industry, decreases the level of organizational formalization. “If decision makers have different beliefs about public reactions, they may adopt different communication strategies or messages. Mixed messages may confuse the public, or worse, reduce the organization’s credibility” (Leong et al., 2008, p. 268).

In their article, “Managing Integrated Marketing Communication (IMC) Through Strategic Decoupling,” Beverland and Luxton (2005) state that “institutional theory predicts that firms survive to the extent that they are seen as legitimate by their respective publics” (p. 104). In many cases, this involves conforming to industry standards (Scott, 1995), such as implementing environmental procedures. Meyer and Rowan (1991) propose that organizations attempt to present an external façade to give the impression that they are conforming to external, institutionally acceptable norms, while behind the scenes they engage in practices that contradict their external image. This concept is known as decoupling and demonstrates that publically stated commitments to environmental procedures do not always echo true corporate action.
Institutional Theory recognizes the possible split from the espoused philosophy of a company and the actual practices employed. According to Beverland and Luxton (2005), often corporations “reinforce their image as responsible, moral advocates for the environment, thus gaining support for their agenda … and avoid[ing] causal links being drawn between their environmental philosophy and their actions. … this strategy is necessary for some brands … facing large, entrenched, mass-market competitors” (p. 104). Meyer and Rowan (1991) surmise, “many of the environmental forces on organizations are not based on efficiency or effectiveness, but on social and cultural pressures to conform to a given structural form” (p. 41), allowing for a separation between practice and promotion.

In order to investigate this disjuncture, Institutional Theory looks at how the flow of media messages is produced, managed, and distributed. That is to say, institutions “collectively provide social lenses through which individuals and groups interpret their social world” (Kilbourne & Carlson, 2008, p. 107). As related to vineyards in the South Eastern Australian wine industry, many wineries may selectively communicate aspects of their operations to give the appearance of being green while their actual procedures demonstrate otherwise (Beverland, 2005).

As Scott (2008) maintains, “institutional theory encourages scholars to take a longer and a broader perspective in crafting testable arguments” (p. 31). Scott (2008) continues:

An embarrassingly large proportion of our theoretical conceptions and empirical findings has been constructed by U.S. scholars based on data collected from U.S. organizations. Institutional theory can do much to overcome this regional bias as it fosters a rich combination of historical and comparative research.” (p. 31)
This supposition merits the comparison of organic and non-organic wineries in the South Eastern zone of Australia as plausible candidates for the application of an environmental communication study founded upon an Institutional Theoretical framework.

Terms Related to Organic Wine Industry

Environmental communication scholar Retzinger (2008) writes, “For each of us, eating is a political act. The choices we make everyday regarding what to eat shape the health not only of our individual bodies, but the broader body politic and the environment” (p. 248). Applying this thought pattern directly to food, Retzinger continues:

Perhaps more than anything else we encounter in our daily lives, food represents our deep indebtedness to both nature and culture. Our food purchases communicate the values we hold and reverberate those values outward, first to the land, then to the farmers and farmworkers who grow our food. (p. 248)

Incidentally, one might argue the same case for the beverages we drink, such as wine.

Key to the abovementioned logic is that “Agriculture – and thus all of human civilization – hinges upon the thin layer of topsoil built over thousands of years” (Retzinger, 2008, p. 248). Alarmingly, however, “the planet’s topsoil is being eroded and lost. … Because it is directly tied to the earth, the wine business is uniquely positioned to respond to these challenges” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 4). In a symbiotic capacity, “grape growing, winemaking, and business practices that improve the quality of the land will noticeably improve the quality of the wine” (p. 4).

Retzinger (2008) avows that “the agricultural practices carried out on the lands reshape the natural world in profound ways, yet we remain dependent on nature in the
form of the soil, seeds, water, and sunlight that together produce every morsel of food we ingest” (p. 248). According to Dolan (2003):

Humanity now consumes resources and produces waste faster than the earth can replenish and absorb them. … the “ecological footprint” of human activity … was created [as a metric] by an organization called Redefining Progress. … The latest “ecological footprint” update calculates that our biosphere currently needs about a year and three months to renew the resources and absorb the waste that humanity consumes and throws away in a year. In other words, we’re using up fifteen months of the earth for every twelve months of real time. (pp. 40-41)

As society has begun to awake to this dependence, over approximately the last ten years terms like going green and carbon footprint have become gradually more popular in public forums. Consequently, “winegrowers and winemakers have begun paying increasing attention to the impact of their practices on the environment. … During the same time, the term sustainable agriculture has begun to emerge” (Zucca, 2008, p. 2). This rhetoric, however, has left many individuals confused regarding the terms organic, biodynamic, and green. Organics and biodynamics are agricultural practices that can be applied to any crop, including the grapevine. Green is primarily a marketing campaign meaning environmentally friendly, which includes a very broad range of circumstances. In order to avoid confusion, and for the scope of the project, definitions of related terms are described herein.

Sustainable / Conservational. Partly due to an increase in awareness of the agriculture industry’s social and environmental responsibility, there has been movement toward sustainable agricultural practices. Sustainable can be defined as “the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems” (Agyeman, Bullard, & Evans, 2003, p. 5). Common sustainable philosophy usually promotes natural farm
management, restoration of the land, and biodiversity on the estate. A word sometimes
used in place of sustainable is conservational.

Sustainable is viewed as “capable of being continued with minimal long-term
effect on the environment. … Sustainable farming means working with, not against
nature” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 6, p. 9). The notion
is guided by the principle put forth by the World Commission on Environment and
Development’s *Our Common Future* report from 1987, which defined sustainable as
“meet[ing] the needs of the present without compromising the ability of future
generations to meet their own needs” (p. 43). According to wine scholar Zucca (2008),
“Sustainable agriculture is characterized by a systems perspective of stewardship of
natural and human resources and comprises three goals – environmental health, economic
profitability, and social equity” (p. 2). The combination of these three key principles is
known as the three “E’s” for environment, economics, and equity (Thach & Matz, 2004).

**Organic.** Organic refers to the way agriculture products are grown and
processed. “Organic production is based on a system of farming that maintains and
replenishes soil fertility without the use of toxic and persistent pesticides and fertilizers”
(Organic Trade Association, 2008, para. 1). “The term is only legally defined in a few
countries such as the USA and Australia” (Robinson, 2006, p. 499). According to the
agriculture is an ecological production management system that promotes and enhances
biodiversity, biological cycles, and biological activity. It is based on minimal use of off-
farm inputs and on management practices that restore, maintain and enhance ecological
harmony” (para. 1).
Originating in Europe, “organic farming is usually defined by a government body, and if food products are grown and produced according to their regulations, they can be labeled ‘organic’. In the wine industry, organic viticulture is basically growing grapes without the use of synthetic pesticides or fertilizers” (Thach & Matz, 2004, p. 41). “To be described as organic a vineyard and/or its wine must, in most markets, have third party certification, usually from a non-governmental organization overseen by a ministry of agriculture or its equivalent” (Robinson, 2006, p. 298). Organic viticulture has been “adopted by both small and large vineyards in several areas of the world. It is also being used as a consumer marketing tactic to appeal to those consumers who will only purchase organic products” (Thach & Matz, 2004, p. 41).

While any type of agricultural product can be certified organic, the item must be grown according to strict uniform standards, which is regulated by the federal government’s United States Department of Agriculture (USDA) and the National Organic Program that was implemented in 2002. Although Congress passed the Organic Foods Production Act in 1990, it took twelve years to go into effect (Organic Trade Association, 2008). Important to wine producers and consumers, “the directive covering organic viticulture does not cover the production or labeling of organic wine. Thus in the USA and Australia, a distinction is made between ‘wine produced from organically grown grapes’ and ‘organic wine’” (Robinson, 2006, p. 499). “‘Organic’ is a labeling term that denotes products produced under the authority of the Organic Foods Production Act. The principal guidelines for organic production are to use materials and practices that enhance the ecological balance of natural systems and that integrate the parts of the farming system into an ecological whole” (Organic Trade Association, 2008, para. 2).
Benefits to choosing an organic product include reducing health risks from pesticides. Moreover, organic farms respect water sources, build healthy soil, work in harmony with nature, and preserve biodiversity, which are some of the most pressing contemporary environmental concerns (Organic Trade Association, 2008). Notably, “the organic farmer’s elimination of polluting chemicals [pesticides] and nitrogen leaching [fertilizers], in combination with soil building, works to prevent contamination, and protects and conserves water resources” (para. 8).

Sales of organic products in 2008 increased more than 12 times since the monitoring of sales in the organic industry began in 1994. Organic foods and beverages continue to be one of the fastest growing segments in the overall food market today (Organic Trade Association, 2008). An important fact to consider in relation to this specific study is that, due to “recent increases in organic vineyard conversions, notably in Australia, more than two percent of the world’s vineyard [is] expected to be certified organic” (Robinson, 2006, p. 498). Moreover, “United States sales of certified organic wine and those made with organic grapes hit $80 million last year [in 2005], rising 28% since 2004, according to the Organic Trade Association. Today wine enthusiasts buy nearly twice as much organic wine as they did in 2003” (Gleason, 2006, p. 35).

**Biodynamics.** *Biodynamics* is the most advanced and holistic form of organic agriculture, in which the farm itself is viewed as a living organism. According to renowned French agriculturist Joly (2007), “‘Bio’ means life; and ‘dynamic’ is an enhancement, an acceleration or also a stimulation of life” (p. 59). Both sustainable and organic farming follow an ecologically minded approach to viticulture, but biodynamic farming, a set of
techniques that have been popular in Europe for years, takes this approach to the next level by restoring the health of the land.

Born from the teachings of German philosopher Rudolf Steiner (1919) underscoring that all life is connected, biodynamics focuses on working with natural calendar cycles, aiming specifically to make farms and vineyards self-contained, life-sustaining ecosystems. Biodynamic farmers “use natural predators instead of pesticides, save seeds, use compost for fertilizer, and grow crops that are appropriate for the local environment. In winemaking, this means that winemakers must study the soil and carefully decide which varietals will best express the vineyards” (Gleason, 2006, p. 39).

“Biodynamic principles were first applied to wine in 1975, when Nikolaihof winery in Austria adopted the practice” (Colman, 2008, pp. 137-138).

Interest in biodynamics stems from principles that enrich and heal earthly soil. The main components of biodynamic farming consist of considering the land as an organism, emphasizing soil health, incorporating animals into the farm, using natural methods, including the farmer as an integral part of the system, achieving balance between the physical and spiritual, observing the biodynamic calendar, and following specific biodynamic preparations. “Methods employed in biodynamic farming serve to enrich the soil’s water-holding capacity, reversing the effects of compaction and increasing the levels of nutrients, minerals, and micro-organisms naturally found in the soil” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 20).

A crucial component of maintaining healthy, biodynamic soil is compost. Compost is “an earthy, dark, crumbly soil amendment made from kitchen, garden, winery, and farm waste decomposed by micro-organisms. Compost, a fundamental
component of both organic and biodynamic farming, enhances the health of soil through slow release of nutrients, aiding water retention and aeration” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 34). Additionally, Demeter, a non-profit organization, is the international biodynamic certifying body that promotes and protects biodynamics. “To qualify, winemakers must be certified organic for three years and adhere to biodynamic principles” (Gleason, 2006, p. 39).

Carbon Footprint / Carbon Offsetting. A carbon footprint is a measure of the impact human “activities have on the environment, and in particular climate change. It relates to the measurement [or sum] of all greenhouse gas [emissions] produced in day-to-day interests through burning fossil fuels for electricity, heating and transportation, etc.” (Carbon Footprint, 2010, para. 1). Calculated in carbon dioxide [CO2] units by the ton, the primary footprint is a measure of direct emissions of CO2 from the burning of fossil fuels, including energy, consumption, and transportation. The secondary footprint is a measure of indirect CO2 emissions from the lifecycle of a product, including manufacture and eventual breakdown (Winemakers’ Federation of Australia, 2009a)

The mitigation of carbon footprints through the development of renewable energy, such as solar or wind energy and reforestation, represents one way of reducing a carbon footprint and is often known as carbon offsetting (Carbon Footprint, 2010). Terms associated with carbon offsetting are: carbon negative, which describes any process that removes more carbon from the atmosphere than it releases; and carbon neutral, which refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount offset.
Terroir / Appellation of Origin. Terroir is “the French word for the taste of a vineyard. … When you’re not intervening with chemicals, the vineyard is able to reveal itself, and the grapes communicate that” (Gleason, 2006, p. 39). Terroir in its holistic use “includes the people, customs, traditions, even the local food of an area. More commonly, however, terroir relates to the land, nearby lakes, rivers and seas, and the climate as it affects the working vineyard” (Saunders, 2004, p. 20). Translated literally as soil, “this French term describes not only the terrain on which the vines are grown, but also encompasses soil, slop, orientation to the sun, elevation, and effects of climate” (Joly, 2007, p. 41).

The appellation of origin, which can be described as a protected name under which a wine may be sold indicating that the grapes used are of a certain kind from a specific district (Santos, Blanco, & Fernandez, 2006), is currently acquiring value as the main strategy used by winemakers to differentiate their product in the global arena. Often these two terms, terroir and appellation of origin, are used interchangeably.

According to Parducci Wine Cellars and Paul Dolan Vineyards (2009), “organic and biodynamic wines authentically reflect the qualities of specific vineyards. This expression known in the wine business as terroir, is a convergence of soil [structure], sunlight hours, slope [topography], alignment to the sun, and temperature [microclimate of the vineyard]” (p. 20, p. 44). Central to the concept of terroir is the fact that all these components are natural and not significantly influenced by vineyard management. In essence, terroir is the belief that “the land gives the wine its character, not the grape” (Saunders, 2004, p. 19).
**Vintner / Vineyard.** *Vintner* is a winemaker. The terms vintner, *winemaker* and *wine producer* are used interchangeably in this project. It should also be noted that while *vineyard* means the fields and *winery* means the buildings, the two words are also used interchangeably in this study.

**Viticulture / Viniculture / Varietal.** *Viticulture* is defined as the theory, science, and study behind the production of grapes. *Viniculture* is defined as the theory, art, and science of making wine. *Varietal* is defined as wine made completely or predominantly from a single grape variety (i.e., name of grape is same as wine; e.g., Shiraz).

**Old World / New World Wine Producers.** The divide between *Old* and *New World wine producers* was traditionally a distinction of geography and the historical production of wine. “However, today we now see the situation in which the Old World [e.g., France, Italy, Spain] is seeking the freedom and innovation of the New World [e.g., Chile, New Zealand, USA] and the New World is seeking the strength in identity that some of the Old World regions enjoy” (Wine Australia, 2009, para. 1). According to Wine Australia (2009), “The comparing and contrasting of approaches between New and Old World philosophies is best explored across three key topics: Viticulture, Winemaking, and Marketing” (para. 1).

The significant difference between the two philosophies is that “the Old World can draw upon centuries of wine production and inherited wisdom [which dates back to the 4th Century]. … Conversely, New World countries are still very much in the embryonic stages of development, where wine regions are generally determined by geography and border a general area” (Wine Australia, 2009, para. 2). This geographic
distinction allows for a broad range of grape varieties to be cultivated within the same estate.

Specific to this project, “Australia was the first country to introduce varietal labeling to provide consumers with a signpost indicating what they should expect from a certain wine, and this approach has been taken up by [other] New World producers” (Wine Australia, 2009, para. 3). Additionally, “new wine closures and packaging, such as [the] screw cap, have also been New World initiatives driven by consumer needs and winemakers’ desire to ensure the consumer purchases the wine as they intended it to be” (para. 3).

*Environmentally Friendly / Green.* Environmentally friendly, or green, refers to goods and services considered to inflict minimal or no harm on the natural environment. The terms *eco-friendly* and *nature friendly* are often used as synonyms.

Other key concepts pertinent to the study of environmentally friendly procedures are: *Ecology*, which is the “study of the abundance of life as well as the interactions between organisms and their environment” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 35); and *Green Power*, which is “electricity generated from environmentally friendly, non-polluting, renewable sources [e.g., sun and wind]” (p. 36).

*Green Product Marketing / Green Product Advertising.* A corporation’s attempt to associate its products, services, or identity with environmental values and images is known as *green product marketing* and is generally used for product promotion, image enhancement, or image repair (Cox, 2010). This concept also includes communication about environmentally beneficial product modifications.
A term associated with green product marketing is *green product advertising*, which is the marketing of products as having a minimal impact on the environment and the demonstration of the manufacturer’s compliance to environmental standards. Incidentally, this can lead to *pro-cotting*, which is the purchasing of products from companies perceived to have good environmental track records; the opposite of *boycotting* (Cox, 2010).

*Environmental Image Enhancement / Greenwashing.* *Environmental image enhancement* is the use of advertising to improve the image or identity of a corporation, reflecting its environmental concern or performance (Cox, 2010).

Related to the concept of environmental image enhancement is *greenwashing*. *Greenwashing* is described as “disinformation disseminated by an organization so as to present an environmentally responsible public image” (Cox, 2010, p. 359). That is, when attempting “to impress potential customers and sell more product, some businesses intentionally overstate their environmental sensitivity and accomplishments” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 37).

*Australian Wine Industry Historical Perspective*

Bryant (2007) reports, “Nature gives us our most fundamental sense of time … [which] places us within a shared history and a common knowledge, and ultimately connects us to other humans and to a shared physical locale” (p. 65). Furthermore, Day and Monroe (2000) state that in order “to design an environmental communication program, it is important to begin with a sense of the history of the environmental issue, knowledge of the key institutions and individuals, and an idea of which options are
possible” (p. 41). With these observations in mind, it is imperative to have a firm understanding of Australia, their wine history, and the geographical structure of the country (see Appendix A).

According to Golob and Bartlett (2007), “Australia is a stable, democratic society of 23 million people. Its system of government is based on the liberal democratic tradition, with institutions and practices that reflect British and North American models but that are uniquely Australian. … Australia’s economy is one of the strongest in the developed world” (p. 4). This economic prowess has aided in the development of the country’s wine industry, which perhaps unexpectedly has a long history of viticulture.

Since there are no native vines on the continent of Australia (Robinson, 2006), wine grape growing began soon after the arrival of European settlers who carried grapevines among the cargo of the First Fleet of 1788 and planted them in a small area near the Sydney Harbor Bridge. “The first vines planted in Australia were probably trodden into the soil in February 1788, soon after the eleven ships under the command of Captain Arthur Phillip established Port Jackson, now Sydney, as a convict settlement, on 26 January 1788” (Mayo, 1986, p. 19). Despite some early setbacks due to Sydney’s humidity and rainfall, a successful vineyard was established at Parramatta in 1791 (Halliday, 1985). Australian viticulturist James Busby, who is widely regarded as the father of Australian viticulture (Mayo, 1986; Sandler & Pinder, 2003) undertook a three-month tour of Spain and France in 1831 and returned with a collection of 543 vine cuttings (362 of which survived) and started the first vineyards in Sydney’s Botanic Gardens, Victoria, and South Australia (Clarke, 2004).
“In Europe grapes are grown on the warm fringes of a cold continent, and in Australia they are grown on the cold margins of a hot continent” (Mayo, 1986, p. 26). Therefore, by the 1850’s, commercial vineyards for wine production were well established on the coastal areas of most states. In the 1880’s, South Australia became known as the “wine state,” and is today the national headquarters of the industry. Some of the oldest vines in the world are in Australia as most of the nation’s wine regions escaped the plague of *phylloxera*, a tiny aphid-like bug, which wiped out many ancient plantings in Europe during the 1800’s (Halliday, 2006). “Shiraz or Scyes, as James Busby called it, was first imported into Australia in 1832 and by the end of the 19th century it had been widely planted throughout New South Wales, Victoria and South Australia. Today it is Australia’s most famous and internationally important wine variety,” (Australian Wine and Brandy Corporation, 2009b, p. 10). In fact, “because Australian Shiraz has been so successful in European markets, the word Shiraz has been used on wine labels for Syrah grown all over the world” (Robinson, 2006, p. 627).

Until the 1940’s, Australia’s wine sector was limited by a tariff protection known as Imperial Preference, but this ended after World War II, ushering in many other changes for the domestic industry. “1956 marked the … first national advertising campaign for wine” (Halliday, 1994, p. 13), which was followed by Australia’s first commercial Chardonnay, Murray Tyrrell’s Vat 47, made in 1971 (Australian Wine and Brandy Corporation, 2009a). Since then the rise of this wine style, complemented by the establishment of 1,800 small wineries that have come into existence since 1970 (Robinson, 2006), has been amazing in terms of both volume and quality. In fact, by the early 1980’s there was an oversupply of red wine that led to vines being pulled as the
demand for white wine (i.e., Chardonnay) became preferred. Presently, “two varieties, Shiraz and Chardonnay, account for around 50 percent of the grapes grown in Australia” (Australian Wine and Brandy Corporation, 2009a, p. 14).

Today roughly 2,600 grape-growing vineyards (Harpers Wine & Spirit, 2009) are found throughout all 62 designated wine regions in Australia totaling 170,000 hectares, or roughly 400,000 acres¹ (Wine Australia, 2009). While there are wineries in Western Australia, the major wine producing Australian states are Queensland, New South Wales, Victoria, South Australia, and the compact island state of Tasmania, all of which are considered part of the South Eastern appellation and together account for over 95% of all grapes grown in the country (Dolan, 2003). “Australia’s wine base is the state of South Australia, or more especially a strip of land running up the eastern side of the state from Mount Gambier in the bottom right-hand corner of South Australia, and from Coonawarra and Wrattonbully up to the big-volume Riverland districts” (Saunders, 2004, p. 319).

In recent years, organic wines made their first national appearance. “Certified organic grape and wine production in Australia first appeared in the late 1980’s with wineries such as Botobolar (Mudgee, New South Wales) and Robinvale (Sunraysia, Victoria). Today, organic wine is distributed across the country from Margaret River to the Hastings Valley” (TM Organics, 2009, para. 1). With the help of organics, the Australian wine industry exported AUD$200 million worth of wine across the world by 1991. In the early 1990’s Australian wines had a solid foothold in the United States. “In 1994, sales were small, but ten years later Australia provided more wine to the United States than any other exporting nation, including France and Italy” (Colman, 2008, p.
“Insiders knew that Australia had quietly developed the world’s most creative and dynamic wine industry – surpassing California. But this fact was largely unknown outside Australia” (Posert & Franson, 2004, p. 180). As the world began to take notice, the country’s export figure leapt to AUD$1 billion in 1999. And by 2004, Australia’s annual export had increased to AUD$2.7 billion (Wine Australia, 2009; Wine Web, 2009).

According to Colman (2008), this nearly rabid expansion in international sales was due to the fact that initially Australia sent only its worst wine abroad, keeping the best wine for the local market. As a result, the international reputation of Australian wines remained lower than it should have for many years:

The situation changed, however, in the 1980’s, as plantings expanded and the industry began to focus on the export markets. The Australian Wine and Brandy Corporation introduced minimum quality standards for exported wines. With their resulting high quality and low price, Australian wines undercut many competitors in the world market and rapidly gained market share. In 1970 a scant 4,000 cases of wine were exported to the United States. The quantity increased by 1980 to 44,000 cases – still just 0.1 percent of the U.S. wine imports. By 1990, 491,000 cases were imported, accounting for 1.7 percent market share. And by 2004, Australian imports exceeded 20 million cases, representing more than 25 percent of U.S. wine imports. (pp. 105-106)

In that same year, 2004, Australia hosted the first International Biodynamic Wine Forum, which amalgamated biodynamic and organic wine producers from across the world (Charters & Pettigrew, 2006). The popularity of the event resulted in many global wineries attaching themselves to a nascent environmentally friendly image. The following year, 2005, the International Federation of Organic Agriculture Movements (IFOAM) held their 15th world congress in Adelaide, which “brought together the most important organic practitioners, policy makers, innovators, thinkers and scientists ever
assembled in Australia to debate the big issues of sustainability” (National Association for Sustainable Agriculture Australia, 2005, para. 2).

Gaining worldwide attention, export earnings for Australian wine had jumped to AUD$3.02 billion by 2007 (Wine Australia, 2009; Wine Web, 2009). As of 2009, “Australia became the world’s sixth largest wine producer (behind France, Italy, Spain, US, and Argentina) and the fourth largest exporter [after France, Italy, and Spain]” (Wine Australia, 2009, para. 5). Today, the Australian wine industry “is selling to more than 100 countries around the world and contributing AUD$3.5 billion to the nation’s economy” (Wine Australia, 2009, para. 4). Overall, “wine is third on the list of Australian agricultural exports after meat and wheat. As an export earner wine is more valuable than wool, milk and cream, and barley” (Wine Australia, 2009, para. 4). Furthermore, “the export market for organic wine continues to grow rapidly. Australian organic wine is sold in UK, USA, Japan, Sweden, with smaller but developing markets in Germany and Asia” (TM Organics, 2009, para. 6).

According to the Wine Export Approval Report (2009) issued by Wine Australia through the Australian Wine and Brandy Corporation, “In the year ended September 2009, Australian wine export volumes increased by 8% to 758 million liters … The US (AUD$727 million) has maintained its position as the number one export destination by value, ahead of the second-placed UK (AUD$673 million)” (Wine Australia, 2009, p. 2). Australia’s top five export destinations by value are US (31%), UK (30%), Canada (9%), China (4%), and New Zealand (3%) (Harpers Wine & Spirit, 2009). Surprising to some, “Australian exports continue their strong growth to China with the market moving up two places to now be ranked the fourth biggest market for Australian exports by both volume
and value. Just five years ago, China was not placed in Australia’s top ten markets” (Wine Australia, 2009, p. 2). Much of this success stems from the perception that “Australia offers a wealth and richness of wines sourced from over 60 regions covering a varied and diverse topography – dynamic and innovative, with dedicated viticulturalists, winemakers, researchers, and marketers. The industry has shaped modern wine drinking” (Harpers Wine & Spirit, 2009, p. 11).

Managing and operating the high-level issues of the Australian industry’s international wine trade, including sector marketing, policy, lobbying, and research, are six national organizations: (1) Australian Wine and Brandy Corporation (AWBC), (2) Grape and Wine Research and Development Corporation (GWRDC), (3) Winemakers’ Federation of Australia (WFA), (4) Wine Grape Growers Australia (WGGA), (5) Australian Wine Research Institute (AWRI), and (6) Australian Trade Commission (Austrade).2 On the state level there are also numerous regional bodies (e.g., Victorian Wine Industry Association, Inc., Wine Industry Tasmania) working with local government agencies on funding, training, and educational issues involved in the domestic wine industry (Wine Australia, 2009).

The Australian Wine and Brandy Corporation, the most prominent industry-based organization, takes great strides to apply a quality control system to reassure consumers (and the industry itself) that faulty or low quality wine, or indeed dishonorable exporters, will not be allowed to damage confidence in “brand Australia”. “No wine can be exported from Australia other than by a licensed exporter, and, as licenses are renewed annually, any holder behaving in any way that could bring the ‘brand’ into question can quickly be removed” (Thach & Matz, 2004, p. 5). Furthermore, no wine can be exported
without an export approval number issued by the AWBC after the wine meets basic technical standards and is individually assessed and approved by an AWBC sensory assessment panel. “Although the AWBC is the industry regulator body created by federal statute, it is jointly administered with and funded by the industry” (p. 5).

Fundamental to the organization and development of both the AWBC and the Australian wine industry as a whole is the geographic division of the country into wine zones, regions (part of zones) and sub-regions (part of regions). While Australia has over 60 designated wine areas, “the country has 103 ‘defined geographic indications’ for wine growing districts covering zones, regions, and sub-regions” (Wine Web, 2009, para. 2). Australia has had the major components of an appellation system since 1963, initially through the framework of state legislation (Robinson, 2006); but the present system, referred to as Geographic Indications (GI), federally governs the wine making process and the marketing of wine to both the domestic consumer and overseas markets. The system offers an official description of an Australian wine zone, region, or sub-region designed to protect the use of the regional name under international law. “Under pressure from the European market … the Australian Wine and Brandy Corporation Act of 1980 was amended to establish a Geographical Indications Committee (GIC) and the Register of Protected Names. … The function of the GIC is to determine and monitor Australia’s Geographical Indications” (Saunders, 2004, p, 320). Essential for exports, the GI system was devised after lengthy negotiations with the European Commission who would not accept Australian wines unless the country complied with their strict regulations. The GI system became law in 1990 and was updated through the passing of amendments to the
Australian Wine and Brandy Corporation Act in 1993 (Robinson, 2006; Wine Diva, 2008).

The Geographic Indications Committee, part of the federal statutory authority AWBC, determines geographic boundaries of regions. Key to the determination of boundaries is soil type and climate. “The process of determining a region (or sub-region) is a lengthy one involving both the industry and government. … The creation of wine regions based on in-depth knowledge of viticulture has fostered standards and ethics within the wine industry and takes credit for much of the success Australian wines have achieved overseas” (Wine Diva, 2008, para. 5).

The GI is similar to the appellation of origin, or terroir, naming system used in Europe, but is less restrictive in terms of viticulture and winemaking practices. For example, there is no legal mandatory requirement to place a GI claim on a wine label and, for the purpose of making a claim, any level of geographical indication may be chosen (Wine Australia, 2009). “Geographical Indications are simply vineyard regions by another name … boundaries define the area but, unlike Europe, no further restrictions (such as grapes used, minimum alcohol or maximum yield) are placed on the wine in the bottle. … The system allows up to three GIs to be quoted on a wine label” (Saunders, 2004, p. 320). The only restriction is that wine carrying a regional name must have at least 85% of the fruit sourced from that region.

It is important to note that “the blanket South Eastern Australia label in practice means the grapes could come from anywhere outside Western Australia” (Woods, 2004, p. 14). This is because, as previously mentioned, South Eastern Australia collectively accounts for “about 95% of Australian wine producing regions. A very large catchall that
reflects no specific terroir, South Eastern Australia GI covers an area greater than ten countries of Europe, from the extremes of cool Tasmania to the heat of McLaren Vale and hotter parts of Barossa right through to the Granite Hills of Victoria” (Saunders, 2004, p. 337). The existence of this GI means that with the exception of those produced in Western Australia, “wines can have an umbrella GI to use” (p. 337).

