

Working on a Dream:

Sustainable Organisational Change in SMEs Using the Example of the Austrian Wine Industry

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Abstract

Driving sustainable development through new products, services, techniques and organisational modes that substantially reduce environmental impacts, or ecopreneurship, is especially important for small and medium-sized enterprises (SMEs) as they have a vital role to play in managing limited environmental and social resources. Reaping the benefits associated with ecopreneurship, however, requires a fundamental qualitative change process at the firm level. However, there remains considerable uncertainty as to how ecopreneurs will discover, develop and realise sustainability-related opportunities in their organisations. Thus, the purpose of this article is to address this gap by analysing how this qualitative change process associated with a shift to sustainable development actually unfolds in SMEs. To do so it examines small and medium-sized wineries in Austria. Based on the results of a Delphi study, a multi-layer process model that differentiates between unfreezing, changing and refreezing processes is developed. The framework shows that the unfreezing of the status quo is mainly accomplished by the business owner's attitude towards sustainability. In the course of the changing process, change related to the adoption of greener business practices follows a hierarchical order, starting with business activity (the first layer). Then, four dimensions of capital resources (the second layer) must be revised in order to implement the change successfully. After that, relevant stakeholders (the third layer) must be integrated into this iterative learning process. Finally, in the course of refreezing, change is embedded in the organisation by the ongoing commitment of the business owner and future sustainable expansion strategies. The developed framework may serve as a guideline for small and medium-sized wineries, but also for a broader set of SMEs implementing sustainable organisational change in the future. The framework could also be used by national governments or certification authorities uncertain of how best to support the change process in SMEs.

Keywords ecopreneurship, organisational change, SMEs, sustainability, process model

1 Introduction

Since the Brundtland Commission Report (World Commission on Environment and Development 1987) popularised the concept of “sustainable development” and explicitly outlined a positive impact of environmental protection on the economic performance of businesses (Sharma and Vredenburg 1998), a large body of research has examined why and how businesses should engage in environmentalism, that is, integrate environmental consideration into their business decisions (Banerjee 2002; Cherrier et al. 2012). However, with most extant research on making environmental progress in the core business being oriented to large, and often multinational, corporations (Bos-Brouwers 2010; Brammer et al. 2012), the environmental practices of small and medium-sized enterprises (SMEs) have remained an under-researched area within the business and environment literature (Schaper 2002; Revell and Blackburn 2007; Klewitz and Hansen 2014).

Driving sustainable development through new products, services, techniques and organisational modes that substantially reduce environmental impacts is known as ecopreneurship (Schaltegger 2002), and is especially important in the SME sector. SMEs have a vital role to play in managing limited environmental and social resources and innovation (e.g. Acs and Audretsch 1990; Tether 1998; Fink and Kessler 2010). One strategy available to meet the associated challenges is to adopt a greener business practice, which is usually a major stimulus for innovation within a firm, giving rise to improvements in processes, production, materials usage and marketing (e.g. Porter and van der Linde 1995; King and Lenox 2001; Cherrier et al. 2012). With regard to SMEs, it has been argued that improvements in environmental management practices can result not only in improved products and better public relations but also higher employee commitment and increased customer satisfaction, thus constituting competitive advantages (Simpson et al. 2004; Gadenne et al. 2009). Hart and Milstein (1999, p. 25) therefore predicted that entrepreneurs will soon begin to consider sustainable development as “one of the biggest business opportunities in the history of commerce”. Since this prediction, the number of businesses increasing their investments in sustainability has grown significantly (Hind et al. 2013). Not only has the public discourse on sustainable development reached unprecedented levels, it continues to increase (Barkemeyer et al. 2009). Moreover,

practitioner journals such as the Harvard Business Review and the MIT Sloan Management Review have advanced the idea that ecopreneurship may be the panacea for environmental and social concerns (Brugmann and Prahalad 2007; Senge et al. 2007) that can be also associated with firm performance (Eccles et al. 2012; Haanaes et al. 2013).

Ecopreneurship, however, “requires more than eco-efficiency, or the minimising of energy, resources and waste; it also requires fundamental personal, social and institutional transformation” (Birkeland 2002, p. 20). In fact, a firm must implement a fundamental qualitative change process (Siebenhüner and Arnold 2007; Martinuzzi and Krumay 2013) to reap the benefits of sustainable development (Lee 2009; Klewitz and Hansen 2014). This change cannot be a superficial or cosmetic public relations response but has to address every dimension of the organisation (van Marrewijk and Hardjono 2003), including its identity, mission and goals, corporate and competitive strategies, organisational structure and formal systems, culture and leadership, competencies, organisational processes, and resources (Porter 1980; Galbraith and Kazanjian 1986; Glasl and Lievegoed 2011).

Yet, despite the promise offered by sustainable development for SMEs, there remains considerable uncertainty regarding these qualitative changes associated with a shift to sustainable development. Not only is there little understanding of how ecopreneurs will discover, develop and realise these opportunities that lie beyond the pull of existing markets (Hall et al. 2010) but, in addition, the academic discourse on sustainable development and organisational change has, to date, and especially with regard to the management and business literature, been sparse (Siebenhüner and Arnold 2007; Goodall 2008; Lee 2009; De Matos and Clegg 2013; Martinuzzi and Krumay 2013). Thus, while the case for sustainable development offering a panacea for transitioning towards a more competitive and innovative organisation is alluring, there remain major gaps in our knowledge of how the changeover processes and the qualitative changes at the firm level associated with the implementation of innovative environmental practices are actually shaped within SMEs.