Legal definitions of the specific geographic indications divisions are as follows. A zone is an area of land, without any particular qualifying attributes. “A zone is a definition of an area of land based on geography, on political map boundaries … There is no requirement that the GIC, when approving a zone as a GI, need consider anything viticultural. Even a complete state of Australia can be a zone” (Saunders, 2004, pp. 320-321). Many of the zones have rather clinical names such as Northern Slopes, South Coast, Central Western Australia, North West Victoria, and Australian Capital Territory. Therefore, according to Saunders (2004), “it seems unlikely that the marketing people would choose the zone name to be a strong factor on the label” (p. 321). The most recognized zone in the country is South Eastern Australia, which, contradictory to Saunders’ claim, is often seen listed on wine bottle labels originating from anywhere within the area.

A region must be a single tract of land, comprising at least five independently owned wine grape vineyards of at least five hectares each and usually producing five hundred tons of wine grapes in a year. A region is required to be discrete from adjoining regions and have “measurable” homogeneity in grape growing attributes within its boundaries. “There cannot be a hot-climate part and a cold-climate part of a region”
Renowned regions of Australia include Barossa Valley, Hunter Valley, McLaren Vale, Coonawara, and Yarra Valley.

A sub-region must also be a single tract of land, comprising at least five independently owned wine grape vineyards of at least five hectares each and usually producing five hundred tons of wine grapes in a year. However, a sub-region is required to be discrete within the region and have “substantial” homogeneity in grape growing attributes within its boundaries. “There are only a handful of sub-regions approved in all of the country” (Saunders, 2004, p. 321; see also Wine Australia, 2009; Wine Diva, 2008). Some of the 12 sub-regions in Australia are High Eden, Piccadilly Valley, Broke Fordwich, and Nagambie Lakes.

Sustainable Practices

Dolan (2003) writes, “a successful sustainable winery is one that provides steady shareholder returns while improving the quality of life of its workers, the communities it calls home, and the environment it touches” (p. 19). Yet, the importance of environmental considerations during winemaking has been long recognized as discussed in Rainbird’s (1963) work from almost a half century ago. “Three things go into the making of wine, whether it be good, bad, or indifferent. Firstly, the soil from which the vine grows, secondly, the sun, or the amount of sunshine which shines upon the vine in any given year, and thirdly, the hand of the vigneron who makes the wine” (Rainbird, 1963, p. 16).

Sustainable viticulture aims to take all three of these factors into account while also avoiding any form of environmental degradation and maintaining the economic
viability of the vineyard (Robinson, 2006). Perhaps one of the biggest challenges facing
the international wine industry in the 21st century is “how to manage its role as a vital,
growing agricultural business that inherently wrestles with environmental issues
everyday in light of its water use, erosion control, herbicide/pesticide use, and labor
issues among many other elements that have an impact on the environment” (Posert &
Franson, 2004, p. 42). In Australia specifically, “some of the practices adopted during
the rapid expansion period of the 1990’s must now be viewed as both unpalatable and
unworkable” (Australian Wine and Brandy Corporation, 2009, p. 18).

One of the ecological practices often criticized by EC scholars as unpalatable is
the “green revolution” approach to farming, which began in the 1950’s and is presently
still prominent. Paradoxically, to be “green” did not mean the same thing fifty years ago
as it does today. The green revolution “essentially normalizes practices that undermine
soil health. Chemical fertilizers and pesticides serve as the primary means to offset
losses in soil health and fertility, often leaving the soils found on conventional farm fields
heavily contaminated” (Retzinger, 2008, p. 248). These insensitive practices have major
implications for the earth and its human inhabitants.

According to the Organic Trade Association (2008), “It takes approximately
3,000 years for nature to produce six inches of topsoil. Every 28 years, one inch of
topsoil is lost as a result of current farming practices” (para. 12). Meanwhile, increased
irrigation pressures to dampen the soil “have encouraged greater dependence on
groundwater stored beneath the earth’s surface in aquifers. Deposited as many as several
thousand years ago, groundwater represents a resource held in reserve, but one that is
currently being used faster than it is being recharged” (Retzinger, 2008, p. 249).
Agricultural researcher Retzinger (2008) claims, “When soils and water sources are eroded and otherwise degraded, losing necessary organic matter, fossil fuels (in the form of fertilizers) are used as a replacement. When plant diversity is lost and the resulting monocultures are left vulnerable to pests and pathogens, fossil fuels (in the form of pesticides) are applied” (p. 250). Although “mold and rot are two of the most serious environmental concerns for a vineyard, if [a vintner] open[s] up the vines for air circulation, it reduces the need for fungicides” (Berenson, 2004, p. 51). Synthetic chemicals, such as fungicides, remove natural microbial richness from the earth, stripping life from the soil (Dolan, 2003). Seeds from plants housed in the soil store the genetic material responsible for the incredible diversity of plant life on earth. “While humans once may have used more than 7,000 plant species for food, currently only 150 plant species are under cultivation” (Dolan, 2003, p. 249). To aggravate the issue, “fossil fuels power the heavy machinery used to plow, plant, cultivate, spray, and harvest crops. And fossil fuels power the pumps that deliver groundwater to the surface for irrigation” (Dolan, 2003, p. 250). All of this adds to carbon emissions and results in a heavy carbon footprint, which places both the natural environment and the global wine industry in an inherently unsustainable position.

Michael Mondavi of the Mondovi Winery in Napa, California, attempts to sidestep contemporary agriculture’s lasting effects. Mondavi states, “Through the global globalization, if you will, of winegrowing and the communication of what’s going on in the New World and the Old World, there’s a renaissance going on right now. … Tradition’s great, but it needs to be complimented with modern technologies” (Giraud &
Despite Mondavi’s appeal, much of the land erosion and environmental degradation seen today on farms is due to these modern technologies.

Recruiting from green revolution techniques, conventional farming is “the type of industrial farming that dominated the 20th Century. It relies on energy inputs typical of large scale, mechanized farms and a life support system of chemicals: routine spraying of pesticides and herbicides and application of synthetic fertilizers. Genetically engineered crops have become part of this paradigm” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 34). Relying on all of these unnatural approaches, conventional agriculture is startlingly inefficient in terms of materials and energy usage. “U.S. agriculture requires 10 fossil fuel calories to produce a single food calorie” (Jackson, 2002, p. 113). Thus, the environmental cost of satisfying our tastes extends far beyond the price paid at the cash register.

These costs have led many scholars to conclude that “modern intensive agriculture is unsustainable. It is damaging the land, draining water supplies, and polluting the environment” (Retzinger, 2008, p. 250). Many farmers, researchers, scholars, vintners, and even consumers agree that the answer to this unhealthy approach to farming is organic agriculture. The organic approach to farming builds the health of the soil, providing the foundation for healthy crops and a livelihood for good stewards of the land. Furthermore, “organic biointensive farming can produce six inches of topsoil in as little as 50 years – 60 times faster than the rate in nature” (Organic Trade Association, 2008, para. 12).

Evidently, there is a growing need to focus on sustainable winegrowing practices that are environmentally and socially friendly, as well as economically viable. Principles
of organic farming and production began to hit the wine industry in the early 1990’s.
“After years of costly trial and error, organic wines are improving, and winemakers are beginning to see more natural farming techniques as a way to produce wines as unique as the soil beneath the grapes” (Gleason, 2006, p. 37). Neal Rosenthal, a wine importer based in New York City says, “Just the notion that wine is an agricultural product means that it must have a specific taste that relates to where it is produced. This is important” (Giraud & Nossiter, 2004, 38:28). There are, however, crucial considerations to follow.
“The first choice of the organic viticulturist it to use knowledge of the basic requirements of the vine to provide just the right growing conditions and to manipulate the physical and cultural conditions in the vineyard, rather than intervening with a chemical” (TM Organics, 2009, para. 5). Organic winemakers understand that healthy soils yield balanced grapes. “Vines reach into the soil for their essential needs. If the soil is full of microbial life and adequate nutrients, the vine absorbs everything it needs to grow at a normal, healthy rate, delivering quality fruit that expresses the unique character of the vineyard” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 14).

In addition to soil content, one of the key strategies for any grower seeking to reduce chemical inputs is to understand the influence of sunlight on the vine. “Row orientation, trellis design, and the use of lifting wires, vine training, pruning, and leaf trimming are all used to open up the vine to penetration of sunlight. … vines most obviously demonstrate the effect of good sunlight exposure to the quality and character of the end product” (TM Organics, 2009, para. 3). In these ways, soil and sunlight, the organic approach encourages the grower and winemaker to obtain the best quality without relying on chemicals or technical shortcuts. In many respects, organic
winemaking represents a return to the traditional approaches to winemaking which once facilitated wines of great distinction.

One of the fundamental requirements for producing distinctive organic wine is the ability to match the unique characteristics of each growing region with the most suitable varieties of grape. In order to do so, “organic farmers employ natural practices that use renewable resources conserving soil and water” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 40). *Renewable resources* can be defined as energy generated from a natural resource that renews itself by natural processes at a rate comparable or faster than its rate of consumption. Methods include integrated pest, weed, and nutrient management as well as cover crops to enhance the vine’s health.

Some vintners, however, have reported that when it comes to organic winemaking negotiations between principle and practice must be made. One key difficulty greeting winemakers in going green is that organic grapes do not necessarily make organic wines. That is to say, “an organic vineyard is not the whole story; the process in the winery must be organic, too. … In America, wines with added sulfites cannot display the ‘USDA organic’ label, even when the grapes are 100 percent organic” (Gleason, 2006, p. 35). *Sulfites* are an antioxidant that serve as a preservation that prevents oxidation and bacterial spoilage. Although sulfites occur naturally in foods, vintners must not add any to their wine during the winemaking process or the product will not be certified as organic. This sulfite controversy has winemakers divided; however, as one vintner points out, “adding a preservative goes against the consumer’s expectations of organic food … When a wine label says organic, people expect that it’s made without chemicals” (p. 36).
“At present there is no uniform level of government supervision of viticulture, winemaking, or labeling in the world. … government regulations are loose in Australia” (Estreicher, 2006, p. 158). Colman (2008) reports the following as guidelines followed in the United States regarding the labeling of organic wine (see Figure 2.1).

![Figure 2.1 – Organic Wine Labeling in the United States and What it Means](image)

<table>
<thead>
<tr>
<th>On the Label</th>
<th>What it Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Organic</td>
<td>Made from all organically grown ingredients</td>
</tr>
<tr>
<td></td>
<td>Cannot include added sulfites</td>
</tr>
<tr>
<td>Organic</td>
<td>95% of ingredients organically grown</td>
</tr>
<tr>
<td></td>
<td>Cannot include added sulfites</td>
</tr>
<tr>
<td>Made with Organic Grapes</td>
<td>70% of ingredients organically grown</td>
</tr>
<tr>
<td></td>
<td>Can contain added sulfites below 100 parts per million</td>
</tr>
<tr>
<td>Some Organic Ingredients</td>
<td>Can be made from less than 70% organic ingredients, providing the percentages are stated on the label (p. 135)</td>
</tr>
</tbody>
</table>

The most common term used on a wine bottle label is “made with organically grown grapes” (Colman, 2008). This certifies that at least 70 percent of the grapes used to produce the wine are organically grown and sulfites are kept to a minimum. This sort of labeling is not without international controversy, however. “Because of labeling and certification regulations, much of the effort to practice more sustainable winemaking may go unrecognized, and producers may resort to other means to advertise it – if they make the attempt at all” (Colman, 2008, p. 135). According to French viticulturist Joly (2007),
“Just a moment’s reflection will show the vacuousness of such a phrase as saying that [wines] are 95% organic or biodynamic. Can you say a woman is 95% pregnant? One also hears vintners saying that they use very few artificial herbicides, just enough to ‘save vines from disease’ … without understanding that it is these same herbicides which overtime create the conditions for disease” (Joly, 2007, p. 43).

Despite growing pains, and perhaps to Joly’s (2007) relief, the international wine industry seems to understand the benefits of organic farming and, in taking a bold step, is slowly going green. In fact, “the number of organic and biodynamic wines that have come into the market in the last several years has increased dramatically” (Thach & Matz, 2004, p. 58). Zucca (2008) points out 14 criteria that address the ecological, economic, and social equity of green practices at wineries. They are: (1) viticulture, (2) soil management, (3) vineyard water management, (4) pest management, (5) wine quality, (6) ecosystem management, (7) energy efficiency, (8) winery water conservation and quality, (9) material handling, (10) solid waste reduction and management, (11) environmentally preferred purchasing, (12) human resources, (13) neighbors and community, and (14) air quality. Although it is simple to list these criteria, successful integration of ecologically aware practices is not as easily navigated.

Once a vineyard makes the decision to produce organic wine, there are four steps that must be followed: (1) vineyards must be farmed naturally without harmful or toxic chemicals, (2) vineyards must be certified by a certifying body, (3) vineyards must produce wine following organic standards, and (4) no sulfites may be added. Additionally, 100% organically grown grapes must be used at all times. If the wine is made with organic grapes, but the overall product is not created in a fully organic way,
sulfites may be added and the product may be marketed as consisting of organic grapes.

An organic wine claim, however, may not be made (Parducci Wine Cellars and Paul Dolan Vineyards, 2009). In the production of organic wines:

Oxygen levels must be closely monitored … and the temperature, from the moment the grapes enter the winery until the bottle is uncorked at the table, must remain at less than 65 degrees. … Once served, it can also spoil if left exposed to the air, and the white wine will turn brown like a slice of apple left on the kitchen counter top. (Gleason, 2006, p. 37)

Moreover, in the process of making a winery sustainable, four major environmental issues must be addressed: (1) clean air, including reduction in carbon emissions, (2) water conservation and recycling, including availability and health of water, (3) earth friendly packaging, including 100% post-consumer recycled paper, and (4) healthy soil, including vitality and conservation of the earth (Parducci Wine Cellars and Paul Dolan Vineyards, 2009). Additionally, natural amendments (e.g., animal manure), cover crops (e.g., clover planted between vineyard rows to enrich the soil and prevent erosion), manual methods (e.g., no chemicals for weed control), biodiesel (i.e., non-toxic, renewable resources), encouraging natural predators (e.g., owls that patrol mole and mice populations) and avoidance of pollutants (e.g., fertilizers, herbicides, pesticides) are all methods readily employed on a sustainable vineyard (Parducci Wine Cellars and Paul Dolan Vineyards, 2009).

Specifically highlighting the third issue in making a winery sustainable, “Earth Friendly Packaging”, initiatives have recently focused on alternative packaging products. Some strategies to achieve this include using recycled materials for packaging, plastic bottles to cut carbon emissions during transportation, and compact packaging to reduce landfill space (Wine Australia, 2009). According to Gleason (2006), however, the
biggest controversy confronting environmental packaging today is the use of plastic stops and screw tops, which are both non-biodegradable and threatening the tradition of the cork.

Although earlier attempts to implement alternative wine bottle closures, such as screw tops, had been made throughout the international wine industry in the 1970’s and early 1980’s, it was during the most recent decade that cork usage dwindled drastically. “Cork extraction is one of the most environmentally friendly harvesting processes in the world,” says Pedro Regato of the World Wildlife Federation (Taber, 2007, p. 19). That is because “about 50 percent of the world’s cork supply comes from forests in Portugal and Spain, where farmers strip the bark off cork oak trees for the wine industry. The bark grows back over ten years without harming the tree” (Taber, 2007, p. 37). However, fear of cork-taint, or trichloroanisole (better known as TCA), which is a chemical reaction that, although not harmful to the imbiber, leaves wine with a moldy, musty, or medicinal flavor, frequently results in 10 percent of wines being ruined (Sandler & Pinder, 2003; Saunders, 2004; Taber, 2007). This factor, along with a desire for more predictable aging, “is fueling the market for synthetic stoppers. Plastic corks and screw caps, once red flags that signified low quality, are becoming more popular with premier wineries. … Synthetic stoppers now make up 10 percent of the market” (Taber, 2007, p. 37).

Despite ongoing research at both the University of California at Davis (Boulton, 2009; California Sustainable Winegrowing Alliance, 2010; Johnson & Robinson, 2008) and the Australian Wine Research Institute in South Australia (Cooperative Research Centre for Viticulture, n.d.; International Organization of Vine and Wine, 2010; South Australian Wine and Brandy Industry Association, 2002), which has found little
difference in the way cork and screw-top wines age, vintners concerned with vintages of bad wine due to tainted cork have embraced the alternative closures. The development and acceptance of plastic and aluminum stoppers by both wine producers and consumers has environmentalists worried that switching wine bottle stoppers will doom the production of cork and the biodiversity of the ancient cork forests.

Currently, another critical component of sustainable management in the Australian wine industry is reduction of water usage. Notably, the Drought Management Taskforce was established in December of 2006 in South Eastern Australia for the better management of waste water. Recycling of processing water and construction of rainwater collection tanks are two of the initiatives being implemented to help winemakers plan their way through production impacts of the current drought, which has lasted over ten years (Harpers Wine & Spirit, 2009). The combined use of these practices imply that organic farming in Australia is capable of substantially reducing many of the key impacts of conventional agriculture on the environment, including water deficit.

It is issues such as water mismanagement and the use of plastic stoppers that has many concerned, including Amie Guibert, who owns 40 hectares of land in Aniane, Languedoc, in the south of France. Guibert, who produces Daumas Gassac wines, declares, “Wine is dead. Let’s be clear, wine is dead. I said ‘wine is dead,’ so let me clarify. What is wine? For millennia, wine has been … a religious relationship between man and nature, with the earth of course, the live earth, free of synthetic products; and with the weather” (Giraud & Nossiter, 2004, 9:40). But, Guibert and environmentalists need not despair quite yet. International sustainability reporting efforts, such as the Global Reporting Initiative, monitor the international environmental management system.
Because sustainability is not a temporary trend, but a continuous journey and constant process, some “winemakers have undergone the transformative shift from the standard reductive approach, where man dominates and controls nature, to a natural-systems view where man partners with nature” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 5).

As mentioned above, the wine industry is entirely dependent on natural resources. Solar energy, suitable climate, clean water, healthy soils and the interaction of these elements with ecological processes are critical. “In Australia natural water systems are seriously threatened by salinity and overuse; precious topsoil is being lost through excessive erosion; and greenhouse gas-induced global warming and climate change is likely to exacerbate all these problems” (South Australian Wine and Brandy Industry Association, 2002, p. 4). The preservation of natural resource base is considered the main environmental imperative for the wine industry; not only to provide long-term viability and security, but also to maintain the long-term integrity of all ecological and agricultural processes.

In Australia particularly, the Australian Government committed its citizens in 1992 to a National Strategy for Ecologically Sustainable Development. This initiative aims to create a clean, green, and admirable industry with the specific objectives of sustainable interactions with the environment, mutually beneficial relationships with all industry stakeholders, furthering of organic production, and demonstration of environmental stewardship (South Australian Wine and Brandy Industry Association, 2002). Much of this can be successfully realized through organic agriculture. Across the globe, “organics is the fastest growing sector in the food and beverage market” (Wine
Australia, 2009, para. 2). Significantly, “Australia currently has the largest amount of land certified organic worldwide with over 150 certified organic wine industry entities. The isolation and sunny climate of Australia has resulted in an historically reduced application of synthetic chemicals and fertilizers and we are seeing a growing interest in organics as the gulf between traditional and organic practices is more easily bridged” (Wine Australia, 2009, para. 13). This is an essential component for the future of organic wine, which may give Australian vintners a definite edge in the progressively more competitive global market.

**Australian Certifying Bodies**

Organic certification is performed in Australia by several organizations that are accredited domestically by the Australian Quarantine and Inspection Service (AQIS) and globally by the International Federation of Organic Agriculture Movements (IFOAM). Certification for organic claims can be made by many private organizations as long as they follow the guidelines put forth by the *National Standard for Organic and Biodynamic Produce*, which is set by the AQIS and was most recently updated in July of 2009. First implemented in 1992 as the “Australian Export Standard for Products Labeled Organic or Biodynamic,” the document, known as *The Standard*, stipulates minimum requirements, general principles, and specific conditions for products placed on the market that have been produced under organic or biodynamic systems. This record “forms the basis of equivalency agreements between approved certifying organizations and importing country requirements” (Organic Industry Export Consultative Committee, 2009, p. 1). As a result, *The Standard* is recognized by most importing countries as
equivalent to their domestic standards, thus allowing Australian organic wines access to markets worldwide (Wine Australia, 2009).

According to *The Standard*, in Australia there are seven key principles of organic and biodynamic production. They are: (1) producing food of high nutritional value, (2) enhancing biological cycles in farming systems, (3) maintaining and increasing fertility of soils, (4) working as far as practicable within a closed system, (5) avoiding pollution resulting from agriculture, (6) minimizing the use of non-renewable resources, and (7) co-existing with and protecting the environment (TM Organics, 2009, para. 1).

Accordingly, there are four main bodies that govern the organic, biodynamic, and sustainable agricultures: (1) Australian Certified Organic (ACO), (2) Bio-Dynamic Agriculture Association of Australia (BDAAA), (3) National Association for Sustainable Agriculture Australia (NASAA), and (4) Organic Federation of Australia (OFA).

The Australian Certified Organic organization is the largest certifying body in the domestic industry. Accredited with both AQIS and IFOAM, ACO currently certifies about 55% of the Australian organic industry. “The Australian Certified Organic logo (affectionately known as the ‘bud’) is Australia’s organic industry’s leading logo. It carries with it the ability to market organic produce on both domestic and international markets with confidence and market advantage. The logo is well recognized both in Australia, and now in increasingly key areas such as the U.S.” (Australian Certified Organic, 2010, para. 2). A search for “wine” on the Australian Certified Organic webpage in the “Organic Product Search” engine resulted in a listing of 91 organic wineries.
To receive biodynamic certification by Demeter in Australia, a farm must demonstrate proper soil structure and development. During this process, the Bio-Dynamic Agriculture Association of Australia is present to aid farmers to develop farming skills, cultivate an awareness of nature, and continue careful observation of soil, plant, and animal life (Demeter, 2005). A search for “wine” on the Bio-Dynamic Agriculture Association of Australia webpage under the “Certified Demeter Bio-Dynamic Product Range” tab resulted in a listing of three biodynamic wineries.

Challenging the ACO as the lead certifier, the National Association for Sustainable Agriculture Australia, founded in 1986, was the first organic certifier in the country. National Association for Sustainable Agriculture Australia states that they are “the nation’s leading organic certifier – focused on providing quality, cost efficient organic certification services. With operations both in Australia and overseas, the company provides certification and inspection services, which assist in facilitating market access throughout the world for NASAA certified organic products” (National Association for Sustainable Agriculture Australia, 2005, para. 1). Through its role as a certifier, also accredited by both AQIS and IFOAM, NASAA is committed to developing and maintaining organic standards, assisting operators in gaining organic certification, and conducting ongoing compliance supervision and inspection of certified operations. A search for “wine” on the National Association for Sustainable Agriculture Australia webpage in the “Product Search” engine resulted in a listing of 37 organic wineries.

The Organic Federation of Australia was established in 1998 as the main body for the organic industry in Australia. The Federation “works in co-operation with all sectors of industry and government to develop the Australian Organic Industry from a niche
industry into a major component of Australian agriculture that delivers benefits to consumers, producers, and the Australian environment” (Organic Federation of Australia, 2010, para. 1-2). The OFA is not a certifying body, instead the organization fulfills a unifying role for the organic industry by representing the interests of Australia’s organic producers to industry and governments at the local, state, and federal levels.

According to the OFA, in order to become organically certified in Australia “you have to detail your present and past farming practices and develop a farm plan. After this is completed an inspector will come to your farm to audit and inspect. They will also take soil and/or crop samples for residue testing. If you pass this first inspection, then your farm will be considered in pre conversion for a year” (Organic Federation of Australia, 2010, para. 6). The conversion to organic generally takes three years. After that point, if successful, the farm will have full organic certification and access to all the organic markets. Some notable organic wineries in the South Eastern zone of Australia are Penfolds organic vineyard located in the Clare Valley, Grancari Estate Wines in McLaren Vale, Yalumba in Angaston, Botobolar Vineyard in the Hunter Valley, and Temple Bruer in Langhorne Creek (TM Organics, 2009).

The organic sector in Australia is an AUD$600 million per year industry (TM Organics, 2009), however, “Australia does not have a mandated regulatory system for organic products. Despite repeated requests from the industry, successive Australian governments have refused [to instill a legal process] due to a reluctance to have mandatory systems unless there is a proven failure of the existing regulatory systems” (Organic Federation of Australia, 2010, para. 8). This lack of government interference means that consumers are met with a confusing array of organic certification schemas.
with many different labels, logos, and grower requirements. Incidentally, there are no Australian wine labeling regulations or laws currently enforced prescribing environmental and related claims regarding vineyard and manufacturing practices.

The Trade Practices Act (TPA) addresses the possibility of false or misleading claims on labels and states that care must be taken when describing wine, particularly when a producer requests certain environmental wording on a label. According to TPA, environmental claims in the wine industry may be expressed or implied by using terms such as “ecologically or sustainably produced,” “environmentally friendly,” “environmentally safe,” “green,” “energy efficient,” “recyclable,” “carbon neutral,” “renewable energy,” or “green energy.” Shockingly, however, environmental claims may also be silent, “where no direct claim [is clarified], but other information in the description and presentation of the wine may lead a consumer to believe an environmental claim is being made” (Wine Australia, 2009, para. 2). These expressed, implied, and silent claims are obviously problematic in the determination of true environmental practices on behalf of a winery.

*Environmentally Friendly Awareness*

Although debate surrounds the precise reasons why, many people acknowledge that the global natural environment is changing and the Earth is in peril. Historically, at the corporate and organizational level, “technological innovations in a globalized era seemed to propel decision makers along an environmentally disastrous route. … Most business leaders seem impelled along a course that has clearly negative environmental outcomes” (Bryant, 2007, p. 56, p. 63). Recently, however, due to widespread public
awareness of climate variation, many companies have adopted new green practices that are environmentally friendly and work toward the procurement of a more sustainable ecosystem (Golob & Bartlett, 2007; Kilbourne & Carlson, 2008). Not isolated from these corporate modifications, “the effects of global warming are currently much discussed in agriculture production” (Wine Australia, 2009, para. 13); and the international wine industry has also begun to alter its procedures in the process of winemaking.

With international discussion surrounding whether organic and biodynamic products truly are more nutritious (National Association for Sustainable Agriculture Australia, 2005) and despite the proposition that organic sales have beaten the world recession (Organic Federation of Australia, 2010), there is ongoing deliberation surrounding the health benefits and better wine quality that result from organic wines produced on sustainable vineyards. According to Zucca (2008), “there is clear evidence that the sustainable winegrowing program is being accepted by large growers and winemakers. … In the next few years, [it is likely that] the international wine industry will have a certification program much like the current organic agriculture program now in place” (p. 7). This assertion may come to fruition as “many winemakers consider protection of the environment and avoidance of harmful additives to be a vital component of their tradition and lifestyle” (Organic Guide, 2007, para. 19).

Across industries, many wine and other “organizations and practitioners perceive environmental marketing as a viable and important option for generating salient consumer appeals as well as for differentiating goods and services from competitors’ offerings” (Kilbourne & Carlson, 2008, p. 106). Sustainable development is now “the notion incorporated into the commitments of most major business organizations around
the world” (Golob & Bartlett, 2007, p. 4). In fact, “not talking about sustainability now suggests you’re out of touch. Mainstream businesses are catching on and they’re profiting from the consumer demand for green products” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 2).

However, as discussed previously, there is more to organic wine than certification of the grapes used in its production. Likewise, there is certainly more to incorporating sustainable business practices than strengthening a brand or capitalizing on the growth of the lucrative green market. But the kickback can be worth the effort. “Sustainable business practices often lead to more efficient operations, and more efficient operations mean a better bottom line” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 2).

Although not necessarily altruistic, “more and more corporate farms have tried to profit from the organic movement. While some observers argue that any reduction in the amount of pesticides used … is beneficial, others are less sanguine, fearing that organic standards will come under assault” (Retzinger, 2008, p. 251). Nevertheless, there are upsides to the eager adoption of organic profitability. “The number of farms certified as organic has increased … and the number of acres certified as organic has quadrupled” (p. 251), and that is good news for the natural environment.

Organic farming can yield up to three times as much food as conventional farming and research at the Rodale Institute, a non-profit, Pennsylvania-based organization dedicated to pioneering organic farming, has also shown that “organic practices can remove about 7,000 pounds of carbon dioxide from the air each year and sequester it in an acre of farmland. Thus, Rodale estimates that if all 434 million acres of
U.S. cropland were converted to organic practices, it would be the equivalent of eliminating 217 million cars – nearly 88 percent of all cars in the country today and more than a third of all the automobiles in the world” (LaSalle & Hepperly, 2008, p. 30).

Further, according to Walsh (2009), “there is more pent-up demand for organic than there is production. … Sustainable ingredients are not just better for the planet, they also taste better” (pp. 35-36). As questioned by the *Time* magazine cover story from last year, “How willing are consumers to rethink the way they shop for – and eat – food” (Walsh, 2009, p. 37)? For most people, price remains the biggest obstacle:

Organic food continues to cost on average several times more than its conventional counterparts. … But not all costs can be measured by a price tag. Once you factor in crop subsidies, ecological damage, and what we pay in health-care bills after our fatty, sugary diet makes us sick, conventionally produced food looks a lot pricier. (p. 37)

In Australia, there have been developments of a variety of instruments that aim to improve, evaluate, and communicate socially responsible practices on behalf of corporations to aid interested consumers. “In fact, reporting on environmental and social matters has been prevalent for several decades with further growth over the past decade or so” (Golob & Bartlett, 2007, p. 1). The Australian government and many domestic organizations have been proactive in developing a plausible approach to sustainability. The wine industry’s 30-year-plan, *Strategy 2025: The Australian Wine Industry*, launched in 1996, recognizes the importance of good environmental management, stating that “90% of Australian consumers regard companies which tell the truth or behave in decent, ethical, responsible ways as an important factor in making purchasing decisions” (South Australian Wine and Brandy Industry Association, 2002, p. 3). Further, the Business Council of Australia “has endorsed a sustainable approach and is committed to excellence
in managing the environmental, social, and economic dimensions of organizational activity, including the marketing messages of environmental products” (Golob & Bartlett, 2007, p. 4).

Cramer and Foss (2009) assert that creators and proponents of environmental marketing messages must consider values in order to more effectively shift human relationships with and practices in regard to the Earth. The researchers purport that “communication practices must be less purpose driven, less focused on traditional rhetorical appeals that may include fear, logic, science, or even emotion” (Cramer & Foss, 2009, p. 300). However, “Australian marketing guidelines differ to U.S. guidelines in that they tend to be less prescriptive and do not specifically address the use of pictures and certification schemes, which may be frequently utilized on packaging” (Polonsky, Bailey, Baker, Basche, Jepson, & Neath, 1998, p. 284).

Beverland and Luxton’s (2005) research consequently addresses the possible gap between public understanding of product marketing on store shelves and environmental practices performed in the wine industry. The authors examine the means through which luxury wine producers create and maintain the aura of authentically green brands. Beverland and Luxton theorize that wine producers attempt to present an external façade to give the impression that they are authentic in their use of conservational procedures while behind the scenes they engage in decoupling practices that contradict their external image. From a strategic standpoint, green wineries are positioned around authenticity and they project an outward image of such attributes. However, as consumer knowledge becomes clearer and demand intensifies, Beverland and Luxton hypothesize that vintners
who are less-green in practice may be tempted to decouple in order to ensure relevance and secure a place in both domestic and global markets.

While the use of environmental marketing claims is on the increase, there is extensive evidence that a majority of these claims are being used to mislead consumers. “It has even been suggested that misleading environmental claims are one of the biggest environmental problems facing consumers and business” (Polonsky et al., 1998, p. 281). In Australia, it is reported that “as a marketing term, sustainability is not a household word, but consumers are willing to pay more for sustainably produced products” (Zucca, 2008, p. 8). Subsequently, one scholar notes, “even if we want to, it is often difficult to compare the environmental impacts of choosing one product over another, due to the extremely complex nature of global production and distribution systems” (Bryant, 2007, p. 67). Thus Carbaugh (2007) surmises, “This grounds our views of environmental communication in a dual allegiance to words and worlds” (p. 71).

Targeting questionable environmental marketing claims, Polonsky et al.’s (1998) article “Communicating Environmental Information: Are Marketing Claims on Packaging Misleading?” employed a content analysis to examine the environmental information on product packaging, the findings of which were presented in the Journal of Business Ethics. Specifically looking at dishwashing soap in Australia and the extent to which provided information was misleading, “it was found that a majority of the packaging information can be classified as being not accurate” (p. 281). Using seven types of environmental variables (images, licensing agreement, scientific environmental attributes, general environmental claims, product name, logos, and pictures) and four categories of misleadingness (acceptable, poor explanation, no explanation, and
meaningless), the researchers found that 64% of environmental information fell into one of the latter three categories provided.

When considering environmental marketing, the ethical impacts are wide ranging. Some have even suggested that the natural environment should be considered an organizational stakeholder along with consumers and producers. Polonsky et al. (1998) report:

The present situation where environmental marketing claims are not completely appropriate has several important implications: a) Consumers will not be able to reduce their environmentally harmful consumption behavior, because they will not know which products are actually environmentally better; b) Firms who have attempted to become less environmentally harmful will lose any competitive advantage they might have gained because of the increased consumer skepticism; and c) There will be less rewards and therefore less motivation on the part of firms in making further environmental improvements, as consumers will discount all environmental marketing claims. (p. 290)

“The US Federal Trade Commission has as one of its functions the prevention of false or misleading marketing claims, including environmental or ‘green’ claims” (Russel & Battaglene, 2007, p. 37). Therefore, in the United States, “anyone who knowingly sells or mislabels as organic a product that was not produced and handled in accordance with the [federal] regulations can be subject to a civil penalty of up to $10,000 per violation” (Organic Trade Association, 2008, para. 6). In order to label food with the “USDA Organic” seal, products must be made from at least 95% organic ingredients. Additionally, in order to be certified organic, crops must be grown on land free of prohibited substances for at least three years prior to harvest (Organic Trade Association, 2008). However, as demonstrated above, misleading international labeling persists, including in Australia.
Wine Bottle Labels

Wine labels chronicle history and the evolution of the wine industry while simultaneously expressing characteristics of particular wine varietals and individual personalities of winemakers. From the moment wine was first sold in bottles, it was often labeled with a tag. “What the tag said determined its value, its destination, who would open it, and when” (Caldewey & House, 2003, p. 16). As early as 300 BCE, “markings on Greek amphora handles indicated the origin of wine” (Estreicher, 2006, p. 19); but, one of the most remarkable finds of labeled wine jars was set in place one thousand years earlier. In the annex to the tomb of Tutankhamun, which was sealed when he died in 1323 BCE, “26 wine jars were found, carefully labeled. … The wine labels contained a great deal of information: the location of the vineyard, the year of the vintage expressed as the regal year of the king, the ownership of the vineyard. The labels also indicated the chief winemaker who was responsible for its contents” (Sandler & Pinder, 2003, p. 62).

Bottled wine labels were also discovered in other New Kingdom sites from around the same era. “At Tell el Amarna [in Egypt], [Pharaoh] Akhenaton’s capital city and religious center, some of the wine labels give additional information apart from the date, estate, vineyard and vintner; they describe the wine as ‘good wine’, or ‘very good wine’, or ‘genuine’, or ‘sweet’, or ‘for merry making’” (Sandler & Pinder, 2003, p. 63). At El Malqata, the palace city of Amenhotep III in western Thebes, “the wine labels sometimes refer to the specific occasion for which the wine was made: ‘wine for offerings’, ‘wine for taxes’, ‘wine for a happy return’” (pp. 62-63).
Advancing through the millennia, “the first wine labels of the modern age were occasionally gold, more usually silver” (Caldewey & House, 2003, p. 16). Although the designs were fanciful, hand written paper labels did not first appear until the early 1800’s. Later in the century, in the 1870’s, printed labels were employed to mark wine bottles when durable non-absorbent paper and glue were developed to allow the label to stick to the glass (Estreicher, 2006).

As the quality of wines improved the art of the wine label was called upon to communicate advances. “Prior to the 1960’s, designing wine labels was not a profession, and printers produced millions of generic labels on which the winery would overprint or rubber stamp the winery’s name, type of wine, and vintage” (Caldewey & House, 2003, p. 10). Discovery of wine producer or place of origin took investigation of the fine print. “Even the elegant, hand-engraved labels of the Old World emphasized the winemaking region over the unique character of the wine and its producer” (p. 10). As time progressed, the evolution of the international wine label was shaped and influenced by the development of wine packaging as both a commercial enterprise and a valuable communication device.

In the international wine industry specifically, it is widely considered that bottle labels are the primary marketing tool for producers of wine (Beverland, 2005; Beverland & Luxton, 2005). This communication portal is the vehicle through which wineries market their specific product. According to one winemaker, “we communicate our message of presentation through our packaging” (Berenson, 2004, p. 60). In their research, Dodd, Pinkleton, and Gustafson (1996) found that for wineries print media (e.g., wine bottle labels) offers the greatest outlet for information dissemination. Further,
Haran (2008) emphasizes, “winemakers use the wine bottle to promote marketing messages … in addition, wine labels have been used in the past as markers of specific information with the use of symbols and texts, presenting their power as communication tools” (pp. 3, 8). According to Moulton and Lapsley (2001), label design should be based on a comprehensive statement of what the winery wants to accomplish. “This should include what image is to be conveyed, what the wine will taste like, what the price position will be, and which consumers are to be targeted. This represents the platform from which the label design effort is launched” (Moulton & Lapsley, 2001, p. 166).

Sandler and Pinder (2003) add “the label does more than gives us facts. Deliberately, or sometimes subconsciously, its design conveys an impression. … The classic elegant design of a label leads us to expect a serious wine with stature, whereas a cheerful colorful label automatically implies a simpler, less sophisticated wine” (p. 19). The authors report, “some producers may attach more importance to the appearance of their bottles, while others merely accept whatever their local printer has to offer them” (Sandler & Pinder, 2003, p. 19). In order for a label to be effective in the marketplace “for major brands, it now takes one to two years. Labels are being continually modified … The continuing objective is to make sure that the label and packaging are vibrant and that they work effectively in selling the product” (Moulton & Lapsley, 2001, p. 167). “The equipment and expertise needed to produce a high quality image is well beyond the core competency of the winery. It is not a loss of strategic advantage to outsource and it is still quite easy to maintain control of the design of the label” (Thach & Matz, 2004, p. 163).
Stein (2008) states:

For label design, both front and back, producers have been highly sensitive to the particularities of specific markets. Their goal has been to design labels that communicate “mystique” and individuality … Importers and distributors have had major participation in export labeling, providing decisive input on label designs and overall point of sale materials. (pp. 31-32)

Moreover, wine bottle labels can also be used to make the product appear more attractive to the consumer. Many small wineries outsource the bottling and labeling process because it can be an expensive endeavor. Business issues regarding bottle and label type and design are often regulated to the marketing division of a winery, but it must be done with consideration of wine production costs. “A standard bottle size and design are usually less expensive to process in terms of overall material and processing costs than a specially designed bottle that requires hand-labeling and perhaps etching” (Thach & Matz, 2003, p. 53). The cost of a bottle will vary from $0.30 to $2.30. The label printing costs can range from $0.03 to $0.85 each depending on size, content, and quantity (Moulton & Lapsley, 2001; Thach & Matz, 2003). However, the overall value of the merchandise is determined by “the quality of the bottle, the wine, and the image of the product. … The design of the label is a big part of it. Successfully marketing wine requires attracting attention. This begins with strategic marketing on bottle labels” (Berenson, 2004, pp. 52-53).

While qualitative research methods for label design might include discussion groups, online groups, telephone or face-to-face interviews, focus groups, and other various approaches (Moulton & Lapsley, 2001), perhaps the most important lesson to be learned about label and bottle marketing is that professional wine label designers can help maintain or enhance a winery’s competitive position considerably. “Wineries have
reached out to designers to help the product gain a competitive edge” (p. 171). A
designer is usually called in when a winery needs a label and wants to market it right
away. However, the work often develops into a complete identity package for the
winery:

The designer is immersed in the winery’s special culture for the full period of the
project and must decide on, or recommend options for, paper type and quality, the
use of die cut, the number and place of borders, the use of calligraphy, and other
items. They need to consider the typeface to use on the label. (Moulton &
Lapsley, 2001, p. 168)

According to Caldewey and House (2003) “state of the art wine labels represent
the highest level of printing being done anywhere. … The visual and tactile elements of a
successful wine package are subordinate to its structural integrity. Forging a link
between the graphic surface and the sculptural foundation is the essence of the package”
(p. 26). The graphics that are used by the designer on the label and in packaging and
promotion “should be fresh and new and should associate the product and the producer
with positive values – values that consumers will respond favorably to, such as high
quality, enjoyment, a good reputation, and confidence” (Moulton & Lapsley, 2001, p.
166).

It is important to recognize, however, that there is no specific recipe for a good or
attractive label. “Label size decisions depend on what information the winery wants to
convey and what information the consumer prefers to have. Some wineries prefer rather
large labels that tell a story about the wine and the winery. Many consumers, on the
other hand, prefer less label area and more glass so that they can see the product inside
the bottle” (Moulton & Lapsley, 2001, p. 166). Label designers often speak of designing
above the price point, “so that a $10 bottle of wine has a $15 to $20 look to it. Wine
producers are advised to use well-recommended label designers with experience in wine label design” (Thach & Matz, 2004, p. 76). According to Moulton and Lapsley (2001), “label and bottle design should be compatible with other elements of the winery’s advertising and promotion scheme … to use label and bottle design as part of an ongoing marketing strategy” (p. 171). But these practices do not come without their own expense. “Design costs vary upward from a minimum of $20,000… Larger wineries using complex design processes can spend $150,000 to $200,000. … Some labels have required as many as 25 design phases, each lasting two or three weeks. Most work done is in the $25,000 to $65,000 range” (Moulton & Lapsley, 2001, p. 170). The key message is that “proper design leads to effective differentiation and increases sales. Labels that deliver the wrong message about the wine are ineffective or damaging to sales” (Moulton & Lapsley, 2001, p. 165), which, ultimately, can cost more than the price of the designer.

Analysis of wine bottle labels is specifically demonstrated by Saunders’ (2004) Wine Label Language and Woods’ (2004) Understanding Wine Labels. In his book, Woods (2004) writes, “in an ideal world, a label should tell the consumer everything he or she needs to know about the wine that’s in the bottle. … However, labeling requirements differ around the world” (pp. 6-7). Broadly speaking, Woods (2004) determines that the information of legal requirements can be split into four main categories – the essential, the useful, the flowery, and the bureaucracy:

Essential information would include country of origin, quality designation, name and address of the bottler, volume of container, and alcohol strength. Useful information would include more precise details of origin, name and address of the producer, brand name, vintage, grape variety, color, and sweetness. Flowery information would include tasting notes, serving suggestions, and technical information. Finally, bureaucracy information would include recyclability, additives used in winemaking, and details of the importer. (pp. 7-8)
However, Woods (2004) acknowledges a variation between labeling found in the Old and New Worlds. “The New World wine labels are a consumer’s delight as they give the essential pieces of information: the grape variety, and thereby a basic indication of flavor, and the name of the producer, with the indication of quality which that entails. The Old World, in contrast, places much more emphasis on terroir” (Sandler & Pinder, 2003, p. 14).

According to Woods (2004), “New World wine labels, like those found in Australia are a little more wordy than they used to be” (p. 13). Some of that wordiness might have to do with the fact that in Australia, particularly, the broad description of South Eastern Australia is used as a blanket designation. Although this can mean there are no limits to what varieties can be planted and wines can be produced within certain boundaries, it can also lead to false environmental claims. Typically, “there are two labels on a wine bottle: one carries all the mandatory statements and the other has the winery logo and eye-catching design, which is the front label for display purposes” (Moulton, & Lapsley, 2001, p. 170). However, in Australian wine law, “front and back labels are considered equally” (Saunders, 2004, pp. 321-322; see also Wine Australia, 2009, para. 1). Therefore, “finding meaning and substance on wine labels requires involvement and lots of investigation” (Saunders, 2004, p. 7).

In the Australian wine industry, for all organic and non-organic wineries, there are seven main legal requirements that must be placed on a bottle’s label that have been monitored through the Australian Wine and Brandy Corporation’s Label Integrity Program since 1990, which annually carries out both general and specific audits (Robinson, 2006). “The intent of the program is to create an audit trail from grape to
bottle for any claim on the label of a bottle. The winemaker must keep record for seven years of the production and acquisition of grapes and other goods, and the manufacture, sale, and the disposal of wines, in a way that leaves an audit trail” (Estreicher, 2006, p. 151). Designed to protect the quality and reputation of Australian wine by ensuring truth in labeling, the seven requirements are: (1) volume statement (e.g., 750ml), (2) number of standard drinks in each bottle, which is now a mandatory requirement to be shown on labels of all drinks (e.g., 8.3 Standard Drinks), (3) named blends, which must be listed in descending order of proportions (e.g., Shiraz, Grenache, Malbec), (4) alcohol content (e.g., 12.5% ALC/VOL), (5) allergens, anything that may be added to the wine that may cause a physical reaction in some people (e.g., may contain traces of the fining agents milk and egg white), (6) name and address (e.g., company name and street address of responsible entity), and (7) country of origin (e.g., wine of Australia). The volume statement must be placed on the main face, the label with the largest print height and the label that is visible to consumers when on the shelf, otherwise information may appear anywhere on the front or back label (Saunders, 2004; Wine Australia, 2009).

According to the AWBC (2009a), “any claim [on a label] regarding vintage, variety, or geographical origin of a wine must be capable of being substantiated through the provision of an auditable trail of records” (para. 4). However, environmental claims are left largely unmonitored and unaudited. In fact, “the manufacture and labeling of organic wine, whether relating to vineyard practices and/or manufacturing practices, is not specifically regulated in wine law” (Wine Australia, 2009, para 1). Certification for organic claims can be made by any of the many private organizations that perform this function authorized by the Australian Quarantine and Inspection Service (Australian
Wine and Brandy Corporation, 2009b). Therefore, “organic and biodynamic winemakers must decide whether to label their wines as such on the label … [as] some winemakers doubt whether it is an additional selling point” (Colman, 2008, p. 139).

While it is true that in Australia products that claim to be organic must comply with the provisions of the Export Control (Organic Certification) Orders issued under the Export Control Act of 1982, which makes it illegal to export organic produce without a certificate, this careful monitoring does not extend to the environmental promotion found on labels (Wine Australia, 2009). Therefore, while organic exporters must provide a copy of the Organic Produce Certificate with each shipment of wine in order to receive an export permit number, non-organic producers may list any environmental claim they wish on their labels as long as they comply with the seven legal requirements described above. This extremely limited regulation in the Australian wine industry regarding environmental communication transmitted via wine bottle labels supports this study’s investigation of green product marketing. Moreover, the findings presented above demonstrate the importance of the wine bottle label as a key marketing tool for producers of environmental communication and further substantiate this artifact’s use for in-depth research.

**Consumer Reaction to Environmentally Friendly Practices**

Substantive research has shown that “80% of all consumers are some shade of green. In addition, 77% of respondents to a national survey [in America] believed it important to buy environmentally friendly products” (Parducci Wine Cellars and Paul Dolan Vineyards, 2009, p. 2). “There is an unprecedented consumer focus on food
integrity and a rapidly growing concern about ecological sustainability – factors which suit the ‘clean and green’ Australian wine industry” (South Australian Wine and Brandy Industry Association, 2002, p. 3). One main reason for the wine industry in Australia to develop its environmentally friendly image is directly related to “a rapidly growing number of ecologically aware consumers who value taste and quality enthusiastically purchasing wines from vineyards and wineries that are certified biodynamic, certified organic, and utilize certified sustainable farming and business practices” (South Australian Wine and Brandy Industry Association, 2002, p. 3). This is largely because “eco-friendly wines, in many cases, have moved beyond their funky past. They’re worth discovering. … Now consumers are starting to understand it’s not funky; it’s earthy. You’re tasting a component of earthiness that all foods should have. … Organic wines are hot. … They are attracting unprecedented attention both from consumers and from today’s more skilled winemakers” (Gleason, 2006, pp. 37-39).

In the last three decades, there has been considerable environmental research related to consumption in marketing literature. “There was a ‘surge’ of environmental marketing research in the 1970’s” (Polonsky et al., 1998, p. 282). “Most environmental-related research focuses on the consumption of green products and on the identification of green consumers so that green target markets and marketing programs can be developed” (Kilbourne & Carlson, 2008, p. 109). However, “the environmental marketing literature has tended to overlook the links between environmental advertising and other sources of environmental information” (Polonsky et al., 1998, p. 282).

The definition of marketing recently put forth by the American Marketing Association is stated as: “Marketing is an organizational function and a set of processes
for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders” (Kilbourne & Carlson, 2008, p. 109). The trouble with marketing, however, “is that people have become increasingly cynical about all levels of civic life to address them. They generally expect dishonest practices and self-gain agendas from their governments and elected officials, and they believe themselves to be impotent to influence them” (Senecah, 2007, p. 27).

By the early 1990’s, due to this divide between marketing and consumer perception, many scholars began devoting attention to the study of environmental or green marketing. *Green marketing* is defined as “the application of marketing concepts and tools to facilitate exchanges that satisfy organizational and individual goals in such a way that the preservation, protection, and conservation of the physical environment is upheld” (Kilbourne & Carlson, 2008, p. 106). Yet, it remains that “consumers are very skeptical of environmental information and find much of it to be misleading” (Polonsky et al., 1998, p. 282). This is possibly due to “research on customer awareness of sustainable agriculture that suggests that consumers are confused by such terms as organic, biodynamic, low carbon footprint, and sustainable agriculture” (Zucca, 2008, pp. 2-3). Consumers like the idea of sustainable winemaking, but do not have any idea what sustainability really means or what wineries do to achieve it. For clarification purposes, “the organic approach eschews the use of most agricultural chemicals even in bad years, whereas those pursuing a sustainable approach reserve the right to spray. … They agree with the overall philosophy of organic farming, but ultimately they are pragmatists” (Colman, 2008, p. 134).
Despite this disjuncture, scholars argue that the primary goal of research related to the environment should be to identify and support the strategies used by community members to educate the public (Blythe, Grabill, & Riley, 2008, p. 272). “It has been suggested that consumers are willing to seek environmental information about products and to read product labels for relevant information” (Polonsky et al., 1998, p. 281). What is needed to rectify this deficiency in environmental understanding is a new approach to the study of marketing and the environment. “Among these have been such areas as environmentally responsible behavior, environmental attitudes, green products, green advertising, energy consumption, and psychological factors to name a few” (Kilbourne & Carlson, 2008, p. 107).

These approaches to environmental education should help the public reduce some ambiguity; yet, these new studies must be implemented efficaciously as the modern mode of farming is taking its toll on the consuming public:

If the risks to consumers from eating foods sprayed with pesticides remain unclear, the risks to farmworkers (and their families) from contact with these toxins are better understood. They include headache, nausea, skin irritation, muscular incoordination, vomiting, diarrhea, loss of reflexes, abdominal cramps, mental confusion, convulsions, fever, blurring of vision, and unconsciousness. (Pesticide Certification Training, 2002, p. 161)

Moreover, studies have shown an “increased risk for several cancers, birth defects, infertility, and miscarriages among farmers and farmworkers compared with the general population” (Reeves, Schafer, Hallward, & Katten, 1999, pp. 19-20). Additionally, researchers have also linked pesticides to an “increased incidence of asthma, allergic reactions, and other respiratory problems” (Kegley, 2001) in the general public. “So even though the effects of pesticide use may not show up for a long time, they are present in
the body and can appear at any time and in a time far removed from the present” (Cramer & Foss, 2009, p. 308).

On a more positive note, on its homepage the *Organic Guide* lists wine as one of its healthy eating habits and a good quality organic food. “The steady sales growth of organically produced wine appears to highlight a change in consumer taste and purchasing behaviors. … the majority of consumers now prefer to spend a little extra to obtain something distinctive” (Organic Guide, 2007, para. 3). “U.S. organic food sales have grown between 17 and 21 percent each year since 1997, to nearly triple in sales, while total U.S. food sales over this time period have grown in the range of only 2 to 4 percent a year” (Organic Trade Association, 2008, para. 1). Consumers are demonstrating that buying organically represents a “conscious choice to opt out of the industrialized mode of food production and demonstrate concern for individual health as well as the health of the planet” (Retzinger, 2008, p. 252).

Organic wines mediate nature and the general population in complex ways. The organic product purchased represents a pact with environmentally aware producers to care for the land that nourishes and supports all people. “Sustainability is an evolving concept that consumers associate with six key values: healthier, local, social responsibility, environmental responsibility, simple living, and control” (Zucca, 2008, p. 7). Perhaps unaware of it themselves, this new consumer base is effectively defining what it means to be a *green consumer*, the belief that by buying environmentally friendly products consumers can do their part to protect the planet (Cox, 2010), while currently formulating a nascent culture based upon quality.
Quality is classically expressed in terms of tastes and style. However, with a greater understanding of how the health of the planet is directly related to one’s own welfare, an increasing number of consumers are considering how their purchases reflect their quality of life. Gleason (2006) states that “in all honesty, wine consumers have not embraced quality and organic in the same line yet. They still have the attitude that organic wine is a lower quality than what you can get in a conventional wine. It’s a stigma” (p. 37). Yet, “the consumer wants and demands greater environmental responsibility from wineries” (Colman, 2008, p. 135). While it is often noted that effective communication is elusive, based on the above analysis, accurate communication of environmental marketing information is important both to consumer understanding and product selection. “Consumers are no longer content to be passively considered; they expect to be engaged. … It is no longer sufficient to communicate a simple message directly to a mass audience through traditional means of mass communication” (Camilleri, 2008, p. 51). As Stein (2007) recognizes there is a “need for grape producers and wineries to structure their operations around the wants of consumers” (p. 11). With surveys indicating that “three in four Americans call themselves ‘environmentalists’, and seven in ten consumers would gladly choose a ‘greener product’ over its ‘less green’ counterpart” (Russel & Battaglene, 2007, p. 44), it seems that what consumers want is sustainable practice.

**Recognition of South Eastern Zone as Leader**

It has been argued within the environmental communication literature that attitudes and behavior regarding the environment are more complex than many studies
have indicated (Kilbourne & Carlson, 2008, p. 117). Specifically relevant to wine producers, “scholars and practitioners regularly observe that natural resource management is becoming increasingly complex” (Leong et al., 2008, p. 257) as is the environmental communication of that management. As previously demonstrated, “consumers still exhibit genuine, intense concern about environmental issues, which suggests that green marketing is a practical and useful corporate strategy, especially when consumers are able to choose familiar brands that have environment-friendly attributes” (Kilbourne & Carlson, 2008, p. 106). As producers become more aware of the adverse impact of agro-chemicals and greenhouse gas emissions on the environment, eco-friendly, lower impact production, packaging, and transport methods are being adopted.

With the globalization of trade and the domination of markets by transnational capital “there is more than ever the possibility for a separation of environmental effects from the point of consumption” (Bryant, 2007, p. 63). Before globalization, viticulture in the New World was limited by relatively small local markets, poor technology, and difficulties of transportation. “It was not until the 1980’s, and notably the 1990’s when, led by Australia, the New World adopted more efficient production, distribution, and marketing techniques that, in the era of globalization, enabled them to claim growing market shares in centers of world demand for wine” (Campbell & Guibert, 2007, p. 5).

Sustainable winemaking is a process that is currently accepted by a large number of vintners and will continue to become even more widely accepted in the wine community as globalization spreads. “Consumer awareness of sustainable winegrowing and winemaking is low and is confused with vague terms such as organic and green, but as consumer awareness grows, the market will see growing acceptance and demand for
wine produced from sustainably farmed grapes and made in sustainably certified wineries” (Zucca, 2008, p. 8). This means that, “a strategic approach to the marketing of organic wine, to make consumers aware of the good quality organic wines can offer, may effectively boost the organic market within the wine industry both domestically [in Australia] and internationally” (National Association for Sustainable Agriculture Australia, 2005, para. 11). According to NASAA, South Eastern Australian produced organic wines “provide an equal match to their conventionally produced counterparts, and meet the expectations of consumers on the basis of taste and flavor. Another driver of consumer wine choice is health benefits, and for consumers concerned with this aspect, organic wines certainly fit the bill” (para. 2). This is one reason why the South Eastern Australian wine appellation, which accounts for “over 95% of all Australian wines” (Wine Intro, 2009, para. 2) and includes all of New South Wales, Victoria, and Tasmania as well as considerable amounts of South Australia and Queensland, holds such importance in this area of study (see Appendix B).

Wine importer Rosenthal explains, “the place of origin beats out any brand. Brands get forgotten, like people” (Giraud & Nossiter, 2004, 40:30). As a place of origin, the South Eastern zone boasts the highest number of wineries in the country. According to Wine Australia (2009), the most famous and diverse wine regions are Barossa Valley, Clare Valley, Coonawarra, Heathcote, Hunter Valley (Australia’s oldest wine region), McLaren Vale, Mudgee, Tasmania, and Yarra Valley. Each of these wine regions is located in the South Eastern Australian wine zone. Moreover, “the four major wine groups – Southcorp Wines, BRL Hardy, Orlando Wyndham, and Mildara Blass – dominate the industry, controlling nearly 70% of the production of branded wines. The
top 20 wineries account for around 73.4% of production” (Reid, 2001, p. 241). All of these wine groups and wineries are located in the South Eastern zone.

One South Eastern winery, Yalumba, prides itself on its environmental practices, commitment to sustainability, and approach to authenticity through corporate social responsibility (Camilleri, 2008). The oldest family owned winery in Australia, Yalumba focuses its organization around effective communication through relevant, timely, comprehensive, and truthful practices including responsive feedback. “The wine firm must determine the most effective means of communicating what to whom” (Camilleri, 2008, pp. 42-43). “Yalumba, which became the first wine company in the world to receive the Climate Protection Award from the US Environmental Agency, adheres to strict policies of sustainability, operating in as environmentally and socially sustainable ways as possible” (Harpers Wine & Spirit, 2009, p. 9). According to Yalumba winemaker Camilleri (2008):

Yalumba’s environmental program comprises five key performance areas, which it refers to as the five pillars of sustainability: land stewardship, product stewardship, climate change mitigation and adaptation, waste management, and environmental citizenship. … Yalumba believes that a low-carbon future requires a constructive dialogue among all members of the supply chain. … Environmental sustainability poses a significant communication challenge. Each of Yalumba’s stakeholder groups has a different level of perception, knowledge, interest, and attitude towards the environment. (p. 42).

A big factor in the South Eastern Australian wine industry’s communication approach is its practice toward sustainability. One strategy is to “establish mechanisms to communicate and promote the environmental performance of the wine industry as there is an opportunity to integrate environmental perspectives into marketing initiatives” (South Australian Wine and Brandy Industry Association, 2002, p. 11). Recent communication initiatives have focused especially on the ongoing drought that has afflicted the country
for the past decade. Water scarcity has forced growers to consider the long-term viability of their vines and approaches toward sensible sustainability. “This means considering the soil, water and air, and achieving a sustainable balance …. Much of South Eastern Australia’s recent viticultural focus combines a deeper understanding of vine compatibility with climate and soils” (Harpers Wine & Spirit, 2009, pp. 8-9). Concern over how best to conserve the precious elements found in the rich soils “is being translated into the aforementioned sustainable viticulture. In fact, this is an area where Australia leads the world. … Projects to conserve water usage and reduce or eradicate the need to irrigate vines are widespread. Organic and biodynamic practices (which can help conserve water in the soil) are growing fast” (p. 9).

Much of this growth is arguably related to the fact that South Eastern Australia has a climate for almost every kind of grape. “And in recent years, thanks to a growing awareness of the impacts of climate change on the industry, there is an emerging view that alternative grape varieties can offer vineyards a very real hope of surviving in a warmer, drier climate” (Australian Wine and Brandy Corporation, 2009, p. 14). Additionally, “many of the South Eastern Australian winemakers are descendents of winemakers who emigrated to Australia from wine regions in Europe, and winemaking is in their blood. … [Moreover,] South Eastern Australia has an educational system that has turned out incredibly knowledgeable and ambitious vintners” (Sommers, 2008, p. 196). All of this combines to the notion that “sustainability is going to be absolutely critical to the future of Australian wine” (Harpers Wine & Spirit, 2009, p. 34).

Even the world at large is acknowledging South Eastern Australia’s growing prowess. “At the end of 1995, Wine Spectator named 1990 Penfolds’ Grange its Wine of
the Year, the first time a wine outside of France or California had been selected” (Posert & Franson 2004, p. 182). Meanwhile, industry insiders say:

The greatest challenge in the U.S. wine industry today would be what has been defined as the Australian invasion, the explosion of reasonably priced, high quality Australian wines into the U.S. marketplace. It has set most California wineries back a great deal. … The Australians presented an array of high quality value wine with interesting packaging, put it in the marketplace and made it accessible. It was not overly complex so people just went for it. (Berenson, 2004, p. 30)

Further, a survey performed by the Harvard Business School in 2003 of the world’s leading wine regions concluded that the Adelaide region in South Australia, which in addition to stellar wineries and educated winemakers includes the Australian Wine Research Institute and the esteemed wine faculty at the University of Adelaide, “is the world’s most innovative and productive wine center” (Taber, 2007, p. 67).

Taking into account all of the above, it is evident that the South Eastern wine zone of Australia is the leader in its field. “Innovation is being driven across the industry, from lightweight packaging to new size formats” (Harpers Wine & Spirit, 2009, p. 11). It is also worth mentioning “how many wineries are sustainably run, often embracing organic or biodynamic practices in a quest to produce fine wines while nurturing soils” (p. 32). As many as 150 wineries, or a tenth of the wineries in this particular geographic area are championing the sustainable practices presented in the previous section. These vineyards are actively advancing green wine production standards that carry the potential to impact the wine industry on the global level. In fact, other New World winemakers, such as Argentina, point to Australia as their model (Stein, 2008); but, what is more important, as Haran (2008) reports, New World wine practices are beginning to influence the production of wine in Old World countries as well. With all of this in mind, wineries
in South Eastern Australia are most readily applicable to the study of environmental communication.

*South Eastern Australian Sustainable Initiatives and Labeling*

In the South Eastern wine zone of Australia, sustainable approaches at winery compounds include a litany of initiatives. Aspects such as product design through use of recycled materials, waste reduction or elimination, water quality and treatment, environmental management including green architecture and energy efficiency, support of the green community, stewardship of the land, and carbon emission mitigation are all seen as priorities. Incidentally, some organic vineyards have added recycling centers on premise, installed solar powered electric or natural gas engines, initiated company-provided transportation for workers, utilized only toxic-free cleaning supplies as restroom cleaning agents, and employed 100% recycled materials for packaging including non-toxic inks and glues on smaller wine bottle labels.

Through strategies such as these, many wineries, both organic and non-organic, have found that being green is good business; yet, the decision to grow organically as opposed to conventionally comes down to two main objectives. First, being sustainable, farming organically, and caring for the land increases water-holding capacity of the soils, which is a primary concern in Australia today due to the decade-long, nationwide drought and offers greater long-term benefits for viticulture as a whole. Second, healthy soil produces better fruit and allows the land (i.e., terroir) to show through in the wine, enhancing the quality of the product and increasing sales, which is a direct, short-term benefit.
The determination to produce organic wines arises from multiple social, economic, and environmental considerations. “Organic agriculture, while not a panacea for all of the problems discussed above, offers a more sustainable model, returning to many of the agricultural practices in place before the introduction of the ‘green revolution’. Farmers and consumers alike have recognized the benefits of organic agriculture” (Retzinger, 2008, p. 251). It is a possibility, however, that customers are not going to buy a wine simply because it is from an organic winemaker. “The simple truth is that wineries following more natural techniques are typically places that are putting more effort into their vineyards and their winery practices. Often that effort translates into a better tasting product” (Gleason, 2006, p. 38).

The taste of organic viticulture is just one method of communicating sustainability. According to Camilleri (2008), sustainability “may be understood as a set of actions and interactions that a creative organization undertakes to achieve a distinctive and true-to-self identity and image over time and across audiences, [which is] created through language as well as other representations and symbols such as wine labels” (p. 45). Australia seems to consider itself “the country that has done the most to engage consumers with a consistent and varied supply of appealing, varietally labeled wines of quality across all price points and styles” (Harpers Wine & Spirit, 2009, p. 6), including both the organic and non-organic sectors.

Despite recent success in overseas markets with appealing, varietally labeled wines (e.g., [yellow tail]), there is no best strategy for constructing a particular message for a wine label. Save the need for designs to be legally defensible (i.e., labels cannot infringe on an existing trademark, patent, or copyright or violate relevant governmental
regulations), the basic rule for label messages is to speak to the target consumer. If possible, the front label should be the same for all markets, which may mean changing the domestic label slightly. The overall cost of only having one front label may be much less than having different ones for each market, which can not only affect market costs, but bottling and inventory costs as well. Back labels usually must be changed for export markets. Sometimes a split back label is most cost-effective, with a generic top back label and a different label with internationally required information below. When considering a design that will be used for both domestic and export markets, it is important to maintain simplicity as cultural differences between countries may make complex labels very unattractive in some places. Ultimately, the label design and the winery name should clearly link to the brand position, such as organic agriculture, thereby communicating the focus of the product’s origin.

According to Berenson (2004), “with any producer of a premium consumer product, it is essential to have brand attributes in line with corporate beliefs, emphasis and drivers all related to consumer desires. The luxury wine business is no different” (p. 9). One South Eastern Australian winemaker confessed, “our marketing team designed a beautiful package, including a label with gold foil and earthen colors. … [However,] the inks, the paper, the gold foil process – all of them were expressions of conventional, environmentally unfriendly processes. … [Eventually, we] found a tree-free form of paper called kenaf to use for the labels and all of the labels were printed with soy-based inks” (P. Wood, personal communication, June 26, 2010). For this wine producer, although the original label design may have been beautiful, it was not in harmony with the winery’s environmental positioning, and, consequently, warranted modification. “In
this new, very competitive marketplace, the attention to and successful communication of these attributes make for product differentiation, recognition, and ultimately, leads to an increase in shareholder return” (Berenson, 2004, p. 9).

As evidenced in the above scenario, there are different perspectives about what a label should convey. From the producer and sales manager to the retailer and the designer, there are myriad factors to consider, including the price of the product, target markets, and consumer demographics. With the possibility of these variables becoming muddied, some organic producers elect to eschew mention of environmental practice on their label altogether. This decision to abstain from organic reference on a label may be because some winemakers view organic production as a philosophy. That is to say, sustainable viticulture for organic vintners is not a marketing tactic, but rather the main ingredient to produce great wine and promote a viable ecological future for their agriculturally based industry.

An alternative motive to refrain from environmental communication on wine bottle labels may be as foremost leading expert of the Australian wine industry James Halliday suggested in a personal interview at his winery, Coldstream Hills, in the Yarra Valley in Victoria, Australia:

The reason why you won’t always see organic certifications mentioned on a label from legitimate wineries is because they say, “Yes, we are doing it. No, we make no mention of it because if we get clobbered by rain we want to use whatever sprays are necessary to save the crop.” I would like to think that the majority of environmental communication and green product marketing is out of conviction, but also it’d be ideal to not suggest that they’re aware that this is to their benefit or success. (J. Halliday, personal communication, July 5, 2010)

Whether the rationale to employ green product marketing is the former or the latter proposed by Mr. Halliday, South Eastern Australian wineries, organic and non-
organic alike, are utilizing the wine bottle label as a principal means of environmental communication.

**Approach for Studies of Environmental Communication**

Review of preliminary studies shows that environmental communication methodology toward scholarly inquiry emphasizes human communication as mediating views and actions toward nature. Carbaugh (2007) writes, “just as our language struggles to make sense of the natural world, so too do our senses of the natural world seek a language about that of which we are a part” (p. 67). The environment and its effects on the use of language through strategic industry advertisement is manifest through ongoing interest in the academic community (Beverland, 2005; Kilbourne & Carlson, 2008; Polonsky et al., 1998). As such, there are multiple methodological approaches to examine important issues of environmental communication as it relates to corporate implementation (Depoe, 2007).

Seeking to explore the management and integration of marketing communication specifically in the Australian wine industry, Reid (2001) found that environmental communication is a growing area of importance for wine producers and marketers on the global level. “EC practitioners become spokespersons for other persons, birds, wolves, fish, trees, mountains, or any other community member in an attempt to promote community sustainability” (Reid, 2001, p. 259). By becoming spokespeople for the environment, EC practitioners must be able to effectively use language. But, “if language, especially written language [like that seen in green product marketing], is part
of the problem, how can we use language to restore the connection to the environment” (Killingsworth, 2007, p. 60)?

According to Schwarze (2007), environmental communication “make[s] perspective rather than method a defining feature of inquiry. A perspective oriented [approach] … not only captures the sense of urgency that might motivate environmental communication scholarship; it also offers a concept that facilitates the invention of scholarly argument” (p. 95). Depending on the environmental communication employed, specific industry perspectives may foster a reconnection with the natural world. As Cox (2010) maintains, academic interpretations of corporate actions have a formative hand in shaping understandings regarding nature and the environment both in the academy and in the public sphere. Therefore, it is important for scholars to help produce more effective ways of understanding the relationship between society and the environment.

Heath et al. (2007) report, “It is becoming increasingly clear that the main product of environmental communication is not informed understanding as such, but the quality of social relationship it supports, becoming a tool for communication values and identities” (p. 46). It has been argued that “environmental education is the process through which necessary changes in behavior can be effected” (Kilbourne & Carlson, 2008, p. 117). To this extent, environmental communication scholars seek to critique and raise awareness about existing dominant discourses that are unclear, especially those that contribute to environmental degradation. “In doing so, [scholars] look not only at communication that is directly about the environment, but also at communication that is not necessarily about the environment but that has an impact on the environment” (Milstein, 2009, p. 346).
As previously noted, according to Cox (2010) there are seven areas of study in the environmental communication field. The seventh area, Representations of Nature in Popular Culture and Green Marketing, serves as the focus for this study’s methodology. *Green marketing*, or the construction of an environmental identity for products, is a “major type of corporate communication in the public sphere about the environment” (p. 332). Through the use of public relations and strategic marketing, often many businesses appear green while actively implementing non-ecological procedures and opposing environmental protections. Green marketing is principally an attempt to influence the public’s perception of a corporation’s environmentally responsible image, but this function has invited much debate over actual corporate behavior.

The sustainable practices being employed by wineries in South Eastern Australia and the process of becoming organic were detailed in previous sections. It is important to underscore that non-organic wineries may be sustainable in other ways even if they are not certified organic, such as through careful water management or recycling of materials on the vineyard premises. These actions may be expressed through *green product advertising*, the association of a company’s product with popular images and slogans that suggest a concern for the environment on product labels (Cox, 2010). However, there is no uniform standard for international labels and consequently most environmentally friendly claims are governed only by voluntary guidelines. Due to this lack of regulation, purposeful deception by a corporation used to soften the public’s perception of a company’s activities is often applied to target the growing base of ecologically minded consumers (Bryant, 2007; Charters & Pettigrew, 2006; Orth, 2005; Overby, Woodruff, & Gardial, 2005; Thogersen, 2002).
Although the message design of green products targets prospective consumers, this dissertation addresses the issue of environmental communication by wineries in South Eastern Australia and potential environmental image enhancement, or intentionally overstating environmental sensitivity and accomplishments of sustainable practices. As such, data from consumers has not been collected for this specific study. “Many businesses have begun to ‘green’ or environmentally improve their operations, while others have opposed higher standards for ... initiatives on energy and global warming” (Cox, 2010, p. 33). That is why the most crucial aspect of this study is the communication of ecological procedures via green product marketing on wine bottle labels to determine if environmentally friendly images are being constructed.

Prior to the methodological examination, extensive background on each participating winery has been conducted through thorough investigation of traditional resource outlets (e.g., books, articles, etc.) and newer media portals (e.g., websites, podcasts, etc.) to provide a relevant profile of the selected wineries. To gain more in-depth knowledge about the design of labels, image representation manuals have also been consulted (Caldewey & House, 2003; Nugent, 2006; Rose, 2007). Further, contact with experts in the field, including Australian vintners, certifying bodies, critics, and label-makers, has been performed via email correspondence and telephone conversations in order to achieve a firm understanding of decisions regarding the process of sustainable winemaking, certification procedures, and label design. This descriptive phase of the project served to provide an initial overview of the current demographics of wineries in the South Eastern Australian wine zone as well as the sustainable practices being implemented.
Rationale for Study

Values regarding environmental concern have become increasingly popular across the globe and many corporations are beginning to expand their communication to include green product marketing in order to link products and behaviors to images of ecologically responsible corporate citizens (Beverland & Luxton, 2005; Bulkeley, 2000; Cox, 2010; Cramer & Foss, 2009; Environmental Communication & Social Marketing, 2009). It is important to ascertain if a corporate advertisement is environmental image enhancement or if instead the stated claim is a legitimate environmental achievement. Applying Scott’s (1995) theoretical framework of Institutional Theory, which describes how the flow of media messages is produced, managed and distributed, this exploratory research employs a content analysis of wine bottle labels, the prime communication device for the wine industry. Investigating and comparing organic and non-organic South Eastern Australian wineries will offer a comprehensive means to address the proposed research questions.

Research Questions

Based on the current review of literature and overall goals of this study, the following research questions are posed:

RQ1: In what ways do South Eastern Australian wineries convey information about sustainable practices through green product marketing on wine bottle labels?

RQ2: How does the green product marketing on wine bottle labels for organic South Eastern Australian wineries compare to their non-organic counterparts?
RQ3: Are South Eastern Australian wineries employing green product marketing messages on wine bottle labels without being certified organic?

In the next chapter, the step-by-step process for winery sample selection, procedures for data collection, and methodological approach to data analysis per each research question will be detailed.
CHAPTER III. METHODOLOGY

Through the methodological approach of content analysis, this dissertation explores how sustainable practices utilized at South Eastern Australian wineries are communicated via green product marketing messages on wine bottle labels to construct an environmentally friendly image. As New World wine producers, the South Eastern wine zone of Australia has been selected for inclusion in this study since many vineyards in this geographic area are actively advancing green wine production standards. By comparing the green product marketing between organic and non-organic wineries, this research will determine how environmental communication is employed to underscore ecological benefits related to wine production.

Sample Selection of Wineries

The data for this dissertation has been collected from both organic and non-organic wine producers. This comprehensive approach allowed for greater validity and reliability in comparing data related to the evaluation of wine production and environmental communication through green product marketing of sustainable practices (Denzin, 1978; Hakim, 2000; Ryan & Bernard, 2003). As a result, the sample selection from the population of South Eastern Australian wineries followed five specific steps detailed below.

Step One – Identify Core List of Organic Wineries: A core list of organic wine producers was identified using three specific resources: (1) government certifying body Australian Certified Organic (ACO) (2010), (2) online entity Green Pages Australia (2010), and (3) research institute National Association for Sustainable Agriculture...
Australia (NASAA) (2005). A combined list of 156 South Eastern Australian based organic wine producers was identified from these resources (see Appendix C).

**Step Two – Filter Core List of Organic Wineries:** The core list of South Eastern Australian based organic wine producers was filtered using three criteria: (1) the wine producer must be a vineyard or winery with valid and up-to-date certification, (2) the vineyard or winery must bottle and label their own organic wine, not simply grow organic grapes for distribution to other wineries, and (3) the vineyard or winery must produce the Shiraz varietal (addressed below). All three elements – organic certification, bottled wine, and Shiraz varietal – were necessary in order to construct a complete population of organic wineries.

The Shiraz varietal was the specific wine bottle label analyzed from each selected winery. This choice, based on industry resources, was three-fold: (1) Shiraz is the number one variety planted across the prominent 62 regional Geographical Indications (i.e., it is a saturated market), (2) South Eastern Australia is best known for this grape (i.e., the international identity of Australia is Shiraz), and (3) Shiraz is Australia’s most famous export and distinguishes Australia from other winegrowing countries (i.e., it is an emblematic wine) (Australian Wine and Brandy Corporation, 2009a, 2009b; Berenson, 2004; Clarke, 2004; Giglio, 2009; Harpers Wine & Spirit, 2009; MacNeil, 2001; Mayo, 1986; Posert & Franson, 2004; Robinson, 2006; Sims, 2009: Thach & Matz, 2004).

If the selected wineries produced more than one Shiraz, only one bottle was analyzed to ensure an equal number of wine bottle labels per winery (Coffey & Atkinson, 1999; McTavish & Loether, 2002; Weiss, 1994). In order to determine the bottle selected, the various wines were organized by pre-defined price-points. Based on
industry classification, the wines were broken down into three levels: entry, mid-range, and icon. The mid-range bottle was chosen due to the closer price point to that associated with organic wines (Charters & Pettigrew, 2006; Dodd, Pinkleton, & Gustafson, 1996; Orth, 2005; Thogersen, 2002).

Step Three – Identify Core List of Non-Organic Wineries: According to Wine Australia (2009) there are 1,545 wineries in South Eastern Australia. Since 156 of these wineries are organic and three are biodynamic⁴ (total population, 159), 1,386 non-organic and non-biodynamic wineries in the wine zone remained available for potential analysis (see Appendix D).

Step Four – Filter Core List of Non-Organic Wineries: The core list of South Eastern Australian based non-organic wineries was also filtered on the basis of three variables: (1) the winery must bottle and label their own non-organic wine, (2) the winery must produce the Shiraz varietal, and (3) the winery must be in the same region as the selected organic winery.

Step Five – Match Organic and Non-Organic Wineries: After dividing the population into organic and non-organic categories based on the procedures described above, precision control matching was performed to increase sensitivity of the study (Anderson, 1966; Blalock, 1982; Christensen, 1980; Reinard, 2006). After the non-organic wineries were selected, they were matched with organic wineries from the same region and listed in pairs to create equivalent groups of subjects on a case by case basis. In order to make the selection process rigorous and avoid sampling error, an equal number of non-organic wineries were matched with the total population of organic wineries.
Procedures for Data Collection

Once the sample of winery participants was determined according to the multiple steps detailed above, data was gathered from winery resources in one main collection phase during the summer of 2010 while the researcher was on-site in Australia. The researcher traveled to Australia to conduct field research at the selected wineries, perform informal interviews with wine industry representatives regarding design of bottle labels, and collect data from the sample selection. Digital images of each wine bottle label included in the study were captured for analysis. All original wine bottle labels making up this data set are available upon request.

Data Analysis

Content analysis was conducted using wine bottle labels from the sampled vineyards. This explanatory phase aimed to uncover the winery’s messages regarding sustainable procedures through the power of text, design, and imagery. The purpose was to explore key findings regarding environmental communication of green product marketing in the South Eastern Australian wine industry through content analysis.

Previous research examining environmental claims found on products demonstrated that print labels produced the strongest marketing resource on store shelves (Berenson, 2004; Dodd, Pinkleton, & Gustafson, 1996; Polonsky et al., 1998). Polonsky et al.’s (1998) research provides a thematic approach for the content analysis of bottle labels. Variables have been modified from the original research approach in order to apply this template to the current study (see previous discussion regarding Polonsky et al.’s, 1998, categories in preceding chapter). The following categories have been
collapsed: (1) Product Name and Logos (e.g., font and visual representation of name, certifying seal) and (2) Pictures and Images (e.g., image of winery, picture of Earth). The following categories have been adopted and expanded: (3) Licensing Agreement (e.g., certified, approved, recommended by), (4) Scientific Environmental Attributes (e.g., biodegradable, 100% organic grapes, recycled), and (5) General Environmental Claims (e.g., no sulfites added, eco-safe). Finally, the following categories have been added: (6) Meaningless Environmental Language (e.g., promotes a healthy planet, save our world), (7) Statement Spectrum (e.g., the taste of a sunny day, the sun grows healthy grapes), (8) Appeal to Romanticism (e.g., referring to a special occasion, family-run business), (9) Materials and Colors (e.g., etched into bottle, no label, gold leafing, earthy tones), and (10) Proportion of Text (e.g., actual word count) (see Appendix E).

Examination of wine bottle labels (front and back) using a content analysis following a rubric based on these ten categories allows for distinguishing specific patterns relating to environmental communication of ecological practices among South Eastern Australian winemakers. Importantly, this phase uncovers how members of the Australian wine industry “experience, label, and structure the world in which they live” (El Guindi, 1998, p. 475). Specific examples based on the wine bottle labels are provided in the next chapter to illustrate these findings.

In order to address Research Question One, how South Eastern Australian wineries are communicating sustainable practices via green product marketing on wine bottles labels, the data collected from the rubric of variables has been coded for analysis in three steps. (1) Qualitative information was entered and reported, which allowed for automated coding, text search and retrieval, and pattern discernment (Johnston, 2006;
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Miles & Huberman, 1994; Ryan & Bernard, 2003; Seale, 2002). (2) To provide a more complete understanding of the overall qualitative data, frequencies and percentages of these findings were determined and reported quantitatively. Such qualitative and quantitative approaches encouraged analytical rigor and allowed for managing large amounts of data for analytical purposes (Coffey & Atkinson, 1999; Lewis, 2004; McTavish & Loether, 2002; Silverman, 1993). (3) To examine consistency, inter-coder reliability was utilized based on 20% of the data.

In order to address Research Question Two, comparing green product marketing between organic and non-organic wineries, conclusions from the data have been drawn. Results have been analyzed to gain a better understanding of how sustainable practices are communicated by vineyards producing organic and non-organic wines. To determine how an ecological image is conveyed through environmental communication, wineries have been divided into a spectrum of four distinct groups: (1) organic wineries with no environmental communication, (2) organic wineries with environmental communication, (3) non-organic wineries with no environmental communication, and (4) non-organic wineries with environmental communication.

In order to address Research Question Three, employment of green product marketing messages without organic certification, results from the comparison of the content analysis of organic and non-organic wine bottle labels can determine whether real claims of environmental communication are stressed or if messages are simply an attention seeking tactic. Through exploration of this final research question, winemakers in South Eastern Australia have been divided into four different categories of green marketing: (1) Non-Green Product Advertisers – those who perform environmental
compliance, but their advertising practices do not draw reference to it. Organic wineries with no environmental communication fall into this category; (2) Green Product Advertisers – those who perform environmental compliance and their advertising practices reflect this concern. Organic wineries with environmental communication fall into this category; (3) Non-Environmental Image Enhancers – those who do not advertise an environmentally friendly image and do not practice ecological procedures. Non-organic wineries with no environmental communication fall into this category; and (4) Environmental Image Enhancers – those who advertise an environmentally friendly image, but do not necessarily practice said ecological procedures. Non-organic wineries with environmental communication fall into this category (see Appendix F).

Based on the investigation of these three research questions – sustainable information, organic and non-organic marketing comparison, and employment of green product marketing messages without certification – a flow chart regarding the prospective environmental communication data is provided (see Figure 3.1).

**Figure 3.1 – Flow Chart of Wineries’ Environmental Communication and Green Product Marketing**

- **Sustainable Practices**
  - **Org, No EC** → **Non-Green Product Advertiser**
  - **Org, EC** → **Green Product Advertiser**
  - **Non-Org, No EC** → **Non-Environmental Image Enhancer**
  - **Non-Org, EC** → **Environmental Image Enhancer**
Selected winery descriptive demographics, reliability, and presentation of data collection addressing the research questions are detailed in the next chapter. Review of findings and subsequent discussion regarding implications, limitations, and recommendations for future research will be included in the final chapter.
CHAPTER IV. RESULTS

This chapter examines study findings for each of the environmental communication variables to interpret the meaning of the research results. A contextual overview of the data in both qualitative and quantitative manner is presented. In order to assess each of the three posed research questions (i.e., sustainable information, organic and non-organic marketing comparison, and employment of green product marketing messages without certification), summary of data from the content analysis of green product marketing on wine bottle labels in the South Eastern Australian wine industry is provided.

Selected Winery Descriptive Demographics

A list of 52 organic wineries (36 from Australian Certified Organic, 8 from Green Pages Australia, 8 from National Association for Sustainable Agriculture Australia) were identified for inclusion in the study and listed by group alphabetically for examination (see Appendix G). A list of 52 non-organic wineries were also identified for inclusion in the study and listed alphabetically for examination, including region and state (see Appendix H). Matching by wine region on a case by case basis resulted in 52 pairs of equivalent groups of subjects or a total population of 104 organic and non-organic wineries. Each organic winery was listed alphabetically by state (18 from New South Wales, 1 from Queensland, 22 from South Australia, 1 from Tasmania, 10 from Victoria), including address and non-organic match (see Appendix I). Finally, the matched pairs of organic and non-organic wineries were combined into a matching document organized by region, including state, certification, and price points (see Appendix J).
Reliability

Inter-coder reliability was utilized based on 20% of the data to examine consistency in the data results. After an in-depth training of wine bottle label content analysis using data from outside the study’s population, a secondary coder re-coded 22 of the 104 wine bottle labels from the original data, 11 from organic wineries and 11 from non-organic wineries. The inter-coder reliability across the 22 wine bottle labels indicated discrepancy in only one of the 22 labels. Analysis of the disagreement identified that there was an instance where the secondary coder could not determine whether or not a wine bottle label was employing environmental communication. To determine if the two coders were assessing environmental communication uniformly, a Cohen’s kappa was calculated, $K = 0.91$, which is considered satisfactory.

Presentation of Data

Research Question One. To address research question one, wineries conveyance of sustainable practices through green product marketing on wine bottle labels, the qualitative data have been separated into a content analysis rubric by organic (see Appendix K) and non-organic status (see Appendix L) and designated as wineries that either do or do not employ environmental communication. Pertinent detailed information can be found in each of the respective content analysis appendices. Qualitative examples illustrated by each variable are exhibited below.
Category 1 (Product Name and Logos) resulted in various fonts for the winery name including the use of all capital letters (see Figure 4.1), all lowercase letters, ethnic scripts (see Figure 4.2), and cursive. Assorted logos included the recycle symbol, the Standard Drinks icon (see Figure 4.3), the Enjoy Responsibly emblem, and barcodes (see Figure 4.4).

Figure 4.1 – Pensilva, Non-Organic, Capital Letters Product Name (top left)
Figure 4.2 – Clonakilla, Non-Organic, Ethnic Script Product Name (top right)
Figure 4.3 – Saltram Vineyard, Non-Organic, Various Logos (bottom left)
Figure 4.4 – Zilzie, Non-Organic, Ethnic Script and Various Logos (bottom right)
Category 2 (Pictures and Images) ranged considerably from family crests to depictions of Aboriginal art (see Figure 4.5), portrayals of vineyard scenes (see Figure 4.6), winemaker signatures, drawings of animals (see Figure 4.7), wine competition medals, and no pictures or images at all (see Figure 4.8).

Figure 4.5 – Jinda-Lee, Non-Organic, Aboriginal Art Image (top left)
Figure 4.6 – Pioneers Run, Organic, Vineyard Scene (top right)
Figure 4.7 – Cock + Bull, Non-Organic, Animals Image (bottom left)
Figure 4.8 – Australian Vineyard, Non-Organic, No Picture or Image (bottom right)
Category 3 (Licensing Agreement) was relatively straightforward usually referring to Australian Certified Organic (ACO) (see Figures 4.9 and 4.10), National Association for Sustainable Agriculture Australia (NASAA), or general organic certification (see Figures 4.11 and 4.12).

Figure 4.9 – Organic One, Organic, ACO Licensing Agreement (top left)
Figure 4.10 – Tamburlaine, Organic, ACO Licensing Agreement (top right)
Figure 4.11 – Macquariedale, Organic, General Organic Certification (bottom left)
Figure 4.12 – Pennyweight, Organic, General Organic Certification (bottom right)
Category 4 (Scientific Environmental Attributes) included assertions such as “100% organically grown grapes,” “no preservatives added,” “without the use of artificial or synthetic chemical pesticides,” and “chemical free” (see Figure 4.13).

Category 5 (General Environmental Claims) comprised of phrases like “hand picked and handcrafted,” “minimal sulfites added,” “ecologically safe,” “natural fermentation,” and “striving to achieve zero environmental impact.”

Category 6 (Meaningless Environmental Language) referred to ambiguous statements such as “please recycle,” “the Earth matters,” “dedicated to the region,” and “sourced from premium Australian vineyards” (see Figure 4.14).

Figure 4.13 – Pig in the House, Organic, Scientific Environmental Attribute (left)
Figure 4.14 – Lambloch, Non-Organic, Meaningless Environmental Language (right)

Category 7 (Statement Spectrum) represented some of the broadest use of language such as “our life journey often takes us down many trails and paths,” “homage to the hard years endured by the early pioneers who settled upon this land,” “our last
generation’s hour is this generation’s minute” (see Figure 4.15), and “fairly Protestant wine for such a Catholic valley” (see Figure 4.16).

Figure 4.15 – Loomwine, Non-Organic, Generation Spectrum (left)
Figure 4.16 – O’Leary Walker, Non-Organic, Religious Spectrum (right)

Category 8 (Appeal to Romanticism) incorporated notions like “proudly made by the family” (see Figure 4.17), “limited release,” “estate grown from vineyards planted in 1891,” “classic,” and “Australia’s oldest Chardonnay vineyard” (see Figure 4.18).

Figure 4.17 – Elderton, Organic, Family Romanticism (left)
Figure 4.18 – Cowra Estate, Non-Organic, Established Romanticism (right)
Category 9 (Materials and Colors) ran a wide spectrum with materials ranging from torn labels (see Figure 4.19) and gold and silver leafing (see Figures 4.20 and Figure 4.21), to burnt edges and no back label. Colors included the entire rainbow of shades, palates, and hues (see Figure 4.22).

Figure 4.19 – Mount Pleasant, Non-Organic, Torn Label (top left)
Figure 4.20 – Velo, Non-Organic, Gold and Silver Leafing (top right)
Figure 4.21 – Hardys, Non-Organic, Torn Label with Gold Leafing (bottom left)
Figure 4.22 – Climbing, Non-Organic, Label of Many Colors (bottom right)
Category 10 (Proportion of Text) spanned from a minimum of a mere five words (see Figure 4.23) to a maximum of a verbose 281 (see Figure 4.24).

Figure 4.23 – BH & KM Robinson / Moyston Hills, Organic, Minimum Text (left)
Figure 4.24 – Dandelion, Non-Organic, Maximum Text (right)

A summary of the content analysis is reported quantitatively in Figure 4.25, providing frequencies and percentages of environmental communication on wine bottle labels from wineries in South Eastern Australia separated by organic and non-organic status.
As can be seen in this data, out of a total population of 104 organic and non-organic wineries in the South Eastern Australian wine zone, 68.3% (n = 71) employ environmental communication and 31.7% (n = 33) do not employ environmental communication as a means of product marketing. The trend represented through this data translates into more than two-thirds of South Eastern Australian wineries, whether organic or not, that utilize environmental communication as a promotional strategy on wine bottle labels.

**Research Question Two.** To address research question two, how green product marketing on wine bottle labels compares between the organic and non-organic groups, results in Figure 4.25 can be further analyzed. Out of a total population of 52 organic wineries, 71.2% (n = 37) utilize environmental communication and 28.8% (n = 15) do not utilize environmental communication as a means of product marketing. This shows that almost three-fourths of organic wineries are employing environmental communication as a means of product marketing on wine bottle labels. Notably, more than one quarter of these wineries make no mention of environmental practice whatsoever even though they are certified organic.
Perhaps more importantly, out of a total population of 52 non-organic wineries, 65.4% (n = 34) utilize environmental communication and 34.6% (n = 18) do not utilize environmental communication as a means of product marketing. This means that nearly two-thirds of non-organic wineries are employing environmental communication as a marketing technique on wine bottle labels even though they do not necessarily practice said EC claims. Comparably, almost the same number of non-organic wineries is applying environmental communication as their organic counterparts (65.4% and 71.2% respectively).

*Research Question Three.* To address research question three and determine if wineries that are not certified organic are actively promoting green product marketing messages, the data have been divided into four distinct categories and represented in Figure 4.26, Green Product Marketers by Organic and Non-Organic Wineries.

**Figure 4.26 – Green Product Marketers by Organic and Non-Organic Wineries**

<table>
<thead>
<tr>
<th></th>
<th>Organic</th>
<th>Non-Organic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Green Product Advertiser</td>
<td>15 (14.4%)</td>
<td>0 (0.0%)</td>
<td>15 (14.4%)</td>
</tr>
<tr>
<td>Green Product Advertiser</td>
<td>37 (35.6%)</td>
<td>0 (0.0%)</td>
<td>37 (35.6%)</td>
</tr>
<tr>
<td>Non-Environmental Image Enhancer</td>
<td>0 (0.0%)</td>
<td>18 (17.3%)</td>
<td>18 (17.3%)</td>
</tr>
<tr>
<td>Environmental Image Enhancer</td>
<td>0 (0.0%)</td>
<td>34 (32.7%)</td>
<td>34 (32.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>52 (50.0%)</td>
<td>52 (50.0%)</td>
<td>104 (100.0%)</td>
</tr>
</tbody>
</table>

This data reveal the following: Out of the four subgroups of green product marketers, organic Green Product Advertisers are the most numerous with 35.6% (n =
37), followed closely by non-organic Environmental Image Enhancers with 32.7% (n = 34), both with approximately the same quantity. Interestingly, non-organic Non-Environmental Image Enhancers with 17.3% (n = 18) and organic Non-Green Product Advertisers with 14.4% (n = 15) also have a similar number in their respective categories. The total population of organic and non-organic wineries is listed by appropriate category in Appendix M.

The data show that regardless of organic certification, the majority of South Eastern Australian wine producers (68.3%) are employing environmental communication messages on wine bottle labels as a method of product marketing. In fact, there are over twice as many promoters of environmental communication (Green Product Advertisers and Environmental Image Enhancers, representing a combined total of 68.3%) than non-promoters of environmental communication (Non-Green Product Advertisers and Non-Environmental Image Enhancers, representing a combined total of 31.7%). A representative sample of wine bottle images from each of these four categories is included in Appendix N.

Discussion of the study’s implications regarding environmental communication on wine bottle labels, Institutional Theory framework, and organic and non-organic wineries related to greenwashing in the South Eastern Australian wine industry, as well as limitations in the research and recommendations for future investigation are addressed in the final chapter.
CHAPTER V. DISCUSSION

This research investigated the sustainable information being marketed by Australian vintners to examine how practices are communicated on wine bottle labels to construct an environmentally friendly image. Comparing the green product marketing strategies between organic and non-organic wineries, the results revealed that sustainable messages are being used by wine producers from the South Eastern Australian wine zone as a form of environmental communication. In this chapter, implications of the data findings will be addressed in three stages: environmental communication on wine bottle labels, Institutional Theory framework, and organic and non-organic wineries related to greenwashing. Discussion of the study’s limitations, recommendations for future research initiatives, and a conclusion to this specific exploration of environmental communication will follow.

Implications

Environmental Communication on Wine Bottle Labels. Communication has the potential to challenge and inspire, not simply to inform. If environmental communication “makes use of multiple channels of engagement to reach target audiences, and draw[s] on different sources of information to shape perceptions” (Camilleri, 2008, p. 60), it can achieve long lasting and meaningful change for the climate, Earth, and environment. Because of this, it is vital that clear communication regarding environmental stewardship remain an integral part of South Eastern Australian wineries’ journey toward sustainable development. Although wineries in Australia have performed well in global markets during the past couple of decades, “over time even the best products can saturate the
market and lose their novelty; consumers may move on, and want to try the next ‘new
thing’. … On the other hand, Australian wines could continue to improve through the
proliferation of new wines and aggressive marketing” (Sommers, 2008, p. 197) such as
the influential venue of environmental communication on wine bottle labels, the primary
marketing tool for the international wine industry.

As New World wine producers, the aim of the Australian industry seems to be to
sustain the momentum established by the recognition it received as the world’s most
creative and dynamic winemakers due to such events as the first International
Biodynamic Wine Forum. As Australian wine expert and author James Halliday reports,
“Sustainable viticulture is the most common phrase right now” (J. Halliday, personal
communication, July 5, 2010). Regarding environmental communication on wine bottle
labels, Halliday explains:

I look at labels in two ways: As a producer I think of design, content, the whole
package. As a wine critic, judge – I am always interested in the quality of
knowledge much more than the quantity of knowledge the label provides. I have
seen everything – a raft of stuff on labels. … Sorting out cynical users to practical
organic believers on a label can be a challenge. Absolutely you see non-organic
producers promoting green initiatives on labels. I am totally convinced that
people are doing this [promoting green marketing on wine bottle labels] because
it’s a marketing tool and others have genuine conviction. It comes down to
distinguishing the difference between word and deed on a label.

Label designer Nugent (2006) proclaims, “before one opens a bottle, one looks at
the artistic label on it. This is more than a matter of reading a label to know the contents
of the bottle. The label invites attention; it is an intriguing work of art. It is an essential,
intimate part of the experience of enjoying wine. … The label also hints to the quality of
the wine” (pp. 5-7). Caldewey and House (2003) add, “the label is part symbol, part
memory, and part storytelling. The package personifies the wine. … The identity of a
wine is revealed or concealed primarily through its package. … With other luxury goods the package simply complements the product, but with wine, the label provides the only sensory clues about what lies within” (pp. 21-22).

As reported in the presentation of data, the label also provides impressive amounts of environmental communication. In fact, more than two-thirds (68.3%) of South Eastern Australian winemakers are achieving sustainable initiatives in labeling by utilizing EC to state ecological attributes. The content analysis conducted for this study supports claims presented in the review of literature stating that labels refer to the use of 100% recycled packaging materials, stewardship of the land, water treatment, and carbon emission mitigation. Within this overall population, there is a large percentage (71.2%) of organic wineries employing environmental communication, demonstrating that many vintners are using the marketing approach in a fair manner. That is to say, these organic wineries that are sustainable in practice are accurately sharing their efforts with the consuming public.

Although the above is a positive finding, meaningless environmental communication on labeling remains, which, due to discrepancy in use of similar terms, may harm the perception of organic wine. Regarding miscommunication about environmental claims, 65.4% of non-organic wineries are utilizing environmental communication as a marketing tool to convey a specifically green impression. Although these claims, such as conservational, recyclable and ecologically safe, may not be as precise as organic wineries’ information, it should be reminded that non-organic wineries may be sustainable in other ways than through organic certification. Halliday retorts, “I don’t believe in a measurable increase in quality wines based on a wine label or based on
organic viticulture anyhow. But green viticulture is growing month by month. There is a significant increase in awareness of green issues. How much is politically correct versus how much is legitimate conviction, I don’t know” (J. Halliday, personal communication, July 5, 2010).

The main focus of this study, environmental communication of sustainable practices on wine bottle labels, ultimately demonstrates that 68.3% of organic and non-organic South Eastern Australian wineries want to convince consumers that they are some shade of green. While this means that 31.7% of winemakers are not promoting environmental messages as part of their marketing strategy, the majority seems to find benefit in employing the technique. Thus demonstrating the relevance regarding sustainable practices, environmental communication, and green product marketing at South Eastern Australian wineries as illustrated in Figure 3.1, Flow Chart of Wineries’ Environmental Communication and Green Product Marketing. Applying these findings to the study’s analytical framework can offer insight into the relevance of identifying and separating legitimate EC users from those that are less genuine.

*Institutional Theory Framework.* As noted in the review of literature, environmental communication theorists seek to understand discourses concerning the quality of communication that leads to environmental understanding by crafting testable arguments. Since this study’s theoretical framework, Institutional Theory, predicts that industry survival is related to the extent that it is seen as legitimate by their respective publics (Beverland & Luxton, 2005), environmental communication messages on wine bottle labels can have wide-ranging impact from micro interpersonal interactions to macro global frameworks. Investigating the flow of media messages, such as those
communicated from producer to consumer via wine bottle labels, Institutional Theory argues that social reality is a human construction, which is created through interaction. Institutionalism, recognized as the process by which actions are repeated and given similar meaning, is a core process in the creation and perpetuation of social understandings and institutionally acceptable norms (Berger & Luckmann, 1967; Scott, 2008).

Presently, Green Product Advertisers and Non-Environmental Image Enhancers (35.6% and 17.3% of the study’s overall population, respectively) are employing accurate marketing messages in the promotion of their products. If, however, Environmental Image Enhancers (32.7% of the study’s overall population) continue to adopt illegitimate environmental communication strategies to target green consumers, and Non-Green Product Advertisers (14.4% of the study’s overall population) continue to eschew mention of ecological attributes on their wine bottle labels, it may lead to misinformed notions of factual environmental stewardship. This institutionalized construction of social reality can have long-lasting consequences, creating and perpetuating societal misunderstandings and institutionally unacceptable norms.

Environmental communication does not equal organic, which most consumers may not immediately realize. As represented in the data, nearly the same proportion of non-organic wineries (65.4%) is using environmental communication as a means of product advertising as organic wineries (71.2%). To make matters more confusing, more than one-quarter of the organic population in this study (28.8%) does not even boast their environmentally friendly practices, while 65.4% of non-organic wineries make seemingly inappropriate claims. These findings are evidence of decoupling, presenting a façade to
give the impression of conformation to institutionally acceptable norms while engaging in practices that contradict the external image. As mentioned by Halliday (2010), perhaps the organic wineries are avoiding mention of their organic winemaking because they want to save the crop in bad harvest years by using non-organic sprays if necessary. Further, maybe the non-organic wineries recognize that environmental communication and green product marketing, although not part of their conviction, will aid their success in an increasingly competitive market. Regardless of explanation, if this split persists from espoused philosophy reported on wine bottle labels and actual practices of a winery, the social lens through which individuals and groups interpret environmental initiatives may continue to perplex consumers.

Specifically for the Australian industry, the employment of environmental communication marketing by non-organic wineries may dilute the efforts of organic vintners that are truly committed to sustainable procedures and production of quality products for consumers. Moreover, the neglect on behalf of organic wineries to mention their environmental attributes may conceal important information to support the formation of social understanding of green practices. This incongruent balance highlights the significance of this study’s Institutional Theory-based comparison between environmental communication marketing approaches of organic and non-organic wineries in the South Eastern Australian wine zone, underscoring the importance of accurate environmental messaging on wine bottle labels.

Mixed environmental messages through the use of EC on wine bottle labels will only serve to further confuse the public regarding sustainable implementation. It has already been determined that the consuming public is perplexed by the new barrage of
green terms related to the environment (Zucca, 2008). Making false claims in regards to conservational procedures, or none at all when actually used, will further erode societal understanding of genuine ecological practice. Moreover, if this sort of interaction is repeated, Institutional Theory states that the meaning of environmental constructs will be distorted, serving only to belittle the efforts of authentic organic producers.

**Organic and Non-Organic Wineries and Greenwashing.** As more wineries emphasize and communicate their green practices on wine bottle labels the confluence of accurate environmental communication utilizing the lens of Institutional Theory becomes especially pertinent. For an industry whose profits reach $25 billion per year in the United States (Colman, 2008) and over AUD$3.5 billion annually in Australia (Wine Australia, 2009), Thach and Matz (2004) predict, “more wineries will include information on their labels regarding sustainable and organic farming practices, which means it could be a marketing hook when promoting individual brands” (p. 210). As Halliday states, “I see no downside to any green practices” (J. Halliday, Personal Communication, July 5, 2010). Based on the results of the current study, almost three-quarters (71.2%) of organic wineries and nearly two-thirds (65.4%) of non-organic wineries located in the South Eastern Australian wine industry promote marketing of green practices. Perhaps, like Mr. Halliday’s estimation, these non-organic wineries see no downside to the marketing of green practices although this approach carries with it the potential to negatively affect both the environment and the consumer.

It is important to note, however, that 34.6% of non-organic wineries make no ecological claims and no use of environmental communication on their wine bottle label. Additionally, not one case (0.0%) of greenwashing, intentionally overstating
environmental sensitivity and accomplishments as a form of disseminating disinformation, was uncovered in this research of marketing on wine bottle labels in South Eastern Australia. This evidence supports the notion that wineries are demonstrating ethical practices toward product promotion and presents an optimistic sign that Australian wine producers are regarding consumers as an environmentally aware, ecologically astute people.

As demonstrated by the findings, winemakers utilize sustainable messaging as a marketing tool, from the promotion of recycling to claims of ecologically friendly procedures. However, although the attempt to present an environmentally responsible public image to impress potential customers and sell more product is certainly present in the Australian industry, wineries do not seem to be pushing the concept too far. As recognized in the review of literature, there are few legal restrictions applied to the international promotion of environmental claims on wine bottle labels, leaving consumers confused (Organic Federation of Australia, 2010; Robinson, 2006; Saunders, 2004; Wine Australia, 2009). In fact, even with the twenty-year presence of the Label Integrity Program’s seven requirements (i.e., volume statement, number of standard drinks, named blends, alcohol content, allergens, company’s name and address, and country of origin), there is no domestically monitored system for the regulation of labeling organic wine in Australia such as that seen in the United States (see Figure 2.1, Organic Wine Labeling in the United States and What it Means), which makes the restraint toward the practice of greenwashing unclear.

Perhaps the self-regulation of greenwashing on behalf of South Eastern Australian vintners is a preservation tactic. After all, the wine industry is an agriculturally based
business. Sustainability of the land, protection from pesticides and chemicals, and promotion of organic soils and grapes are all beneficial and anticipated behaviors for the future. “Improved research outcomes, increased viticultural investment, new education outreach, and – perhaps most importantly – a recognized marketing message that can communicate a credible premium, must now be viewed as immediate priorities” (Australian Wine and Brandy Corporation, 2009b, p. 18). Thus, the prospect of accurate and honest communication regarding environmental practices carries with it the promise to increase sensitivity and restore a connection to the natural environment through the use of language, making the wine industry an example for other industries of agriculture on the global level.

**Limitations**

Kinsella (2007) notes that environmental communication scholars “are situated in the environment, which enables and constrains our projects” (p. 197). Due to the researcher’s ability to travel and remain in Australia for three months and collect the pertinent data, limitations of this research were severely assuaged. However, two main limitations of this study’s specific approach to research and data collection persist. First, although there were three criteria in the methodology, the vintage year could present an analysis obstacle (i.e., if one Shiraz from 2002 was compared with another from 2008, much could have been altered in the environmental communication via wine bottle labels in those years). Second, data acquisition from boutique wineries presented an issue (i.e., difficulties procuring organic bottles of wine included high mailing costs, allowance for only full case orders, and the product being sold out).
Additionally, as this study analyzed static data from wineries (i.e., wine bottle labels), it did not provide for analysis from the consumers’ perspective. Consequently, the transaction model of communication was not fully explored, which explains that meaning is determined by two or more parties responding to their environment and each other. Whereas content analysis was conducted as the sole methodology to accomplish the goals for this study, triangulation of the data through interviews and focus groups would have provided a more holistic research approach. The triangulation method may have offered insight into multiple perspectives from winemakers, label designers, and consumers.

**Recommendations for Future Research**

Four main areas of future research are recommended, including: Australia and Abroad, Biodynamics, Consumer Concern, and Field of Environmental Communication.

*Australia and Abroad.* Future research should investigate if Australian wine industry initiatives to remain relevant and compelling to consumers like “Brand Champions” (concentrating on the guarantee of quality, accessibility, affordability, and enjoyment), “Regional Heroes” (promoting popular, well-known brands that have blazed a trail for the country’s profile to continue mainstream presence), “Landmark Australia” (reflecting the fine wine dimension), and, especially relevant to this study, “Generation Next” (reaching out to modern consumers with a focus on social responsibility and health for oneself and the environment) are helping to establish global distinction and create a niche for Australian wines (Australian Wine and Brandy Corporation, 2009b). Moreover, further exploration might question if sustainable and biodynamic talk is still emerging
within the Australian industry through the establishment of new associations such as the “Sustainable Wine Partnership” developing in the Cowra wine region of New South Wales.

Sommers (2008) professes, “a sustainable future for Australian wineries lies in a more informed understanding of environmental issues. … The confronting reality for Australia is that the future will certainly see a change to the scale and scope of existing systems” (p. 196). Therefore, further analysis of this study’s original data from South Eastern Australia could include the reporting of frequencies within each variable to determine the strength of each independent item. For example, the percentage of organic wineries using the recycle logo on their wine bottle label might be compared to that of non-organic wineries. Additionally, while this research focused on the organic industry specific to one zone, exploration of Western Australia should be initiated as the area has been found to contain many wineries on the cutting edge of sustainable practices such as Cullen Wines in Margaret River. Furthermore, it remains to be determined if this study’s findings are uniquely Australian or if they can be applied to the wider international wine industry. Thus, research on environmental communication and green product marketing of organic and non-organic wine bottle labels in other wine regions should be conducted, especially in locations that share similar qualities to the Australian industry such as California, Argentina, and New Zealand (Poncini, 2007; Skinner, 2008; Steiman, 2010; Stein, 2007).

**Biodynamics.** As previously discussed, biodynamics is the most advanced and holistic form of organic agriculture, in which the farm itself is viewed as a living organism. It is distinguished from organic and sustainable farming by its ability to
revitalize and individualize a property. Biodynamic agriculture is spreading fast in the realm of viticulture because when properly applied the practice has a powerful effect on the quality and taste of wine (McInerney, 2010). “Biodynamics is the first type of agriculture, at least for several centuries, to give back to cultivators the possibility of affecting plant behavior on a plane other than the physical – which only allows it limited potential for diversity” (Joly, 2007, pp. 74-75).

According to Joly (2007) the international wine industry has suffered three great dramas, which are weed killers and herbicides, artificial growth agents and chemical fertilizers, and synthetic products. “The quick summary of biodynamic viticulture has the sole aim of showing wine lovers that it is not some superstitious sorcery based on an illusory view of the world, not a wily communication ploy, but rather a reality … this is really the only way of offering consumers a healthy product” (p. 103). Biodynamics should be explored further to investigate Joly’s assessment that “if such artificial taste enhancement remains legally acceptable, at least it should be noted on the label so as to give consumers an opportunity to know whether or not what they are buying is an authentic taste of terroir” (p. 104).

Consumer Concern. “Winery is now looking to pay more attention directly to the consumer than they did in the past” (Berenson, 2004, p. 21). In Australia, as around the world, “consumers are looking to buy wines that meet modern standards for environmental stewardship” (Winemakers’ Federation of Australia, 2009b, para. 1). The consuming public is concerned about air, water, and soil pollution, global warming, wildlife, tree and plant protection, and many other ecological matters. Because of this, consumers are tending to purchase and consume ecologically safer products and desire
assurance that the environment was not harmed from any farming, harvesting, or production practices. They are even concerned about the effect that recycling of waste products, use of pesticides, and packaging that is biodegradable has upon their own wellbeing. “Recently consumers have actually boycotted products they perceive as not being environmentally friendly. Some wine businesses are being very proactive in pursuing sustainable wine-growing practices. However, there is ample opportunity for others to expand on this theme and for the whole industry to communicate their efforts better” (Thach & Matz, 2004, p. 206).

Society, through the role of consumers, is demanding that governments be more proactive in protecting the environment, which has led to increased regulations. “The ability of the [wine] industry to maintain and justify its ‘clean and green’ image is vitally important. Customers are demanding environmental performance information and the Australian wine industry must meet these demands and present its credentials. … More consumers now include environmental criteria in product selection” (South Australian Wine and Brandy Industry Association, 2002, p. 5). In the long run, inaccurate environmental marketing will not only affect the health of consumers, but it will also harm the natural environment. “This decline will ultimately hurt all firms, because as the natural environment declines, resources normally taken for granted will become more scarce, limiting marketers’ ability to satisfy the long term needs of all consumers” (Polonsky et al., 1998, p. 290). As a result, deeper investigation into the concerns of consumers should be initiated.

Field of Environmental Communication. As Cramer and Foss (2009) recognize, “language has long been regarded as somewhat magical in the sense that it can compel a
particular effect on the recipient” (p. 310). This understanding has resulted in “a unique vantage-point for environmental communication scholars which allows them to clearly claim their distinctive contribution in richer, more robust explanations of the communication practices that constitute, sustain, and transform environmental practices” (Schwarze, 2007, p. 92). Importantly, “some environmental communication scholars theorize that such alternative ways of communicating about nature may help human society overcome or subvert destructive culturally dominant ways of relating with nature” (Milstein, 2009, p. 347).

Carbaugh (2007) understands that “investigating the terrain of environmental discourses, that is, the communication of environmental issues, entities, and integrative systems, necessitates careful thinking, action based in what we know about the diversity of parts and processes, through a language that can keep those issues, entities, and systems in view” (p. 65). That is why environmental communication and green product marketing studies such as that performed in this research concentrating on the South Eastern Australian wine zone should be expanded to investigate other products, markets, and industries. According to Peterson, Peterson, and Peterson (2007), “Topically, EC scholars are well positioned to fulfill our responsibility to community sustainability by repeatedly increasing the permeability of its boundaries” (p. 77). This responsibility can certainly be accomplished in numerous ways, including the aforementioned four areas of recommended future research.
Conclusion

Whether organic or non-organic, the majority (68.3%) of wineries in the South Eastern Australian wine zone are employing environmental communication messages on wine bottle labels as a method of green product marketing. From descriptions of vineyard land (e.g., non-organic winery Wynns’ claim “the thin layer of rich, red terra rossa topsoil overlying porous limestone provides ideal drainage conditions for vines”) to the elimination of harmful growth agents (e.g., organically certified Pig in the House’s statement “our ultimate desire is to live in a chemical free, sustainable environment”), information about sustainable practices is being conveyed in myriad ways through the use of language, graphics, and colors. In fact, even without organic certification, nearly as many non-organic wine producers (65.4%) are using the EC approach to market their product as their organic counterparts (71.2%). This critical finding demonstrates the relevance of the current research investigating environmental communication in the Australian wine industry.

Robinson (2006) surmises that in the South Eastern wine zone of Australia “the next 50 years will bring further refinement, a continuation of the trend towards quality, and a decrease in the use of chemicals in all aspects of grape growing and winemaking” (p. 44). An Australian report recently released called the Wine Restructuring Action Agenda suggests that the industry is suffering through its toughest period in two decades, which is devaluing the Australian brand and undermining profitability (Stelzer, 2010). This is causing concern in some South Eastern Australian winemakers, leading them to prominently consider the possibility of building a more sustainable future, especially as it pertains to water reduction, waste recycling, and organic agriculture. It is important to
question if growth in the organic and biodynamic movements is a response to the decline
of international interest in the Australian wine industry (i.e., economic concern), a
response to the necessity to go green (i.e., environmental concern), or if it is a mixture of
the two.

As the attention of world leaders has become more focused on environmental
issues, regulations encouraging green growth in the wine industry are likewise increasing.
“For wineries in particular, the two big categories are reducing water use and improving
energy efficiency and atmospheric emissions – both because wineries can save the largest
amount of money in these areas and because that’s often where the greatest
environmental benefits are seen” (Nigro, 2010, p. 64). Additionally, vintners are finding
that companies, organizations, and consumers alike are leaning toward supporting green
wineries.

The world over, people “at least acknowledge that environmental degradation is
 occurring … reaching crisis proportions, yet we seem to choose to live our everyday lives
in fundamentally environmentally unsustainable ways,” (Bryant, 2007, p. 56). Related to
agriculture and the wine industry, Kinsella (2007) claims, “to care about the world is to
find it intrinsically interesting, and also relevant to our interests. To care for the world
effectively we must apprehend it in its own terms, not only our own” (p. 198). Directly
responding to that sentiment, Schwarze (2007) asks: “Is it legitimate then to criticize
communication practices in light of their ecological consequences … where the
environmental ends determine judgment of the communicative means” (pp. 89-90)?
Based on this original research, which shows that the majority (65.4%) of non-organic
South Eastern Australian wine producers is utilizing environmental communication in the
marketing of their product, the answer to that question is most definitely affirmative. Although this study exposed no current evidence of greenwashing in the Australian wine industry, the temptation to push environmental communication boundaries should continue to be controlled and monitored before instigation of the tactic can cause environmental consequence.

“Environmental communication influences how individuals, groups and cultures see, value, and ultimately act in the world” (Depoe, 2010, para. 2). Peterson, Peterson, and Peterson (2007) write, “environmental communication becomes a system of practices aimed at creating a more inclusive community. This entails generating and debating multiple legitimate answers to the question of how to achieve a just and healthy earth” (p. 83). It can be argued that the purpose of environmental communication is not “merely the perfection of a technical process of communication,” but that it is also the furtherance of community “competence as a means for accomplishing a more environmentally sustainable society” (Cox, 2007, pp. 14-15). This could be seen as the larger picture and the main purpose of environmental communication: to communicate a process that emphasizes healthy human relationships with the environment while influencing and, subsequently, enriching one another. Perhaps this relationship can be realized through the study of wine. After all, “there is divine wisdom – a heady mix of science and art – in wine itself, as the Latin saying in vino veritas tells us” (Nugent, 2006, p. 4). Indeed, in wine, and in the humbling effort of this dissertation, there is truth.

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1. To proffer a more in-depth picture of how many grapes Australia’s 400,000 acres is producing, “A mature grape vine will produce approximately 10 to 12 pounds of grapes (22-26 kilograms). This translates into five bottles of wine at 750 milliliters each, or 1 gallon (3.7 liters). Another way to view this is
approximately 589.5 grapes are needed to produce one bottle of wine. This varies, however, because different grape varietals have different sizes of grapes” (Thach & Matz, 2004, p. 38).

2. Not listed as one of the six national organizations, but important to the scope of this project is “The Cooperative Research Centre for Viticulture (CRCV), which is Australia’s viticultural research and development organization. CRCV, established in 1992, is an Australia-wide joint venture of 12 core organizations and nine supporting organizations. The CRCV has three research programs, including one for sustainable vineyard systems, an education program, and a Viticare program, which delivers information and research outcomes to the industry. The sustainable vineyard systems research program addresses: water use efficiency, diseases and pests, an integrated crop management approach to grape production, grape berry development, biodiversity and Environmental Management Systems (EMS). … The Australian EMS for Winegrapes has seven sections: water use management, chemical and pesticide management, soil and fertilizer management, equipment, vehicle, and machinery management, waste management, vineyard establishment, and biodiversity. … In August 2001, the government announced a $4.5 million grant to the Australian wine industry to develop a National Wine Industry Research Cluster to support the wine export industry. Among other things, the facility will seek to research and identify sustainable viticulture methodology to further reinforce Australia’s international leadership in wine production” (Thach & Matz, 2004, p. 200).

3. [yellow tail] epitomizes this rise in labeling innovation. “In its first year, 2001, it sold an already large quantity, 250,000 cases [to the U.S.]; in 2005, it sold 8.6 million cases. Total imports of French wine to the U.S. in 2005 were 10.5 million cases. The [yellow tail] brand was competitive with the entire output of France. … American consumers found [yellow tail] easy to understand, with its English-language name, the readily recognizable wallaby on the label, and the name written in lowercase and placed in brackets, making it look informal and vaguely techie” (Colman, 2008, pp. 103-105).

4. Basic background information is included on biodynamic wineries in the Review of Literature. According to the Bio-Dynamic Agriculture Association of Australia (BDAAA), the total population of biodynamically certified wineries in South Eastern Australia is three – Avonmore Estate Winery, Krinklewood Vineyard, and Save Our Soil Estate Winery. Since the number of biodynamic wineries identified in this wine region is limited, the use of this specific population will not be included in this analysis.

5. The researcher was in the field for a total of 92 days from 18 May to 19 August 2010, purposely targeting the winter season in Australia as the time to gather data so as not to interrupt the busier time of year for wine production. The data were personally collected by traveling to wineries, larger wine stores, and boutique cellar doors throughout each of the regions within the South Eastern Australian wine zone, New South Wales (20-31 May, 20-26 June), Tasmania (2-5 June), Queensland (17-19 June), Victoria (1-6 July), and South Australia (12-24 July). Once all the data were collected, they were managed and stored in categorically (by location) and temporally (by date) organized folders. This strategic and ordered operation prepared the data for both qualitative and quantitative analysis in a systematic manner as demonstrated in the presentation of data.
REFERENCES


RESOURCES


Map of Australian wine zones with depiction of various regions used for labeling the source of Australian wine (Copyright 2004, Australian Wine & Brandy Corporation). Everything below the diagonal line, including Tasmania, is considered part of South Eastern Australia.
APPENDIX B
Map of South Eastern Australian Wine Zone

Map of South Eastern Australian wine zone, which encompasses the premium winegrowing regions and sub-regions found in Queensland, New South Wales, Victoria, South Australia, and the island state of Tasmania (Copyright 2008, Alice White).
APPENDIX C
Organically Certified Australian Wine Producers

Australia Certified Organic (91)

1. Nellinda Groves
2. Organic One Wines Pty Ltd
3. Broombee Orchard & Vineyard
4. Statham & Sons / Rosnay Also T/A Rosnay
5. Organic One Wines Pty Ltd (Double Listing)
6. Munchenberg Brett J
7. Wild Fox Wines
8. Wirra Wirra Vineyards
9. Grancari Estate Wines
10. Windowrie Wines
11. YMIR Estate
12. Jacob Park Pty Ltd
13. Cellarmaster Wines Pty Ltd
14. Martins Hill Vineyard
15. Botobolar Vineyard Pty Ltd
16. Temple Bruer Wines Pty Ltd
17. Tanunda Creek Vineyards / Loan Wines
18. Wilkie Estate Wines
19. Landos Pty Ltd
20. Kalleske Enterprises Pty Ltd
21. Antonio Palena
22. Cullen Wines Australia Pty Ltd
23. Edgehill Vineyards
24. AA & PD Barich
25. Robinvale Organic Wines
26. Prince Albert Vineyard
27. Carlei / Green Vineyards
28. Pennyweight Winery
29. CJ & DJ Brown
30. Gurra Downs
31. Australian Harvest / Nutritional Sciences
32. FR & IJ Retief
33. Pig in the House
34. Best Bottlers Pty Ltd
35. BH & KM Robinson / Moyston Hills
36. Andrew Peace Wines
37. Wright Robertson Pty Ltd
38. Cellarmaster Group T/A Vinpac
39. Integrated Agriculture Developments
40. Kalleske Wines Pty Ltd (Double Listing)
41. Pennyweight Winery (Double Listing)
42. Macquariedale Wines
43. Scorpion Enterprises Pty Ltd
44. Toms Waterhole Wines
45. Carlei / Green Vineyards (Double Listing)
46. Eders Outlook
47. Pettavel Pty Ltd
48. Rees Miller Estate
49. Gardners Ground T/A PH & JA Gardner
50. Lowe Family Wines Co
51. Nature’s Harvest
52. Cullen Mangan Vineyards
53. Harris Organic Wines
54. The Right Food Group
55. Landos Pty Ltd (Double Listing)
56. 919 Wines
57. Portavin Melbourne
58. Warreg Wines
59. Salena Estate Wines
60. Angoves Pty Ltd
61. Madrez Wine Services Pty Ltd
62. Kosciusko Wines
63. Welshmans Reef Vineyard
64. Vintage Bottling
65. TW Klingbiel Family Trust
66. Lowe Family Wines Co (Double Listing)
67. Frankland Estate Wines Pty Ltd
68. Citrus Cellars Trust Pty Ltd
69. Kreglinger Wine Estates
70. Somerville Vineyard
71. Welshmans Reef Vineyard (Double Listing)
72. Nellinda Groves (Double Listing)
73. Western Range Wines Ltd
74. Salena Estate Wines (Double Listing)
75. Coffs Organics
76. Capital & Agriculture Management T/As Percydale Es
77. Cape Jaffa Wines
78. Recteck Pty Ltd
79. Karina Vineyard
80. Rocland Estate Wines
81. Wallington
82. Pieter van Gent Winery and Vineyard
83. Nanya Vineyard
84. Integrated Agricultural Developments (Double Listing)
85. Barossa Bottling Services Pty Ltd
86. Tarac Technologies Pty Ltd
87. Premium Estate Bottlers Pty Ltd
88. Great Stone Winery
89. Ken Wines Pty Ltd
90. Ken Wines Pty Ltd (Double Listing)
91. Hart of the Barossa

Green Pages Australia (28)

1. Kalleske Wines
2. Cullen Wines
3. Rosnay Organic Wines
4. Wilkie Estate
5. Oranje Tractor Wines
6. Tamburlaine Winery
7. Krinklewood Biodynamic Vineyard
8. Walden Woods Farm
9. Robinvale Organic Wines
10. Thistle Hill Vineyard & Winery
11. Pure Vision Organic Wines
12. Farm Fresh Organics
13. Pioneers Run
14. Castagna
15. Settlers Ridge Organic Wines
16. Stonehurst Cedar Creek Wine
17. Banrock Station Wine and Wetland Centre
18. Elderton Wines
19. Gardners Ground
20. Loan Wines
21. Gilead Estate Biodynamic Wines
22. Louis Laval Organic Wines
23. Macquarie Valley Food and Wine Incorporated
24. Mountford Wines & Tangletoe Cider
25. Palm Beach Wine Co.
26. Drew Wines
27. The Lark Hill Wine Co.
28. Battle of Bosworth

National Association for Sustainable Agriculture Australia (37)

1. Anna’s Vineyard
2. Bell Organic Produce
3. BM & SK Armstrong
4. Burra Creek Wines Pty Ltd
5. Capel Vale Bottlers Pty Ltd
6. Captain’s Creek Farm & Organic Wines
7. Cobaw Ridge Winery
8. DM, SR Cowham & AL McPherson
9. Eden Springs Herbs
10. Erudgere Pty Ltd
11. GR Knight & JE Martens
12. H & S Toutikan
13. Hotham Ridge Winery
14. Jansz Estate Vineyard
15. Jean Pauls Vineyard
16. Kangaroo Hills Organic Farm
17. Kenton Hill Vineyard
18. Kilchurn Wines
19. KJ & CL Legg / Kevin & Cindy’s Organics
20. Maroudas Olives
21. Merops Wines
22. Mountford Winery / Vineyard
23. Mt Franklin Organics
24. N.S.P. Wines Ararat
25. Ngeringa Vineyards Pty Ltd
26. Paul Farrimond
27. Penfolds Clare Estate
28. Prowine
29. Random Valley Organic Wines
30. Settlers Ridge Organic Wines
31. The Food Forest
32. The Old Chaff Mill
33. VOGO-Organics
34. Wildstone Wines
35. Willunga Hills Organic
36. Wundke, Michael Leonard
37. Yalumba Wine Company

TOTAL = 156 Organically Certified Entities

Sources:


APPENDIX D
South Eastern Australian Wineries by State

Queensland = 106
New South Wales = 400
Victoria = 500
South Australia = 450
Tasmania = 89

Total = approximately 1,545 wineries

Source:
<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Product Name and Logos</td>
<td>Font and visual representation of name, certifying seal</td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Image of winery, picture of Earth</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>Certified, approved, recommended by, tested</td>
</tr>
<tr>
<td>(4) Scientific Environmental</td>
<td>Biodegradable, 100% organic grapes, 35% recycled post consumer waste plastic is used for the packaging of this product</td>
</tr>
<tr>
<td>Attributes</td>
<td></td>
</tr>
<tr>
<td>(5) General Environmental</td>
<td>No sulfites added, eco-safe, “recycled” is stated without any specificity as to how or what</td>
</tr>
<tr>
<td>Claims</td>
<td></td>
</tr>
<tr>
<td>(6) Meaningless Environmental</td>
<td>Promotes a healthy planet, save our world, please recycle</td>
</tr>
<tr>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>The taste of a sunny day, the sun grows healthy grapes</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>Referring to a special occasion, family-run business, pop of cork</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Etched into bottle, no label, gold leafing, painting, green, burnt orange, earthy tones</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>Actual word count</td>
</tr>
</tbody>
</table>
### APPENDIX F
Categories of Green Marketing

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Non-Green Product Advertisers</td>
<td>Those who truly practice environmental compliance, but their advertising does not reflect this action. Organic wineries with no environmental communication fall into this category.</td>
</tr>
<tr>
<td>(2) Green Product Advertisers</td>
<td>Those who truly practice environmental compliance, and their advertising reflects this action. Organic wineries with environmental communication fall into this category.</td>
</tr>
<tr>
<td>(3) Non-Environmental Image Enhancers</td>
<td>Those who do not advertise an environmentally friendly image, and do not necessarily practice ecological procedures. Non-organic wineries with no environmental communication fall into this category.</td>
</tr>
<tr>
<td>(4) Environmental Image Enhancers</td>
<td>Those who advertise an environmentally friendly image, but do not always practice said ecological procedures. Non-organic wineries with environmental communication fall into this category.</td>
</tr>
</tbody>
</table>
Appendix G
Filtered Selection of Organic Wineries by Certification

Australia Certified Organic (36)

1. 919 Wines
2. Andrew Peace Wines
3. Angoves Pty Ltd / Nanya Vineyard
4. BH & KM Robinson / Moyston Hills
5. Botobolar Vineyard Pty Ltd
6. Broombee Orchard & Vineyard
7. Cape Jaffa Wines
8. Carlei / Green Vineyards
9. Edgehill Vineyards
10. Grancari Estate Wines
11. Great Stone Winery
12. Hart of the Barossa
13. Kalleske Enterprises Pty Ltd
14. Kosciusko Wines
15. Kreglinger Wine Estates
16. Lowe Family Wines Co
17. Macquariedale Wines
18. Martins Hill Vineyard
19. Nature’s Harvest
20. Organic One Wines Pty Ltd
21. Pennyweight Winery
22. Pettavel Pty Ltd
23. Pieter van Gent Winery and Vineyard
24. Pig in the House
25. Robinvale Organic Wines
26. Rocland Estate Wines
27. Statham & Sons / Rosnay
28. Temple Bruer Wines Pty Ltd
29. Toms Waterhole Wines
30. Wallington
31. Warrego Wines
32. Welshmans Reef Vineyard
33. Wild Fox Wines
34. Windowrie Wines
35. Wirra Wirra Vineyards
36. Wright Robertson Pty Ltd
Green Pages Australia (8)

1. Drew Wines (ACO)
2. Elderton Wines (ACO)
3. Gardners Ground (ACO)
4. Lark Hill Wine Co (NASAA)
5. Loan Wines (ACO)
6. Pioneers Run (ACO)
7. Pure Vision Organic Wines (ACO)
8. Tamburlaine Winery (ACO)

National Association for Sustainable Agriculture Australia (8)

1. Anna’s Vineyard
2. Burra Creek Wines Pty Ltd
3. Cobaw Ridge Winery
4. Erudgere Pty Ltd
5. Food Forest
6. Old Chaff Mill
7. Penfolds Clare Estate
8. Yalumba Wine Company

TOTAL = 52 Filtered Organic Wineries
APPENDIX H
Filtered Selection of Non-Organic Wineries and Region

1. Australian Vineyard Co – Rutherglen, VIC
2. Barwang – Hilltops, NSW
3. Bowler’s Run – Mornington Peninsula, VIC
4. Casella Wines – Cowra, NSW
5. Climbing – Orange/Cowra, NSW
6. Clonakilla – Hilltops, NSW
7. Cock + Bull – McLaren Vale, SA
8. Cookoothama – Riverina, NSW
9. Cowra Estate – Cowra, NSW
10. Cruickshank – Hunter Valley, NSW
11. Dandelion – Barossa Valley, SA
12. Deakin Estate – Grampians, VIC
13. Firestick – Mudgee, NSW
15. Grant Burge – Barossa Valley, SA
16. Hardys – McLaren Vale, SA
17. Haselgrove – McLaren Vale, SA
18. Idiot / Koomooloo – Orange/Cowra, NSW
19. Jacob’s Creek – Barossa Valley/Adelaide Hills, SA
20. Jamiesons Run – Mount Benson, SA
21. Jaraman – Clare Valley/McClaren Vale, SA
22. Jinda-Lee – Murray Darling, VIC
23. Lambloch – Mudgee, NSW
24. Lindemans – Murray Darling, VIC
25. Logan – Mudgee, NSW
26. Long Flat Wines – Clare Valley/Barossa Valley, SA
27. Loomwine – McLaren Vale, SA
28. McWilliam’s – Cowra, NSW
29. Millstone – Mudgee, NSW
30. Mount Pleasant – Mudgee, NSW
31. O’Leary Walker – Clare Valley/McClaren Vale, SA
32. Penny’s Hill – McLaren Vale, SA
33. Penola Estate – Coonawarra, SA
34. Pensilva Estate – McLaren Vale, SA
35. Pepper Tree – Mudgee, NSW
36. Prince Hill – Mudgee/Cowra, NSW
37. Rosemount – Eden Valley, SA
38. Saltram Vineyard – Barossa Valley, SA
39. Scarborough – Hunter Valley, NSW
40. Sirromet Wines – Granite Belt, QLD
41. St. Hallett – Barossa Valley, SA
42. Stonehaven – Padthaway, SA
43. Taylors – Riverland, SA
44. Trails End – Geelong, VIC
45. Tyrell’s Wines – Heathcote, VIC
46. Velo Cellar Door Winery – Tasmania, TAS
47. Vino Gusto – Mornington Peninsula, VIC
48. Whispers – Macedon Ranges, VIC
49. Wolf Blass – Adelaide Hills, SA
50. Wyndham Estate – Hunter Valley, NSW
51. Wynns – Coonawarra, SA
52. Zilzie Wines – Swan Hill, VIC

TOTAL = 52 Filtered Non-Organic Wineries
APPENDIX I
Matching of Organic Winery with Non-Organic Winery

NEW SOUTH WALES (18)
1. Botobolar – 89 Botobolar Rd, Mudgee, 2850, Mudgee region (Lambloch)*
2. Broombee – 1056 Castlereagh Hwy, Mudgee, 2850, Mudgee region (Logan)
3. Erudgere – Hill End Rd, Mudgee, 2850, Mudgee region (Pepper Tree)
5. Kosciusko – Jingellic Rd, Tumbarumba, 2653, Hilltops region (Barwang)
6. Lark Hill – Bungendore Rd, Bungendore, 2621, Hilltops region (Clonakilla)
7. Lowe Family – Tinja Ln, Mudgee, 2850, Mudgee region (Firestick)
8. Macquariedale – 170 Sweetwater Rd Rothbury, 2335, Hunter Valley region (Scarborough)
9. Martins Hill – 1179 Castlereagh Hwy, Mudgee, 2850, Mudgee region (Millstone)
10. Organic One Wines – 1 Elliott Ln, Jerilderie, 2716, Riverina region (Cookothama)
11. Pieter van Gent – 141 Black Springs Rd, Mudgee, 2850, Mudgee region (Mt. Pleasant)
12. Pig in the House – Balcombe Rd, Billimari, 2804, Cowra region (Climbing)
14. Tamburlaine – 358 McDonalds Rd, Pokolbin, 2321, Hunter Valley (Cruickshank)
15. Toms Waterhole – 752 Longs Corner Rd, Canowindra, 2804, Cowra region (Cowra Estate)
16. Wallington – 82 Lawrences Rd, Canowindra, 2804, Cowra region (McWilliam’s)
17. Windowrie – Windowrie Rd, Canowindra, 2804, Cowra region (Casella Wines)
18. Wright Robertson – 8262 New England Hwy, Glencoe, 2365, Hunter Valley region (Wyndham Estate)

QUEENSLAND (1)
1. Warrego – 9 Seminary Rd, Marburg, 4306, Granite Belt region (Sirromet)

SOUTH AUSTRALIA (22)
1. 919 Wines – Hodges Rd, Berri, 5343, Adelaide Hills region (Jacob’s Creek)
2. Angoves / Nanya Vineyard – Bookmark Ave, Renmark, 5341, Riverland region (Taylors)
3. Anna’s Vineyard – PO Box 159, Port Lincoln, 5606, McLaren Vale region (Penny’s Hill)
4. Burra Creek – PO Box 160, Burra, 5417, Coonawarra region (Wynns)
5. Cape Jaffa – Limestone Coast Rd, Robe, 5275, Mount Benson region (Jamiesons Run)
6. Edgehill – PO Box 11, McLaren Vale, 5171, McLaren Vale region (Haselgrove)
7. Elderton – 3-5 Tanunda Rd, Nuriootpa, 5355, Barossa Valley region (St. Hallett)
8. Food Forrest – PO Box 859, Gawler, 5118, Coonawarra region (Penola Estate)
9. Grancari – PO Box 256, Morphett Vale, 5162, McLaren Vale region (Loomwine)
11. Hart of Barossa – Light Pass Rd, Vine Vale, 5352, Barossa Valley region (Grant Burge)
12. Kalleske – PO Box 650, Greenock, 5360, Barossa Valley region (Long Flat)
13. Kreglinger – Limestone Coast Rd, Mt. Benson, 5275, Padthaway region (Stonehaven)
14. Loan Wines – PO Box 106, Tanunda, 5352, Barossa Valley region (Dandelion)
15. Old Chaff Mill – PO Box 421, Tanunda, 5352, Eden Valley region (Rosemount)
16. Penfolds Clarence – Penfold Rd, Magill, 5072, Clare Valley region (Jaraman)
17. Pure Vision – Old Port Wakefield Rd, Virginia, 5120, McLaren Vale region (Gemtree)
18. Rocland Estate – PO Box 679, Nuriootpa, 5355, Adelaide Hills region (Wolf Blass)
20. Wild Fox – PO Box 343, Prospect, 5082, Clare Valley region (O’Leary Walker)
21. Wirra Wirra – PO Box 145, McLaren Vale, 5171, McLaren Vale region (Cock + Bull)
22. Yalumba – Eden Valley Rd, Angaston, 5353, Barossa Valley region (Saltram Vineyard)

TASMANIA (1)
1. Drew – 23 Merriworth Rd, Tea Tree, 7017, Tasmania region (Velo)

VICTORIA (10)
1. Andrew Peace – 4077 Murray Valley Hwy, Piangil, 3597, Murray Darling region (Lindemans)
2. BH & KM Robinson / Moyston Hills – 151 Banfield Rd, Moyston, 3377, Grampians region (Deakin Estate)
3. Carlei / Green Vineyards – 1 Alber Rd, Upper Beaconsfield, 3808, Heathcote region (Tyrell’s)
5. Nature’s Harvest – 522 Wellington Rd, Mulgrave, 3170, Mornington Peninsula region (Bowler’s Run)
6. Pennywright – Pennyweight Ln, Beechworth, 3747, Rutherglen region (Australian Vineyard)
7. Pettavel – 65 Pettavel Rd, Waurn Ponds, 3216, Geelong region (Trails End)
8. Pioneers Run – 800 Toorak Rd, Tooronga, 3146, Mornington Peninsula region (Vino Gusto)
9. Robinvale – Sea Lake Rd, Robinvale, 3549, Swan Hill region (Zilzie Wines)
10. Welshman’s Reef – Maldon-Newstead Rd, Welshmans Reef, 3462, Murray Darling region (Jinda-Lee)

* Parentheses signify name of matched non-organic winery
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<th>#</th>
<th>REGION</th>
<th>STATE</th>
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* All monetary units are expressed in Australian dollars (AUD$)
## APPENDIX K
### Content Analysis of Organic Wineries

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<th>Category*</th>
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<td><strong>#1 919 Wines – SA</strong></td>
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<td>(8) Appeal to Romanticism</td>
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<td>(9) Materials and Colors</td>
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<td>(10) Proportion of Text</td>
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Organic Winery with EC

| **#2 ROCLAND ESTATE – SA** | |
| (1) Product Name and Logos | Winery name all capital |
| (2) Pictures and Images | Vine |
| (3) Licensing Agreement | None |
| (4) Scientific Environmental Attributes | None |
| (5) General Environmental Claims | None |
(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
None

(9) Materials and Colors
No back label; White, black, gold

(10) Proportion of Text
5

Organic Winery with *no* EC

---

**#3 ELDERTON – SA**

(1) Product Name and Logos
Winery name in cursive; Carbon neutral logo; Barcode

(2) Pictures and Images
None

(3) Licensing Agreement
Carbon Neutral

(4) Scientific Environmental Attributes
Elderton wines is proud to be carbon neutral

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Our intention is to always make wines that show varietal definition, regional character, and of course a slice of our personality as well

(8) Appeal to Romanticism
Proudly made by the Ashmead family; The family purchased the existing estate in 1979, and first released wines in 1982; We are very proud of our estate vineyard, which has plantings going back to 1900, as well as our history of success in the Barossa
(9) Materials and Colors  Shiny/dull finish; White, magenta, black, gold

(10) Proportion of Text  92

Organic Winery with EC

#4 HART OF BAROSSA – SA

(1) Product Name and Logos  Winery name in capital; ACO bud (front and back)

(2) Pictures and Images  Family crest

(3) Licensing Agreement  ACO certified (front and back)

(4) Scientific Environmental Attributes  Organic in cursive and capital (front and back); Certified organic Shiraz

(5) General Environmental Claims  The Hart block is the oldest certified organic vineyard in the Barossa valley; Nurturing our organic vineyard, including a patch of 100 year old vines, is a family affair with much of the farming practices still performed by hand; Distinct terroir, organic viticulture, pure fruit, handcrafted wine

(6) Meaningless Environmental Language  Devotion to our wines and the environment is rewarded each vintage with distinctly intense fruit, the way nature intended

(7) Statement Spectrum  Hart family wines display the character and individualism behind our heritage. Bold (brave) and authentic (faithful)

(8) Appeal to Romanticism  Limited release (front and back); Brave and faithful is the Hart motto embodied by our first courageous ancestors who arrived in South Australia in 1845 with steadfast dreams of a fruitful life on the land

(9) Materials and Colors  Black, cream, white, yellow, red, gray

(10) Proportion of Text  272
Organic Winery *with* EC

**#5 KALLESKE – SA**

(1) **Product Name and Logos**

Winery name in cursive; ACO bud; Standard Drinks logo; Barcode

(2) **Pictures and Images**

Man picking grapes from vines with buckets surrounding him; Winemaker signature

(3) **Licensing Agreement**

ACO certified

(4) **Scientific Environmental Attributes**

None

(5) **General Environmental Claims**

Basket pressed; Made from a single vineyard

(6) **Meaningless Environmental Language**

None

(7) **Statement Spectrum**

Cuttings for these vines originate from a vineyard planted on the estate in the late 1800’s

(8) **Appeal to Romanticism**

Tended by fifth and sixth generation family members; A genuine family estate wine

(9) **Materials and Colors**

Torn look; White, red, gray, black

(10) **Proportion of Text**

122

Organic Winery *with* EC

**#6 LOAN – SA**

(1) **Product Name and Logos**

ACO bud

(2) **Pictures and Images**

Leaf hanging from branch

(3) **Licensing Agreement**

ACO certified

(4) **Scientific Environmental Attributes**

Our property is a Certified Organic Vineyard where vines are dry grown,
nurtured, and hand managed to allow the fruit to tell the story of each season

(5) General Environmental Claims None

(6) Meaningless Environmental Language None

(7) Statement Spectrum We are committed to producing wines which express our unique terroir and allow them to develop over time in proper underground cellar conditions

(8) Appeal to Romanticism Established by the first settlers in the area because of our rich alluvial soils along the creek, the original cottage and cellars built in 1842 are now used to age our wines

(9) Materials and Colors Light, earthy brown, green, beige, maroon

(10) Proportion of Text 92

Organic Winery with EC

#7 YALUMBA – SA

(1) Product Name and Logos Winery name all capital; NASAA logo; Enjoy Responsibly; Barcode

(2) Pictures and Images Vine

(3) Licensing Agreement NASAA certified

(4) Scientific Environmental Attributes Organic; Organic wine

(5) General Environmental Claims Organically grown grapes from vineyards certified for over ten years

(6) Meaningless Environmental Language None

(7) Statement Spectrum None
(8) Appeal to Romanticism
Family vineyards

(9) Materials and Colors
One long label; Earthy brown, earthy green, cream, olive green, black, light olive green

(10) Proportion of Text
78

Organic Winery with EC

#8 WELSHMAN’S REEF – VIC

(1) Product Name and Logos
ACO bud

(2) Pictures and Images
Big colorful heart

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
Organic wine of Australia

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Elegant, fine wine of Central Victoria

(8) Appeal to Romanticism
None

(9) Materials and Colors
No back label; Black, purple, white, green, red, pink, blue, orange, yellow

(10) Proportion of Text
28

Organic Winery with EC

#9 PENFOLDS – SA

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Winery name in cursive; Recycle logo; Enjoy Responsibly logo; Standard Drinks logo; Barcode

(2) Pictures and Images
Family crest
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</tr>
</thead>
<tbody>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>None</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>Please recycle</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>This wine pays homage through vision and determination</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>None</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Cream, red, silver</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>71</td>
</tr>
</tbody>
</table>

Organic Winery \textit{with EC}

\textbf{#10 WILD FOX – SA}

<table>
<thead>
<tr>
<th>(1) Product Name and Logos</th>
<th>Winery name all lowercase; ACO bud</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Pictures and Images</td>
<td>Leaf (front and back)</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>ACO certified</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>Certified Organic; Certified organic wine</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>Applying skills to organic production of the finest certified wines in Australia</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>Every attention to detail is maintained, honoring our ancestors, the environment and the natural production of wines</td>
</tr>
</tbody>
</table>
Premium wine; At the village of Angrelopo, meaning “wild fox”, on the historic Greek island of Chios, generations of our family honed their farming skills and cultivated the freshest produce under nature’s purest traditions.

Torn look; White, burnt orange, magenta, gray, black, brown

155

Organic Winery *with* EC

**#11 BURRA CREEK – SA**

Winery name all capital

Red bull

NASAA certified

Organically grown

None

None

A wine that can be appreciated in its youth and also cellared for years

None

White, black, red

75

Organic Winery *with* EC

**#12 FOOD FOREST – SA**
(1) Product Name and Logos Organically certified stamp

(2) Pictures and Images Man; Tree; Kangaroo; Goose

(3) Licensing Agreement NASAA certified

(4) Scientific Environmental Attributes Certified Organic by NASAA

(5) General Environmental Claims None

(6) Meaningless Environmental Language None

(7) Statement Spectrum None

(8) Appeal to Romanticism None

(9) Materials and Colors White and black shadows, green

(10) Proportion of Text 26

Organic Winery with EC

#13 GARDNER’S GROUND – NSW

(1) Product Name and Logos ACO bud

(2) Pictures and Images Bunch of grapes

(3) Licensing Agreement ACO certified

(4) Scientific Environmental Attributes Organic; No added preservatives

(5) General Environmental Claims None

(6) Meaningless Environmental Language None

(7) Statement Spectrum None

(8) Appeal to Romanticism None
(9) Materials and Colors | Maroon, white
---|---
(10) Proportion of Text | 39

Organic Winery *with EC*

**#14 PIG IN THE HOUSE – NSW**

<table>
<thead>
<tr>
<th>(1) Product Name and Logos</th>
<th>Winery name all capital; ACO bud; Barcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Pictures and Images</td>
<td>Half of pig behind open door frame; Gold medal</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>ACO certified</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>Certified organic wine; Chemical free</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>Organic farming practices produce wines unique to the region; Grown on our single vineyard</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>Our ultimate desire is to live in a chemical free, sustainable environment producing wine that reflects where we live and what we believe in</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>On the land was formerly a free range piggery. The free range included entry into the farmer’s house. The locals often ask “Is the pig still in the house?” Most of the time the answer is no.</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Cream, black, orangish-red, shiny gold</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>199</td>
</tr>
</tbody>
</table>

Organic Winery *with EC*

**#15 STATHAM & SONS / ROSNAY – NSW**
(1) Product Name and Logos
Winery name all capital; ACO bud

(2) Pictures and Images
Painting of cockatoo amongst flowers with mountains in background

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
Organically grown; Completing eighth season without artificial fertilizers or synthetic chemicals

(5) General Environmental Claims
Contains minimal added sulfites

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
The label painting is of a hilarious pet cockatoo who eventually found a mate and was never seen again

(9) Materials and Colors
Black, white, dark yellow, light yellow, purple, magenta, green, blue, brown

(10) Proportion of Text
140

Organic Winery with EC

#16 TOM’S WATERHOLE – NSW

(1) Product Name and Logos
Winery name all capital

(2) Pictures and Images
None

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
Organic

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None
Language

(7) Statement Spectrum None
(8) Appeal to Romanticism Winemaker’s selection
(9) Materials and Colors No back label; White, black
(10) Proportion of Text 36

Organic Winery with EC

#17 WALLINGTON – NSW

(1) Product Name and Logos Winery name in cursive
(2) Pictures and Images Sea shell design
(3) Licensing Agreement None
(4) Scientific Environmental Attributes None
(5) General Environmental Claims None
(6) Meaningless Environmental Language None
(7) Statement Spectrum None
(8) Appeal to Romanticism None
(9) Materials and Colors Maroon, white, gold
(10) Proportion of Text 28

Organic Winery with no EC

#18 WINDOWRIE – NSW

(1) Product Name and Logos Winery name all capital
(2) Pictures and Images None
(3) Licensing Agreement: None

(4) Scientific Environmental Attributes: None

(5) General Environmental Claims: Minimal intervention practice – no insecticides used - and this ensures that natural predators flourish; Grape varieties are planted according to which soil type irrigation method and canopy management are required for maximum quality and varietal fruit flavor.

(6) Meaningless Environmental Language: None

(7) Statement Spectrum: None

(8) Appeal to Romanticism: Family reserve

(9) Materials and Colors: Textured; Black, light purple, gold, white

(10) Proportion of Text: 55

Organic Winery with EC

#19 OLD CHAFF MILL – SA

(1) Product Name and Logos: Winery name all lowercase

(2) Pictures and Images: Elaborate vines

(3) Licensing Agreement: None

(4) Scientific Environmental Attributes: None

(5) General Environmental Claims: None

(6) Meaningless Environmental Language: None

(7) Statement Spectrum: None
(8) Appeal to Romanticism
None

(9) Materials and Colors
Platinum blue, silver, white

(10) Proportion of Text
8

Organic Winery with no EC

#20 PETTAVEL – VIC

(1) Product Name and Logos
Winery name all capital; Standard Drinks logo;
Barcode

(2) Pictures and Images
Compass indicating North

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Produced from grapes grown in our winery’s vineyard

(8) Appeal to Romanticism
The ship Evening Star docked at Port Phillip Harbor in February 1836 carrying Mr. Pettavel’s family and friends destined for the expanding vineyards of Geelong

(9) Materials and Colors
Purple, silver, gray, granite, black, white

(10) Proportion of Text
124

Organic Winery with no EC

#21 BH & KM ROBINSON / MOYSTON HILLS – VIC
(1) Product Name and Logos    Winery name all capital
(2) Pictures and Images    Image of two animals, wolf and sheep
(3) Licensing Agreement    None
(4) Scientific Environmental Attributes    None
(5) General Environmental Claims    None
(6) Meaningless Environmental Language    None
(7) Statement Spectrum    None
(8) Appeal to Romanticism    None
(9) Materials and Colors    No back label; Maroon, beige
(10) Proportion of Text    5

Organic Winery with no EC

#22 WARREGO – QLD

(1) Product Name and Logos    All lower case; Standard Drinks logo; Barcode
(2) Pictures and Images    Image of two tops of wine glasses (front and back)
(3) Licensing Agreement    None
(4) Scientific Environmental Attributes    None
(5) General Environmental Claims    The grapes for Brigalow Shiraz were grown in Ladysmith, NSW and Inglewood, QLD
(6) Meaningless Environmental Language    None
(7) Statement Spectrum
Brigalow is a species of silvery wattle that creates a beautiful mosaic of open forest and woodland and is remnant of the extensive subtropical rainforest that would have occupied the area millions of years ago

(8) Appeal to Romanticism
The local Brigalow trees provided mill timbers and many split well and easily. This enabled settlers to quickly put up huts to live in and fences to protect their crops

(9) Materials and Colors
Shiny gold, red, pink, yellow, black, white, silver

(10) Proportion of Text
110

Organic Winery with no EC

#23 CARLEI / GREEN VINEYARDS – VIC

(1) Product Name and Logos
Winery name written twice, once in cursive, once all capital (front label); ACO bud

(2) Pictures and Images
Map of Australia; Map of Victoria; Map of Heathcote region

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
Farmed organically since 2001; Descriptions of longitude, latitude, altitude; pH; Total acidity

(5) General Environmental Claims
Wines need to be grown naturally; Descriptions of aspect, soil, climate; Bottled without fining or filtration; Low sulfur wine; A pure and natural environment free of artificial elements and unnatural interferences

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Growing vines of a specific variety in a specific region, in a specific soil, in a
specific climate; Harvest date; Total production

(8) Appeal to Romanticism

Minimal intervention through “old world” tradition (experience) and “new world” technology (practicality); Like grape growing, winemaking is a natural process and will express terroir if left to its own elements. No doubt the personality of the winemaker will be imprinted in that wine and that’s terroir too!

(9) Materials and Colors

Black, white, light gray, dark gray, dull gold, turquoise

(10) Proportion of Text

219

Organic Winery

#24 KOSCIUSKO – NSW

(1) Product Name and Logos

Winery name all capital

(2) Pictures and Images

None

(3) Licensing Agreement

None

(4) Scientific Environmental Attributes

None

(5) General Environmental Claims

None

(6) Meaningless Environmental Language

None

(7) Statement Spectrum

None

(8) Appeal to Romanticism

None

(9) Materials and Colors

No back label; Black, dull gold, white, gray

(10) Proportion of Text

7

Organic Winery with no EC
#25 LARK HILL – NSW

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Product Name and Logos</td>
<td>Winery name all capital</td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Image of bird standing in tall grass; Bird feather design background</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>None</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>None</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>None</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>None</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>No back label; White, black, shiny gold</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>5</td>
</tr>
</tbody>
</table>

Organic Winery with no EC

#26 MACQUARIDALE – NSW

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Product Name and Logos</td>
<td>Winery name all capital; Barcode</td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Family crest; Certified Organic; Organically Grown</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>ACO certified</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>Organically grown; Organic wine; Fully certified by Australian Certified Organic (ACO)</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>Grapes were grown using approved practices</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>The Earth Matters</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>Small yield a result of the hot dry vintage</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>None</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Crisp white, shiny gold, black, red, blue, light red</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>102</td>
</tr>
</tbody>
</table>

Organic Winery *with EC*

**#27 TAMBURLAINE – NSW**

<table>
<thead>
<tr>
<th>(1) Product Name and Logos</th>
<th>Winery name all capital; ACO bud (front and back); Standard Drinks logo; Barcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Pictures and Images</td>
<td>Two modern art faces licking each other; Man on horse with sword (front and back); Winemaker signature</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>ACO certified</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>100% organically grown grapes; Envirolabel 100% recycled pulp chlorine free</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>None</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>None</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>None</td>
</tr>
<tr>
<td>(9) Materials and Color</td>
<td>Textured; Black, white, gray, purple, red, gold</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>85</td>
</tr>
</tbody>
</table>
Organic Winery with EC

#28 WRIGHT ROBERTSON – NSW

(1) Product Name and Logos  Winery name all capital; ACO bud
(2) Pictures and Images  Tree; Flower blooming
(3) Licensing Agreement  ACO certified
(4) Scientific Environmental Attributes  Organic
(5) General Environmental Claims  None
(6) Meaningless Environmental Language  None
(7) Statement Spectrum  None
(8) Appeal to Romanticism  None
(9) Materials and Colors  Maroon, white, shiny gold
(10) Proportion of Text  11

Organic Winery with EC

#29 COBAW RIDGE – VIC

(1) Product Name and Logos  Winery name all capital
(2) Pictures and Images  None
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  None
(5) General Environmental Claims  None
(6) Meaningless Environmental Language  None
Language

(7) Statement Spectrum
None

(8) Appeal to Romanticism
None

(9) Materials and Colors
No back label; Black, blue, gold, white

(10) Proportion of Text
5

Organic Winery with no EC

#30 ANNA’S VINEYARD – SA

(1) Product Name and Logos
Winery name in lowercase cursive; NASAA logo

(2) Pictures and Images
Drawing of flowers

(3) Licensing Agreement
NASAA certified producer

(4) Scientific Environmental Attributes
Certified area; Certified grapes; Certified wine

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
Possibly one of the smallest vineyards in Australia, Anna’s vineyard only covers .75 acres

(9) Materials and Colors
No back label; White, blue, red, yellow

(10) Proportion of Text
48

Organic Winery with EC

#31 EDGEHILL – SA
(1) Product Name and Logos  Winery name all capital
(2) Pictures and Images  Flower in a circle
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  None
(5) General Environmental Claims  None
(6) Meaningless Environmental Language  None
(7) Statement Spectrum  None
(8) Appeal to Romanticism  None
(9) Materials and Colors  Textured; Earthy gray, black, gold
(10) Proportion of Text  29

Organic Winery with no EC

#32 GRANCARI – SA

(1) Product Name and Logos  Winery name all capital; ACO bud
(2) Pictures and Images  Gate on driveway leading to field; Map of Australia
(3) Licensing Agreement  ACO certified
(4) Scientific Environmental Attributes  Certified organic vineyard; Premium South Australian organic grapes; The organic way
(5) General Environmental Claims  New research is showing that organic methods, when used in agriculture, produce foods with more nutrients, and sometimes there is a remarkable improvement in the quality of these products. Many consumers describe organic produce as having more flavor; Rino and Greta have chosen not to use chemicals, weedicides or pesticides on
their property, not only for their own health but for the health of their consumers and neighbors as well.

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
Family owned and managed

(9) Materials and Colors
Shiny green and gold

(10) Proportion of Text
105

Organic Winery with EC

#33 GREAT STONE – SA

(1) Product Name and Logos
Winery name all capital

(2) Pictures and Images
Grape vine growing between two rocks

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
None

(9) Materials and Colors
Dull silver, Magenta, white

(10) Proportion of Text
77

Organic Winery with no EC
#34 PURE VISION – SA

(1) Product Name and Logos  Winery name all capital except for the “p”
(2) Pictures and Images  Leaf
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  Made with organic grapes
(5) General Environmental Claims  None
(6) Meaningless Environmental Language  None
(7) Statement Spectrum  None
(8) Appeal to Romanticism  None
(9) Materials and Colors  White, maroon, brown, black
(10) Proportion of Text  33
Organic Winery with EC

#35 TEMPLE BRUER– SA

(1) Product Name and Logos  Winery name all capital; “TB” logo (front and back); Barcode
(2) Pictures and Images  Certified organic wine stamp (front and back); Gold medal; Image of a temple
(3) Licensing Agreement  Certified organic by ACO
(4) Scientific Environmental Attributes  Organic wine; Preservative free
(5) General Environmental Claims  Certified organic and made with berries from our own vineyard without adding preservatives
(6) Meaningless Environmental Language  None
Language

(7) Statement Spectrum Truly captivating

(8) Appeal to Romanticism What more could you ask for?

(9) Materials and Colors Beige, purple, shiny gold, maroon, red, black

(10) Proportion of Text 107

Organic Winery with EC

#36 WIRRA WIRRA – SA

(1) Product Name and Logos Winery name all capital

(2) Pictures and Images Man sitting on fence with glass of wine in hand

(3) Licensing Agreement None

(4) Scientific Environmental Attributes None

(5) General Environmental Claims None

(6) Meaningless Environmental Language None

(7) Statement Spectrum A tribute to the wine, the region, and the foresight of the wine that typified the individuality of McLaren Vale

(8) Appeal to Romanticism To say that Woodhenge is a plain post-and-rail fence is akin to saying Stonehenge is little more than a pile of rubble

(9) Materials and Colors Light mauve, light purple, blue, black, green, brown

(10) Proportion of Text 143

Organic Winery with no EC
#37 NATURE’S HARVEST – VIC

(1) Product Name and Logos
Winery name all lowercase; ACO bud; Standard Drinks logo; Barcode

(2) Pictures and Images
Drawing of bird on branch with leaves

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
Organically grown (front and back); Comes from premium quality organically grown grapes

(5) General Environmental Claims
Next-to-no additives and minimal intervention; A good “natural state” wine – organically

(6) Meaningless Environmental Language
Clean. Fresh. Young.

(7) Statement Spectrum
Hallmarks of a good Shiraz

(8) Appeal to Romanticism
None

(9) Materials and Colors
Earthy texture; Beige, light brown, black, white

(10) Proportion of Text
103

Organic Winery with EC

#38 PIONEERS RUN – VIC

(1) Product Name and Logos
Winery name all capital; ACO bud; Recycle logo; Standard Drinks logo; Barcode

(2) Pictures and Images
Picture of vineyard, trees; Floral design

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
Organically grown grapes (front and back); Free of synthetic chemicals
Vines enjoy minimalist intervention; Holistic approach to organic winemaking makes the wine better for you and better for the planet; Striving to achieve zero environmental impact

Recycle

Made with balance and harmony our wines deliver intense flavors

Nature’s best interest of heart; Commitment to organic winemaking spans many decades and this organic wine is a celebration of the art of winemaking

Brown, earthy yellow, earthy orange, muddy red, black

235

Cape Jaffa Wines is the first fully certified organic vineyard on the Limestone Coast and Mount Benson’s pioneer winery, producing terroir-driven and regionally distinctive wines for over a decade

None

None
The Hooper family’s passion for wine, food and the outdoors brought them to this region in 1993, and since then winemaking has been enriched by surfing and catching crayfish.

One big label; Muddy beige, blue, red, white, black

77

Organic Winery with EC

#40 BOTOBOLAR – NSW

Winery name all capital; ACO bud; Barcode

Tree (front and back); Winemaker signature

ACO certified

Organically grown; Preservative free; 100% Organic; Grade A organic fruit, preservative free; ACO certified

Made in accordance with organic winemaking principles and is certified by ACO; The original organic and preservative free wine since 1984; Handcrafted with no preservatives; Sourced from our vineyards

None

A great drink for the health conscious who want a delicious wine and the benefits of antioxidants

Estate bottled premium wine; The original since 1984

White, shiny gold, black

124
Organic Winery with EC

#41 BROOMBEE – NSW

(1) Product Name and Logos ACO bud

(2) Pictures and Images Map of Australia

(3) Licensing Agreement ACO certified

(4) Scientific Environmental Attributes Organic wine; Basket pressed; Organic vineyard; Organic low preservative wine; Premium wines produced from 100% certified organic grapes

(5) General Environmental Claims 100% estate fruit; Hand picked and gently basket pressed

(6) Meaningless Environmental Language None

(7) Statement Spectrum Complexity grows with time

(8) Appeal to Romanticism The vineyard is at 520 meters amongst the picturesque hills of Appletree Flat, Mudgee

(9) Materials and Colors White, olive green, black

(10) Proportion of Text 65

Organic Winery with EC

#42 ERUDGERE – NSW

(1) Product Name and Logos Winery name all capital

(2) Pictures and Images None

(3) Licensing Agreement None

(4) Scientific Environmental Attributes Vineyard using only sustainable practices
(5) General Environmental Claims
100% sustainable

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Delicious sustainably grown

(8) Appeal to Romanticism
Premium; Premium product

(9) Materials and Colors
White, dark gold, yellow gold, black

(10) Proportion of Text
38

Organic Winery with EC

#43 LOWE FAMILY – NSW

(1) Product Name and Logos
Winery name all in capital; ACO bud

(2) Pictures and Images
None

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
In response to demand we have bottled our first preservative free Shiraz; Organically grown and made from unirrigated and untrellised vines

(6) Meaningless Environmental Language
Organic to its bootstraps

(7) Statement Spectrum
It is no tragedy to drink this as a young wine but be assured from 35 years winemaking experience it will last and improve for at least a further 10 years

(8) Appeal to Romanticism
Now after 4 years the wine is still a baby with hints of licorice and vanilla, and no sign of any aged character

(9) Materials and Colors
Maroon, white, gold
(10) Proportion of Text

Organic Winery with EC

#44 MARTIN’S HILL – NSW

(1) Product Name and Logos
Winery name all capital

(2) Pictures and Images
Small cottage with tree on hill

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
Organically Grown

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
None

(9) Materials and Colors
No back label; Dark purple, white, mustard yellow

(10) Proportion of Text
6

Organic Winery with EC

#45 PIETER VAN GENT – NSW

(1) Product Name and Logos
Winery name in cursive

(2) Pictures and Images
None

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None
(5) General Environmental Claims None

(6) Meaningless Environmental Language None

(7) Statement Spectrum None

(8) Appeal to Romanticism None

(9) Materials and Colors No back label; Royal blue, shiny gold

(10) Proportion of Text 6

Organic Winery with no EC

#46 ANDREW PEACE – VIC

(1) Product Name and Logos Winery name in slanted cursive; “AP” logo in shiny gold

(2) Pictures and Images None

(3) Licensing Agreement None

(4) Scientific Environmental Attributes None

(5) General Environmental Claims None

(6) Meaningless Environmental Language “the australian good life. bottled.”

(7) Statement Spectrum The mighty Murray River has long been a lifeline feeding a diverse range of farming and agribusiness pursuits across the southern Australian states; Situated on the banks of this majestic river, our range of value for money wines for export and domestic markets display all of the bold, rich characteristics of our riverbank home

(8) Appeal to Romanticism Winemaker’s Choice
<table>
<thead>
<tr>
<th>(9) Materials and Colors</th>
<th>Shiny gold, maroon, white, black</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10) Proportion of Text</td>
<td>89</td>
</tr>
</tbody>
</table>

Organic Winery with *no* EC

### #47 KREGLINGER – SA

1. **Product Name and Logos**: Winery name in cursive
2. **Pictures and Images**: Image of mountains
3. **Licensing Agreement**: None
4. **Scientific Environmental Attributes**: Planted on 180 hectares of undulating coastal hills; Within 5 kilometers of the ocean at 37 degrees south of the equator, our Shiraz is planted on near perfect “terra rossa” soils, providing an ideal level of nutrient and water retention; pH
5. **General Environmental Claims**: Heavily influenced by a unique micro-climate and vineyard captures the specific regional characteristics of Mount Benson in producing cool climate wines of the highest caliber
6. **Meaningless Environmental Language**: None
7. **Statement Spectrum**: Located on the southern tip of South Australia and renowned for its rugged coastline, exotic seafood and long, white sandy beaches
8. **Appeal to Romanticism**: None
9. **Materials and Colors**: Black, white, brown, olive green
10. **Proportion of Text**: 147

Organic Winery *with* EC

### #48 ORGANIC ONE – NSW
(1) Product Name and Logos  Winery name all capital; ACO logo (large and small); Barcode

(2) Pictures and Images  Map of Australia with kangaroo in it (front and back)

(3) Licensing Agreement  ACO certified

(4) Scientific Environmental Attributes  Sustainable winegrowing

(5) General Environmental Claims  Exceptionally created from the highest level of organics

(6) Meaningless Environmental Language  Divine by nature; Established on virgin soil

(7) Statement Spectrum  Imagine … a taste both sublime and exhilarating … a wine so pure it captures the very essence of nature

(8) Appeal to Romanticism  An environmental paradise, a sanctuary where healthy sustainable living is conscious way of life

(9) Materials and Colors  Textured; Torn look; Cream, pink, white, black, shiny gold, gray

(10) Proportion of Text  94

Organic Winery with EC

#49 ANGOVE’S / NANYA VINEYARD – SA

(1) Product Name and Logos  Winery name in lowercase cursive; ACO bud; Recycle logo; Standard Drinks logo; Barcode

(2) Pictures and Images  Palm of hand with leaf in center (front and back)

(3) Licensing Agreement  ACO certified

(4) Scientific Environmental Attributes  Organic; Certified organic; Organically
<table>
<thead>
<tr>
<th>Attributes</th>
<th>grown grapes &amp; organically made wine; Certified to create organic wines of the highest quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) General Environmental Claims</td>
<td>Tied to protecting and preserving the natural environment for the generations that will follow in our footsteps</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>Please recycle</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>This certified organic wine is as nature intended it to be, pure and pleasurable, made only with the gentlest touch from our winemakers</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>Family winemakers; Heritage, tradition, integrity, passion, vision</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Cream, black, muddy orange</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>163</td>
</tr>
</tbody>
</table>

**Organic Winery**

**#50 PENNYWEIGHT – VIC**

<table>
<thead>
<tr>
<th>(1) Product Name and Logos</th>
<th>Winery name all capital; ACO bud</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Pictures and Images</td>
<td>Forrest/trees</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>ACO certified</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>Organic (all capital) certified; Hand picked; Every grape lovingly made into this wine has been hand picked in the cool hours of the morning</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
</tbody>
</table>
(7) Statement Spectrum
150 years’ experience has gone into this bottle; The family is proud of its certified luscious fruit

(8) Appeal to Romanticism
Skills passed down through 5 generations of winemakers; True wine bouquets and unique flavors of the vineyard are locked away in this bottle

(9) Materials and Colors
Black, white

(10) Proportion of Text
143

Organic Winery *with EC*

#51 ROBINVALE – VIC

(1) Product Name and Logos
Winery name all capital; ACO bud; Barcode

(2) Pictures and Images
Etching of Greek God

(3) Licensing Agreement
ACO certified

(4) Scientific Environmental Attributes
Certified organic wine; Without the use of artificial or synthetic chemical pesticides, fungicides, weedicides, fertilizers, and other unnecessary additives

(5) General Environmental Claims
Using environmentally friendly, ecologically safe biological methods to activate and nurture the life of the soil and plants within nature’s organization

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Big and complex, lashings of lingering spicy oak

(8) Appeal to Romanticism
None

(9) Materials and Colors
Earthy gray, shiny gold, black

(10) Proportion of Text
113
Organic Winery with EC

**#52 DREW – TAS**

(1) Product Name and Logos

Winery name all capital

(2) Pictures and Images

Picture of Aboriginal inspired etching (front);

Map of Tasmania (back)

(3) Licensing Agreement

None

(4) Scientific Environmental Attributes

None

(5) General Environmental Claims

None

(6) Meaningless Environmental Language

None

(7) Statement Spectrum

Fruit purity and peppery spice only found in a true cool climate; Mid-weight elegance

(8) Appeal to Romanticism

Single vineyard exclusively estate-produced from our mature vines at tea tree in Tasmania’s famed Coal River Valley

(9) Materials and Colors

Black, white, purple

(10) Proportion of Text

89

Organic Winery with *no* EC

* Numbering of wineries is based on Appendix J, Organic and Non-Organic Winery Matching Document, and ordered by region
## APPENDIX L
Content Analysis of Non-Organic Wineries

<table>
<thead>
<tr>
<th>Category*</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>#1 JACOB’S CREEK – SA</strong></td>
<td></td>
</tr>
<tr>
<td>(1) Product Name and Logos</td>
<td>Winery name all capital; Standard Drinks logo; Barcode</td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Family crest (front and back); Winemaker signature</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>None</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>None</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>None</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>Tradition dates back to 1847 when Johann Gramp planted his first vineyard on the banks of Jacob’s creek</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Purple, white, black, gold</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>118</td>
</tr>
</tbody>
</table>

Non-Organic Winery with *no EC*

**#2 WOLF BLASS – SA**

<table>
<thead>
<tr>
<th>Category*</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Product Name and Logos</td>
<td>Winery name all capital; Recycle logo; Enjoy Responsibly logo; Standard Drinks logo; Barcode</td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Two eagles with spread wings; Winemaker signature; Gold medal; Tasting chart</td>
</tr>
</tbody>
</table>
(3) Licensing Agreement None
(4) Scientific Environmental Attributes None
(5) General Environmental Claims Sourced from premium Australian vineyards
(6) Meaningless Environmental Language Please recycle
(7) Statement Spectrum None
(8) Appeal to Romanticism Bilyara, the Aboriginal word for eaglehawk
(9) Materials and Colors White, gold, purple, black, gray
(10) Proportion of Text 136

Non-Organic Winery with EC

#3 ST. HALLETT – SA

(1) Product Name and Logos Winery name in cursive; Standard Drinks logo; Barcode
(2) Pictures and Images Modern art image
(3) Licensing Agreement None
(4) Scientific Environmental Attributes None
(5) General Environmental Claims Grown, made, and blended in the Barossa
(6) Meaningless Environmental Language Custodians of the land, we are dedicated to the Barossa region
(7) Statement Spectrum The Barossa has become synonymous around the world with great Shiraz
(8) Appeal to Romanticism We’re sure you’ll enjoy this Barossa Shiraz nearly as much as we do making it
Non-Organic Winery with EC

#4 GRANT BURGE – SA

(1) Product Name and Logos  Winery name all capital and in brackets; Barcode

(2) Pictures and Images  Cellar wood door slightly ajar with brick face surrounding (front and back)

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  None

(6) Meaningless Environmental Language  None

(7) Statement Spectrum  Cellar hands around the world notoriously have a secret reserve of wines which ‘mysteriously evaporates’ from the best barrels in the winery

(8) Appeal to Romanticism  In France it is known as ‘The Angel’s Share’. At Grant Burge we call it ‘The Cellar Cut’

(9) Materials and Colors  Torn top; White, black, gray, shiny gold, brown

(10) Proportion of Text  114

Non-Organic Winery with no EC

#5 LONG FLAT – SA
(1) Product Name and Logos  Winery name all capital; Barcode
(2) Pictures and Images  Picture of vineyard, winery, and land at sunset with large tree; Winemaker signature
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  None
(5) General Environmental Claims  On the floor of the valley; The cooler climate slopes
(6) Meaningless Environmental Language  None
(7) Statement Spectrum  Internationally, the Barossa is known for its Shiraz
(8) Appeal to Romanticism  None
(9) Materials and Colors  Beige, muddy orange, brown, black, white, muddy pink
(10) Proportion of Text  131

Non-Organic Winery with EC

#6 DANDELION – SA

(1) Product Name and Logos  Recycle logo; Standard Drinks logo; Barcode
(2) Pictures and Images  Big wind-blown dandelion
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  None
(5) General Environmental Claims  We encourage the humble dandelion among the vines as they suppress winter weeds, provide mulch in summer; Hand harvested, gently crushed and naturally fermented
(6) Meaningless Environmental Language  
Please recycle; Our wish is to nurture the character of these vineyards

(7) Statement Spectrum  
A unique fusion of vineyards and vignerons, represent decades of experience blending the fruit of heirloom vineyards with the finest traditions of artisan winemaking

(8) Appeal to Romanticism  
These ancient, gnarled vines, many over a hundred years of age, are not only surviving but thriving on their own roots in some of the oldest soils on the planet

(9) Materials and Colors  
Textured, shiny; White, silver, black

(10) Proportion of Text  
281

Non-Organic Winery with EC

#7 SALTRAM – SA

(1) Product Name and Logos  
Recycle logo; Enjoy Responsibly logo; Standard Drinks logo; Barcode

(2) Pictures and Images  
Picture of five men stomping grapes; Family crest; Drawing of woman on telephone

(3) Licensing Agreement  
None

(4) Scientific Environmental Attributes  
None

(5) General Environmental Claims  
None

(6) Meaningless Environmental Language  
Please recycle

(7) Statement Spectrum  
Tradition was born when at the end of every vintage weary pickers and cellarhands would set up a long table in the winery to enjoy a celebratory dinner

(8) Appeal to Romanticism  
Newspaper look; Any questions? Why not call our friendly receptionist!
(9) Materials and Colors

Torn look; Black, white, gray

(10) Proportion of Text

127

Non-Organic Winery with EC

#8 JINDA-LEE – VIC

(1) Product Name and Logos

Winery name all capital; Standard Drinks logo; Barcode

(2) Pictures and Images

Aboriginal turtle; Family crest

(3) Licensing Agreement

None

(4) Scientific Environmental Attributes

None

(5) General Environmental Claims

None

(6) Meaningless Environmental Language

None

(7) Statement Spectrum

Rich berry fruit, soft fine-grained tannins

(8) Appeal to Romanticism

Family owned, estate made and bottled; Aboriginal word meaning “bare hill”

(9) Materials and Colors

Orange, brown, muddy red, black, white

(10) Proportion of Text

81

Non-Organic Winery with no EC

#9 JARAMAN – SA

(1) Product Name and Logos

Recycle logo; Enjoy Responsibly logo; Standard Drinks logo; Barcode

(2) Pictures and Images

Three seahorses swimming; Winemaker signature
Clare Valley’s altitude and red loam over limestone creates the perfect vineyard setting; Moderate temperatures, limited water, and shallow red sandy soils over limestone ensure low yields; Days are warm until the afternoon breeze signals an end to the day’s heat and the onset to the evening’s chill.

Please recycle

Gray, gold, black, white, cream

187

Non-Organic Winery with EC

#10 O’LEARY WALKER – SA

Winery name all capital; Barcode

Big wine stained “O”; Winemaker signatures

None

None

None

None
(7) Statement Spectrum
Fairly Protestant wine for such a Catholic valley

(8) Appeal to Romanticism
None

(9) Materials and Colors
Beige, black, granite, red, gray

(10) Proportion of Text
139

Non-Organic Winery with no EC

#11 WYNNS – SA

(1) Product Name and Logos
Winery name all capital; Recycle logo; Enjoy Responsibly; Standard Drinks logo; Barcode

(2) Pictures and Images
Triple gabled winery; Vineyard; Three trees; Winemaker signature; Map of Coonawara region; Map of South Australia

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
The thin layer of rich, red “Terra Rossa” topsoil, overlying porous limestone, provides ideal drainage conditions for vines

(6) Meaningless Environmental Language
Please recycle; A unique environment in which to grow some of Australia’s finest wine grapes

(7) Statement Spectrum
This bottle is sealed with a “screwcap”. This type of seal ensures the wine is delivered to your glass at the highest quality maintaining rich, ripe fruit flavors

(8) Appeal to Romanticism
Founded by pioneer John Riddoch, who planted vineyards in 1891, completing the estate’s famous triple gabled winery in 1896

(9) Materials and Colors
Textured; Light gray, white, black, red
Non-Organic Winery *with* EC

### #12 PENOLA ESTATE – SA

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Product Name and Logos</td>
<td>Winery name all capital; Barcode</td>
<td></td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Outline of winery</td>
<td></td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>The unique terra rossa soil and favorable climate of Coonawara combine to produce some of Australia’s finest wines</td>
<td></td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>Reflects the generous flavors of an excellent Coonawara vintage and is built on the rich, sweet, and elegant fruit flavors unique to the region</td>
<td></td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>Vines were first planted in the Coonawara fruit colony by John Riddoch in 1890</td>
<td></td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Black, purple, white, green, beige</td>
<td></td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>112</td>
<td></td>
</tr>
</tbody>
</table>

Non-Organic Winery *with* EC

### #13 IDIOT / KOOMOOLOO – NSW

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Product Name and Logos</td>
<td>Winery name all capital; Barcode</td>
<td></td>
</tr>
<tr>
<td>(2) Pictures and Images</td>
<td>Floating man/animal with long nose</td>
<td></td>
</tr>
</tbody>
</table>
(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
None

(8) Appeal to Romanticism
Est in 1988

(9) Materials and Colors
Beige, light brown, dark brown, light yellow, earthy orange, flesh, red, black

(10) Proportion of Text
34

Non-Organic Winery with no EC

#14 CLIMBING – NSW

(1) Product Name and Logos
Winery name all lowercase; Barcode

(2) Pictures and Images
Man climbing ladder; Two trapeze artists; Man standing below ladder with arms folded; Ladder with man’s feet visible; Man standing on ladder hanging below a plane with many propellers; Man laying on ground; Rope hanging from sky; Mountains in the background; Three bronze medals; One silver medal; Winemaker signature

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
Estate grown and crafted
From a climb that begins at 600 meters above sea level, our high altitude, cool climate vineyard estate delivers wine with elegance.

High altitude of the vineyard, bright sunlight and even ripening are shown to great effect.

No back label; One big label; Pale blue, pale red, pale gray, pale purple, red, brown, bronze, silver, light granite, green, black, yellow, flesh

133

Non-Organic Winery with EC

#15 PRINCE HILL – NSW

Winery name in cursive; Barcode

Playing card with a picture of a rooster

None

None

None

None

Pay homage to the hard years endured by the early pioneers who treated sheep and cattle, fossicked for gold, and established the first crops, including grapes, in the region.

Born in 1862 John Prince traveled to North America as a young man in search of gold.

Black, shiny silver, white, brown, golden, yellow, red
Non-Organic Winery with *no* EC

**#16 COWRA ESTATE – NSW**

1. **Product Name and Logos**
   - Winery name all capital; Barcode

2. **Pictures and Images**
   - Family crest; Eagle flying amongst clouds over vineyard valley and winery (front);
   - Map of Cowra region; Eagle flying (back);
   - Winemaker signature

3. **Licensing Agreement**
   - None

4. **Scientific Environmental Attributes**
   - None

5. **General Environmental Claims**
   - None

6. **Meaningless Environmental Language**
   - The undulating vineyards set on an altitude of 315m, are grown on ancient broken down granite, basalt, and alluvial loam brought down by the river

7. **Statement Spectrum**
   - These fast draining soils combined with a perfect climate of cold nights and long warm days continually produce wines which rate with the world’s finest

8. **Appeal to Romanticism**
   - Australia’s oldest Chardonnay vineyard; The name Cowra is derived from the Aboriginal word meaning “eagle on the rocks”; You can’t go wrong with Cowra Estate!

9. **Materials and Colors**
   - White, black, red, shiny gold, gray

10. **Proportion of Text**
    - 199

Non-Organic Winery *with* EC

**#17 MCWILLIAMS – NSW**
(1) Product Name and Logos: Winery name all capital; Standard Drinks logo; Barcode

(2) Pictures and Images: Silver medal; McWilliams symbol

(3) Licensing Agreement: None

(4) Scientific Environmental Attributes: None

(5) General Environmental Claims: None

(6) Meaningless Environmental Language: None

(7) Statement Spectrum: This historic winery continues to craft award winning wines you’ve come to expect from Australia’s award winning winery

(8) Appeal to Romanticism: Internationally recognized

(9) Materials and Colors: White, black, maroon, gold, silver

(10) Proportion of Text: 125

Non-Organic Winery with no EC

#18 CASELLA – NSW

(1) Product Name and Logos: Winery name all lowercase and in brackets; Standard Drinks logo; Barcode

(2) Pictures and Images: Wallabe jumping

(3) Licensing Agreement: None

(4) Scientific Environmental Attributes: None

(5) General Environmental Claims: None

(6) Meaningless Environmental Language: None
Created with a simple purpose in mind, to make great wine that everyone can enjoy

For 3 generations the Casella family has been making wine at their winery in the small town; Approachable, fresh, flavorsome and has a personality all of its own; Everything a great wine should be

Yellow, black, orange, dirty gold, purple

74

Non-Organic Winery with no EC

Winery name all capital; Recycle logo; Responsibly; Standard Drinks logo; Barcode

Family crest

None

None

None

Please recycle

History, passion, and unrivaled style

None

Diamond shape; Black, red, gold, white

93

Non-Organic Winery with EC
### #20 TRAIL’S END – VIC

1. **Product Name and Logos**
   - Winery name all capital; Standard Drinks logo; Barcode

2. **Pictures and Images**
   - Family crest; Valley, mountain range, clouds

3. **Licensing Agreement**
   - None

4. **Scientific Environmental Attributes**
   - None

5. **General Environmental Claims**
   - None

6. **Meaningless Environmental Language**
   - None

7. **Statement Spectrum**
   - Our life journey often takes us down many trails and paths; Intense

8. **Appeal to Romanticism**
   - Estate Vineyard; Reserve; Take the moment to raise a glass at the end of a trail well traveled and toast a new beginning

9. **Materials and Colors**
   - Textured; Black, white, red, gray

10. **Proportion of Text**
    - 113

   Non-Organic Winery *with EC*

### #21 DEAKIN ESTATE – VIC

1. **Product Name and Logos**
   - Winery name all capital; Big “D”; Standard Drinks logo; Barcode

2. **Pictures and Images**
   - None

3. **Licensing Agreement**
   - None

4. **Scientific Environmental Attributes**
   - None
Attributes

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Full flavored; Abundant; Distinctive; In harmony with oak

(8) Appeal to Romanticism
For full flavored Shiraz, make sure it’s Deakin Estate grown

(9) Materials and Colors
Shiny purple, red, black, white, gray

(10) Proportion of Text
78

Non-Organic Winery with no EC

#22 SIRROMET – QLD

(1) Product Name and Logos
Winery name all capital; Barcode

(2) Pictures and Images
Image of mountains and plateaus

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
Life – Style – Wine

(7) Statement Spectrum
Cool climate, above sea level, this bold yet elegant wine style shows lovely fruit characters of sweet berry fruits, soft cinnamon lingering on the finish

(8) Appeal to Romanticism
You’re about to experience a wine that delivers well above expectations
<table>
<thead>
<tr>
<th>(9) Materials and Colors</th>
<th>Black, beige, dark red clay, light red clay, gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10) Proportion of Text</td>
<td>86</td>
</tr>
</tbody>
</table>

Non-Organic Winery *with* EC

**#23 TYRELL’S – VIC**

<table>
<thead>
<tr>
<th>(1) Product Name and Logos</th>
<th>Winery name all capital; Standard Drinks logo; Barcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Pictures and Images</td>
<td>Family crest (front and back); Stone; Arrows</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>None</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>Situated on the ancient strip of Cambrian soil said to give these wines their unique structure; Sourced from Tyrell’s own vineyard</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>All resulting in a brooding intense wine full of restrained power</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>In the year 1100, an errant arrow fired by Sir Walter Tyrell killed King William (Rufus) II. Today the site of this infamous “accident” is marked by the Rufus Stone</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Slate, purple, light red, black, shiny gold, white</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>126</td>
</tr>
</tbody>
</table>

Non-Organic Winery *with* EC

**#24 BARWANG – NSW**
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Product Name and Logos</td>
</tr>
<tr>
<td></td>
<td>Winery name all capital; Recycle logo; Standard Drinks; Barcode</td>
</tr>
<tr>
<td>2</td>
<td>Pictures and Images</td>
</tr>
<tr>
<td></td>
<td>Gold medal; Bronze medal</td>
</tr>
<tr>
<td>3</td>
<td>Licensing Agreement</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>4</td>
<td>Scientific Environmental Attributes</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>General Environmental Claims</td>
</tr>
<tr>
<td></td>
<td>Sourced from the cooler climate regions</td>
</tr>
<tr>
<td>6</td>
<td>Meaningless Environmental Language</td>
</tr>
<tr>
<td></td>
<td>Recycle</td>
</tr>
<tr>
<td>7</td>
<td>Statement Spectrum</td>
</tr>
<tr>
<td></td>
<td>Deliver expressive, distinctive wines</td>
</tr>
<tr>
<td>8</td>
<td>Appeal to Romanticism</td>
</tr>
<tr>
<td></td>
<td>Created with fruit from the Hilltops region of New South Wales, a region known for producing elegant, long lived wines</td>
</tr>
<tr>
<td>9</td>
<td>Materials and Colors</td>
</tr>
<tr>
<td></td>
<td>Blue, white, shiny gold, gray, light red, bronze</td>
</tr>
<tr>
<td>10</td>
<td>Proportion of Text</td>
</tr>
<tr>
<td></td>
<td>130</td>
</tr>
</tbody>
</table>

Non-Organic Winery *with* EC

### #25 CLONAKILLA – NSW

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Product Name and Logos</td>
</tr>
<tr>
<td></td>
<td>Winery name in Celtic script; Barcode</td>
</tr>
<tr>
<td>2</td>
<td>Pictures and Images</td>
</tr>
<tr>
<td></td>
<td>Celtic design</td>
</tr>
<tr>
<td>3</td>
<td>Licensing Agreement</td>
</tr>
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<td></td>
<td>None</td>
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<td>4</td>
<td>Scientific Environmental Attributes</td>
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<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>General Environmental Claims</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>6</td>
<td>Meaningless Environmental Language</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>
A bit back to front with a cool February followed by a gloriously warm March, the vines took this topsy-turvy weather in their stride.

Family winery established in 1971; The warmth of Autumn radiates through every part of this wine.

Cream, light red, black

142

Non-Organic Winery with no EC

#26 SCARBOROUGH – NSW

Regal print; Barcode

“S” in family crest; Big “S”

None

None

None

Hillside volcanic red loam soils which are in limited supply in the Hunter Valley; Earthy

Traditional red wine vinification precedes maturation in small oak casks

Selected from old vines in various sites

Beige, gold, black, royal blue, white

83

Non-Organic Winery with EC
#27 CRUICKSHANK – NSW

(1) Product Name and Logos  Winery name all capital; Barcode

(2) Pictures and Images  Boar’s head; Winemaker signatures

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  Solely from grapes grown in our vineyard

(6) Meaningless Environmental Language  None

(7) Statement Spectrum  None

(8) Appeal to Romanticism  Made in our new winery

(9) Materials and Colors  Beige, maroon, shiny gold, white

(10) Proportion of Text  64

Non-Organic Winery *with* EC

#28 WYNDHAM ESTATE – NSW

(1) Product Name and Logos  Winery name all capital; Barcode

(2) Pictures and Images  Five houses; Four gold medals; Four silver medals

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  None

(6) Meaningless Environmental Language  None
(7) Statement Spectrum Multi-regional blending enables a consistency of premium quality and the soft generous style vintage to vintage

(8) Appeal to Romanticism George Wyndham became the father of Australian Shiraz after planting the first commercial vineyard in 1830; A proud legacy that endures to the present day

(9) Materials and Colors Torn look; Beige, black, shiny gold, shiny silver

(10) Proportion of Text 172

Non-Organic Winery with no EC

#29 WHISPERS – VIC

(1) Product Name and Logos Winery name all lowercase regular font and script; Recycle logo; Standard Drinks logo; Barcode

(2) Pictures and Images Branches of tree; Bunch of grapes; Face drinking from wine glass; Two wine bottles; Steak and kabobs

(3) Licensing Agreement None

(4) Scientific Environmental Attributes None

(5) General Environmental Claims None

(6) Meaningless Environmental Language Recycle

(7) Statement Spectrum Sweetness, cellaring, red meat

(8) Appeal to Romanticism Estate made and bottled

(9) Materials and Colors Torn look; Earthy brown, light brown, dark brown, muddy red

(10) Proportion of Text 62
Non-Organic Winery with EC

#30 PENNY’S HILL – SA

(1) Product Name and Logos  Winery name all capital; Barcode
(2) Pictures and Images  Big dot (front and back)
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  None
(5) General Environmental Claims  None
(6) Meaningless Environmental Language  None
(7) Statement Spectrum  Traditional winemaking preserves the purity, integrity, texture, and powerful flavors of trusted vineyards
(8) Appeal to Romanticism  From the highly regarded grape growing region of McLaren Vale
(9) Materials and Colors  Black, red, gold, white
(10) Proportion of Text  96

Non-Organic Winery with no EC

#31 HASELGROVE – SA

(1) Product Name and Logos  Winery name all capital; Standard Drinks logo; Barcode
(2) Pictures and Images  None
(3) Licensing Agreement  None
(4) Scientific Environmental Attributes  None
Attributes

(5) General Environmental Claims
Traditional techniques, extended skin contact and subtle oak treatment to capture the intrinsic characters of the grapes; Fruit sourced from premium Australian vineyards

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
We have used the most technically advanced closure to preserve the quality, and present you with the best possible example of this wine

(8) Appeal to Romanticism
None

(9) Materials and Colors
Purple, white, black, gray

(10) Proportion of Text
133

Non-Organic Winery with EC

#32 LOOMWINE – SA

(1) Product Name and Logos
Winery name all capital; Barcode

(2) Pictures and Images
Bubbles

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Our last generation’s hour is this generation’s minute and whilst this appears relenting here’s our contribution for slowing things down
(8) Appeal to Romanticism
Family business

(9) Materials and Colors
One long label; Shiny opal, slate blue, white

(10) Proportion of Text
85

Non-Organic Winery with *no* EC

**#33 PENSILVA – SA**

(1) Product Name and Logos
Winery name all capital; Barcode

(2) Pictures and Images
Big “X” in a square (front and back)

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
The moderate coastal climate of McLaren Vale is perfectly suited to growing high quality table wines

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Our range continues to reinforce the region’s reputation for producing wines of the highest caliber

(8) Appeal to Romanticism
None

(9) Materials and Colors
White, red, black

(10) Proportion of Text
73

Non-Organic Winery *with EC*

**#34 GEMTREE – SA**

(1) Product Name and Logos
Capital “G”; Barcode
(2) Pictures and Images     Tree with diamonds as leaves in a circle (front and back)

(3) Licensing Agreement     None

(4) Scientific Environmental Attributes     None

(5) General Environmental Claims     Hand selected; Natural fermentation

(6) Meaningless Environmental Language     Uncut

(7) Statement Spectrum     Testament to the suitability of the variety and the founders of Gemtree vineyards

(8) Appeal to Romanticism     Estate grown; Butter family; The Buttery family hopes that this bottle can reveal the pure essentials of McLaren Vale

(9) Materials and Colors     Teal, shiny magenta, cream, white, gold,

(10) Proportion of Text     210

Non-Organic Winery with EC

#35 HARDY’S – SA

(1) Product Name and Logos     Winery name all capital; Standard Drinks logo; Barcode

(2) Pictures and Images     Sun

(3) Licensing Agreement     None

(4) Scientific Environmental Attributes     No preservatives added

(5) General Environmental Claims     From the Earth came the vine, from the vine came the grape, from the grape came the wine, all we added was the bottle

(6) Meaningless Environmental Language     None
(7) Statement Spectrum
This wine is fresh and well structured

(8) Appeal to Romanticism
None

(9) Materials and Colors
Torn look; Cream, shiny gold, blue, black

(10) Proportion of Text
112

Non-Organic Winery with EC

#36 COCK + BULL – VIC

(1) Product Name and Logos
Winery name all capital; Barcode

(2) Pictures and Images
A bull standing on a ball with a rooster on his hind

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
None

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
Most prolific and recognized growing regions; Perfectly balanced to showcase the premium wine

(8) Appeal to Romanticism
Estate grown [on the farm]

(9) Materials and Colors
Black, white, gray, red, yellow, blue, brown, dark brown, orange

(10) Proportion of Text
107

Non-Organic Winery with no EC

#37 BOWLER’S RUN – VIC
#38 VINO GUSTO – VIC

(1) Product Name and Logos
Winery name all capital; Standard Drinks logo; Barcode

(2) Pictures and Images
Grape crush; Bowl of grapes; Two large grapes; Map of Australia with highlighted South Eastern Zone; Flavor indicator

(3) Licensing Agreement
None

(4) Scientific Environmental Attributes
None

Non-Organic Winery with no EC
Attributes

(5) General Environmental Claims  None

(6) Meaningless Environmental Language  None

(7) Statement Spectrum  Rich and full bodied, a savory edge lurks nearby

(8) Appeal to Romanticism  None

(9) Materials and Colors  Dark purple, light purple, white, black, brown, slate, green, olive, dirty cream

(10) Proportion of Text  103

Non-Organic Winery with no EC

#39 JAMIESONS RUN – SA

(1) Product Name and Logos  Winery name in cursive; Recycle logo; Enjoy Responsibly logo; Standard Drinks logo; Barcode

(2) Pictures and Images  A farming scene with sheep in grass, trees, a cottage, and mountains; “JR” symbol

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  The wine is sourced from grapes grown in premium vineyards

(6) Meaningless Environmental Language  Please recycle

(7) Statement Spectrum  Through consistency in quality and style, Jamiesons Run has become part of a proud Australian tradition in fine winemaking
(8) Appeal to Romanticism  The original Jamiesons Run was a remote outback sheep station owned by the Jamieson brothers in the mid 1800’s

(9) Materials and Colors  Burnt edges; Cream, pale blue, pale yellow, pale green, pale brown, black, white, gold, burnt orange

(10) Proportion of Text  138

Non-Organic Winery with EC

#40 LAMBLOCH – NSW

(1) Product Name and Logos  Winery name all capital; Recycle logo; Barcode

(2) Pictures and Images  Tree with brambles

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  The finest varietal wines sourced from premium Australian vineyards

(6) Meaningless Environmental Language  None

(7) Statement Spectrum  Elegant modern expression of Australian wine

(8) Appeal to Romanticism  Classic

(9) Materials and Colors  Cream, black, shiny gold, shiny silver, brown, orange, green

(10) Proportion of Text  72

Non-Organic Winery with EC

#41 LOGAN – NSW
(1) Product Name and Logos Winery name all lowercase script; Standard Drinks logo; Barcode

(2) Pictures and Images Leaf

(3) Licensing Agreement None

(4) Scientific Environmental Attributes None

(5) General Environmental Claims None

(6) Meaningless Environmental Language None

(7) Statement Spectrum Not actually named after apple trees but the native apple gums; Perfect location to grow fruit, especially grapes

(8) Appeal to Romanticism A little town nestled alongside the river

(9) Materials and Colors Red, white, light red

(10) Proportion of Text 95

Non-Organic Winery with EC

#42 PEPPER TREE – NSW

(1) Product Name and Logos Winery name all capital; Barcode

(2) Pictures and Images Tree in full bloom of gold leaves (front and back); Winemaker signature

(3) Licensing Agreement None

(4) Scientific Environmental Attributes None

(5) General Environmental Claims None

(6) Meaningless Environmental Language None
<table>
<thead>
<tr>
<th>(7) Statement Spectrum</th>
<th>Heady mix of lifted spice integrated well with subtle oak</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>Estate grown</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Beige, shiny gold, black, gray</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>81</td>
</tr>
</tbody>
</table>

Non-Organic Winery *with EC*

**#43 FIRESTICK – NSW**

<table>
<thead>
<tr>
<th>(1) Product Name and Logos</th>
<th>Winery name all capital; Barcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Pictures and Images</td>
<td>Lighting bolt; Image of winery; Winemaker signatures</td>
</tr>
<tr>
<td>(3) Licensing Agreement</td>
<td>None</td>
</tr>
<tr>
<td>(4) Scientific Environmental Attributes</td>
<td>None</td>
</tr>
<tr>
<td>(5) General Environmental Claims</td>
<td>Sourced from premium grape growing regions</td>
</tr>
<tr>
<td>(6) Meaningless Environmental Language</td>
<td>None</td>
</tr>
<tr>
<td>(7) Statement Spectrum</td>
<td>Where vines thrive with long growing seasons</td>
</tr>
<tr>
<td>(8) Appeal to Romanticism</td>
<td>Inspired by one of nature’s most dramatic night time performances, the animated dance of lightning strikes of “sticks of fire” that illuminate the Australian landscape</td>
</tr>
<tr>
<td>(9) Materials and Colors</td>
<td>Red, orange, yellow, gold, black, white</td>
</tr>
<tr>
<td>(10) Proportion of Text</td>
<td>169</td>
</tr>
</tbody>
</table>

Non-Organic Winery *with EC*
**#44 MILLSTONE – NSW**

1. **Product Name and Logos**: Winery name all lowercase; Barcode
2. **Pictures and Images**: Winemaker signature
3. **Licensing Agreement**: None
4. **Scientific Environmental Attributes**: None
5. **General Environmental Claims**: None
6. **Meaningless Environmental Language**: None
7. **Statement Spectrum**: Grapes for this Premium Shiraz wine reached optimum ripeness in what is acknowledged as a vintage year
8. **Appeal to Romanticism**: None
9. **Materials and Colors**: Maroon, shiny gold, white
10. **Proportion of Text**: 79

Non-Organic Winery with *no EC*

**#45 MOUNT PLEASANT – NSW**

1. **Product Name and Logos**: Winery name all capital; Recycle logo; Standard Drinks logo; Barcode
2. **Pictures and Images**: Family crest; Winemaker signature
3. **Licensing Agreement**: None
4. **Scientific Environmental Attributes**: None
5. **General Environmental Claims**: Sourced from Australia’s most premium wine regions
6. **Meaningless Environmental Language**: Recycle
The year was 1965 when Mount Pleasant crafted its first Shiraz, in a tribute to tradition.

The wines are true to Lindeman’s philosophy of selecting the best grapes from premium wine regions.

Since 1843, when Dr. Lindeman hand-crafted his first wine vintage, Lindeman’s has continued to consistently create award winning wines making it one of Australia’s most enduring and respected winemakers.
(9) Materials and Colors  
Textured front; Gold leafing, maroon, white, black, gray

(10) Proportion of Text  
111

Non-Organic Winery with EC

#47 STONEHAVEN – SA

(1) Product Name and Logos  
Winery name all capital; Standard Drinks logo; Barcode

(2) Pictures and Images  
Image of vines

(3) Licensing Agreement  
None

(4) Scientific Environmental Attributes  
None

(5) General Environmental Claims  
None

(6) Meaningless Environmental Language  
None

(7) Statement Spectrum  
Teaming ancient geology with an ancient winemaking philosophy

(8) Appeal to Romanticism  
A wine that tells a story of great adventure from which it came

(9) Materials and Colors  
Torn look; Brown, black, white, red, muddy brown

(10) Proportion of Text  
163

Non-Organic Winery with EC

#48 COOKATHAMA – NSW

(1) Product Name and Logos  
Winery name all lowercase; Standard Drinks logo; Barcode
(2) Pictures and Images  Imprint of two hands; Family crest

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  None

(6) Meaningless Environmental Language  Integrated with earth

(7) Statement Spectrum  The hands on the label pay tribute to the pioneers who had lived and cultivated the land spread out among the banks of the river transforming it into the prosperous, fertile land it is today

(8) Appeal to Romanticism  Family vineyard; Aboriginal word meaning “fertile land”

(9) Materials and Colors  Clay, muddy clay, black, white, purple, brown

(10) Proportion of Text  151

Non-Organic Winery with EC

#49 TAYLORS – SA

(1) Product Name and Logos  Winery name all capital; Recycle logo; Standard Drinks logo; Barcode

(2) Pictures and Images  One seahorse swimming alone; Three seahorses swimming together; Winemaker signature

(3) Licensing Agreement  None

(4) Scientific Environmental Attributes  None

(5) General Environmental Claims  None
My family referred to our original vineyard as being the Promised Land due to the quality and promise of its rich fertile soils. Whether you’re relaxing at home or sharing a meal with friends, this is the perfect wine for every occasion.

Textured; Purple, white, black, gold, cream
Non-Organic Winery with no EC

**#51 ZILZIE – VIC**

(1) **Product Name and Logos**

Winery name in Middle Eastern font; Recycle logo; Enjoy Responsibly logo; Standard Drinks logo; Barcode

(2) **Pictures and Images**

None

(3) **Licensing Agreement**

None

(4) **Scientific Environmental Attributes**

None

(5) **General Environmental Claims**

Selectively sourced grapes

(6) **Meaningless Environmental Language**

Please recycle

(7) **Statement Spectrum**

Passion to nurture premium vineyards; Luscious

(8) **Appeal to Romanticism**

There’s a certain charm about spending time with friends and family, sharing old memories, creating new ones, and delighting in a glass of wine; Proudly family owned and operated

(9) **Materials and Colors**

Black, shiny gold, white

(10) **Proportion of Text**

125

Non-Organic Winery *with EC*

**#52 VELO – TAS**

(1) **Product Name and Logos**

Winery name all lowercase

(2) **Pictures and Images**

Image of winemaker Michael Wilson; Big “V” on back

(3) **Licensing Agreement**

None
(4) Scientific Environmental Attributes
None

(5) General Environmental Claims
100% select hand picked Shiraz; Pressed in a traditional “basket press” and matured in quality French oak barrels

(6) Meaningless Environmental Language
None

(7) Statement Spectrum
An elegant cool climate Shiraz, dark crimson in appearance with lifted aromatics

(8) Appeal to Romanticism
Willo’s Reserve; Limited Release

(9) Materials and Colors
Gold and silver leafing, green, white, black, gray

(10) Proportion of Text
82

Non-Organic Winery with EC

* Numbering of wineries is based on Appendix J, Organic and Non-Organic Winery Matching Document, and ordered by region
### APPENDIX M
Categories of Green Marketing by South Eastern Australian Winemakers

<table>
<thead>
<tr>
<th>Category and Number</th>
<th>Name of Winery</th>
</tr>
</thead>
</table>
| (1) Non-Green Product Advertisers = 15 | Andrew Peace, VIC  
Cobaw Ridge, VIC  
BH Robinson / Moyston Hills, VIC  
Drew, TAS  
Edgehill, SA  
Great Stone, SA  
Kosciusko, NSW  
Lark Hill, NSW  
Old Chaff Mill, SA  
Pettavel, VIC  
Pieter van Gent, NSW  
Rocland Estate, SA  
Wallington, NSW  
Warrego, QLD  
Wirra Wirra, SA |
| (2) Green Product Advertisers = 37 | 919 Wines, SA  
Angove’s / Nanya Vineyard, SA  
Anna’s Vineyard, SA  
Botobolar, NSW  
Broombee, NSW  
Burra Creek, SA  
Cape Jaffa, SA  
Carlei / Green Vineyards, VIC  
Elderton, SA  
Erudgere, NSW  
Food Forrest, SA  
Gardner’s Ground, NSW  
Grancari, SA  
Hart of Barossa, SA  
Kalleske, SA  
Kreglinger, SA  
Loan, SA  
Lowe Family, NSW  
Macquariedale, NSW  
Martin’s Hill, NSW  
Nature’s Harvest, VIC  
Organic One, NSW  
Penfolds, SA  
Pennyweight, VIC |
Pig in the House, NSW
Pioneers Run, VIC
Pure Vision, SA
Robinvale, VIC
Statham & Sons / Rosnay, NSW
Tamburlaine, NSW
Temple Bruer, SA
Tom’s Waterhole, NSW
Welshman’s Reef, VIC
Wild Fox, SA
Windowrie, NSW
Wright Robertson, NSW
Yalumba, SA

(3) Non-Environmental Image Enhancers = 18
Australian Vineyard, VIC
Bowler’s Run, VIC
Casella, NSW
Cock + Bull, SA
Deakin Estate, VIC
Clonakilla, NSW
Grant Burge, SA
Idiot / Koomooloo, NSW
Jacob’s Creek, SA
Jinda-Lee, VIC
Loomwine, SA
McWilliams, NSW
Millstone, NSW
O’Leary Walker, SA
Penny’s Hill, SA
Prince Hill, NSW
Vino Gusto, VIC
Wyndham Estate, NSW

(4) Environmental Image Enhancers = 34
Barwang, NSW
Climbing, NSW
Cookathama, NSW
Cowra Estate, NSW
Cruickshank, NSW
Dandelion, SA
Firestick, NSW
Gemtree, SA
Hardy’s, SA
Haselgrove, SA
Jamiesons Run, SA
Jaraman, SA
Lambloch, NSW
Lindeman’s, VIC
Logan, NSW
Long Flat, SA
Mount Pleasant, NSW
Penola Estate, SA
Pensilva, SA
Pepper Tree, NSW
Rosemount, SA
Saltram, SA
Scarborough, NSW
Sirromet, QLD
St. Hallett, SA
Stonehaven, SA
Taylors, SA
Trail’s End, VIC
Tyrell’s Wines, VIC
Velo, TAS
Whispers, VIC
Wolf Blass, SA
Wynns, SA
Zilzie, VIC
Drew (TAS) Front Label. Organic Winery with No EC = Non-Green Product Advertiser
Drew (TAS) Back Label. Organic Winery with No EC = Non-Green Product Advertiser
Pettavel (VIC) Front Label. Organic Winery with No EC = Non-Green Product Advertiser
Pettavel (VIC) Back Label. Organic Winery with No EC = Non-Green Product Advertiser
Warrego (QLD) Front Label. Organic Winery with No EC = Non-Green Product Advertiser
Brigalow Shiraz 2007

The trees of the district put Marburg on its feet. Prior to settlement, the Marburg district was densely covered by "The Rosewood Scrub" which consisted mostly of Hoop Pine and Brigalow (Acacia harpophylla).

Brigalow is a species of silvery wattle that creates a beautiful mosaic of open forest and woodland and is a remnant of the extensive subtropical rainforest that would have occupied the Marburg area millions of years ago.

The local Brigalow trees provided mill timbers and many split well and easily. This enabled settlers to quickly put up huts to live in and fences to protect their crops.

The grapes for Brigalow Shiraz 2007 were grown in Ladysmith, NSW and Inglewood, QLD.

Standard Drinks

(220) ADDED

PRESERVATIVE

BATCH 01
Botobolar (NSW) Front Label. Organic Winery with EC = Green Product Advertiser
2009 Preservative Free Shiraz
100% Organic

The ‘Grade A Organic’ fruit for the 2009 vintage of Preservative Free Dry Red wine is sourced from Our Selection Vineyard ACO certified #10846A and Martins Hill Vineyard ACO certified #2448A. The wine is best consumed while young to enjoy the vibrant flavours. A great drink for the health conscious who want a delicious wine and the benefits of antioxidants. Handcrafted with no preservatives, we encourage you to enjoy this lovely Shiraz in moderation with friends and food.

Cheers
Kevin Kerstrom winemaker.

‘The Original Organic & Preservative Free Wine’
Since 1984

Made in accordance with organic winemaking principles and is certified by:

ACO Cert # P228
Approx 7.7 standard drinks
Botobolar Vineyard Pty Ltd
89 Botobolar Rd
Mudgee NSW 2850
www.botobolar.com
Nature’s Harvest (VIC) Front Label. Organic Winery with EC = Green Product Advertiser
Clean. Fresh. Young. Nature’s Harvest comes from premium-quality organically grown grapes. The wine is carefully made to ensure next-to-no additives and minimal intervention. With spicy mulberry flavours and just a hint of pepper, this dry red has the hallmarks of a good Shiraz. It has a round and soft palate, supported by a touch of oak complexity. A good "natural state" wine - organically.
Yalumba (SA) Front Label Part I. Organic Winery with EC = Green Product Advertiser

Yalumba (SA) Front Label Part II. Organic Winery with EC = Green Product Advertiser
Yalumba (SA) Front Label Part III. Organic Winery with EC = Green Product Advertiser

Yalumba (SA) Front Label Part IV. Organic Winery with EC = Green Product Advertiser
Idiot / Koomooloo (NSW) Front Label. Non-Organic Winery with No EC = Non-Environmental Image Enhancer

Idiot / Koomooloo (NSW) Back Label. Non-Organic Winery with No EC = Non-Environmental Image Enhancer
Millstone (NSW) Front Label. Non-Organic Winery with No EC = Non-Environmental Image Enhancer
Millstone (NSW) Back Label. Non-Organic Winery with No EC = Non-Environmental Image Enhancer
Penny’s Hill (SA) Front Label. Non-Organic Winery with No EC = Non-Environmental Image Enhancer
Penny’s Hill (SA) Back Label. Non-Organic Winery with No EC = Non-Environmental Image Enhancer
Jamiesons Run (SA) Front Label. Non-Organic Winery with EC = Environmental Image Enhancer
The original Jamiesons Run was a remote outback sheep station owned by the Jamieson Brothers in the mid 1800s.

This wine is sourced from grapes grown in premium vineyards throughout the Limestone Coast. Through consistency in quality and style, Jamiesons Run has become part of a proud Australian tradition in fine winemaking.

The 2008 vintage of Jamiesons Run Shiraz displays lifted aromas of strawberries and raspberries interwoven with vanillin and spices. A medium bodied Shiraz with good depth of flavour and a long finish. This wine is drinking wonderfully now and will reward with careful cellaring.
Whispers (VIC) Front Label. Non-Organic Winery with EC = Environmental Image Enhancer
Whispers (VIC) Back Label. Non-Organic Winery with EC = Environmental Image Enhancer
Wynns (SA) Front Label. Non-Organic Winery with EC = Environmental Image Enhancer
Wynns (SA) Back Label. Non-Organic Winery with EC = Environmental Image Enhancer
BLOOPERS

To put ice today [1929] into any white wine with a name is a far graver gastronomical sin than eating mutton with mustard.

P. Morton Shand

Nowadays [1963] one sees all kinds of corks for cheap wine – plastic (ugh!).

George Rainbird

The truth of the matter is that both the soil and climate Down Under are altogether too good to produce fine wines.

P. Morton Shand

I could certainly write a lot more about [Australian wine], but there is no great point in it.

George Rainbird