The purpose of this study therefore is to address the following research question: How does the qualitative change process associated with a shift to sustainable development unfold in SMEs? To address the purpose, the study first establishes the theoretical grounding for ecopreneurship and organisational change in SMEs (Section 2). Section three explains the qualitative empirical approach

adopted to link the debate on sustainable development with that on organisational change in SMEs using the example of small and medium-sized Austrian wineries. The wine industry of Austria was chosen as the empirical setting for the following reasons: First, the structure of the Austrian wine industry is characterised by a large number of small wineries. Second, the Austrian Wine Marketing Board (2011) has reported a dramatic shift within the wine industry, in that the number of small wineries has been shrinking rapidly since 2009. Therefore, a focus on ecopreneurship may be an important strategy for the remaining SMEs in the industry (Sawyer 2003; Cordano et al. 2010). Third, the Austrian wine industry has had a strong commitment to quality and sustainability since the wine scandal of 1985 when the collapse of the wine industry led to the enforcement of strict regulations on wine quality by the Austrian government. However, most sustainability approaches in the wine industry context concentrate on performance-related aspects of environmental practices related to water utilisation, chemicals and waste management, stakeholder-related aspects, or the motivational drivers for engaging in sustainability practices (e.g. Marshall et al. 2005; Gabzdylova et al. 2009), rather than highlighting the qualitative dynamics associated with implementing such environmental instruments and concepts in small and medium-sized wineries. Thus, within a Delphi study, 20 semi-structured face-to-face interviews with open-ended questions were conducted. Fifteen were with eight working owners of Austrian wineries, and five with other industry experts (three farmers, one brewer and one consultant). The aim of the interviews was to determine how the qualitative change process associated with a shift to sustainable development actually unfolds in SMEs. The audio transcripts of the interviews were analysed using a qualitative content analysis, following Layder (1998). The results are presented in Section 4 and discussed in Section 5 before conclusions are drawn in Section 6 and the final element is Section 7 presenting suggestions for further research.

The resulting analysis and assessment, in the form of a multi-layer process model, of the entrepreneurs' motives for engaging in sustainable development, the changeover processes, and the qualitative changes at the firm level associated with the implementation of innovative environmental practices should enable entrepreneurs to map out strategies for stimulating and supporting sustainable development in their SMEs.

2 Literature Review

2.1 Sustainability and SMEs

The Brundtland Commission described sustainability as meeting “the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987, p. 54). Following that, many researchers have focused on the basic linkages between overall economic behaviour, management and sustainability (e.g. Hall and Vredenburg 2003; Aragon-Correa and Sharma 2003; Arragon-Correa et al. 2008; Albertini 2013).

Two streams of research can be distinguished with regard to ecopreneurship (Kuckertz and Wagner 2010). Early literature often dealt exclusively with environmentally oriented entrepreneurship (e.g. Keogh and Polonsky 1998; Walley and Taylor 2002; Schaltegger 2002; Linnanen 2002; Schaper 2005; York and Venkatatraman 2010), and other contributions to the entrepreneurship field focus primarily on the social aspect of sustainable development (e.g. Borzaga and Solari 2001; Prahalad and Hammond 2002; Mair et al. 2005; Nicolls 2006; Zahra 2009).

One of the main thrusts in the literature is the development of a typology of ecopreneurs (Schaltegger 2002; de Bruin and Lewis 2005; Linnanen 2005), defined by Pastakia (1998, p. 157) as “a new breed of eco-conscious change agents who [...] attempt to popularise eco-friendly ideas and innovations either through the market or non-market routes”. However, there is little consensus on such a typology that would distinguish ecopreneurship from other forms of corporate environmental management activity, and also little distinction between the particular behaviours of SMEs and between the different types of SMEs. In fact, it is necessary to distinguish entrants that provide environmentally benign products and services using environmentally friendly processes from the inception of their business operations, from incumbent SMEs that become more environmentally concerned by increments (Isaak 1999, 2002; Holt 2011).

Those SMEs that try to become more sustainable find their conventional operations fundamentally challenged as processes, products and services need to be reinvented, basic values and knowledge systems need to be adapted, and external and internal communication strategies need to be

revised (Siebenhüner and Arnold 2007; Klewitz and Hansen 2014). Thus, the triple-bottom-line approach (Elkington 1997; Bowden et al. 2001) sees all members of an organisation as motivated and aware of the need to view sustainability as equally important to environmental and economic performance. In a similar vein, debates on corporate sustainability (van Marrewijk and Hardjono 2003; van Marrewijk and Werre 2003; Martinuzzi and Krumay 2013) and the sustainable firm, emphasise the unprecedented and “complete redesign of organizations and strategies” (Shrivastava and Hart 1995, p. 157). However, empirical research has struggled to keep pace with these conceptual advances (Schaper 2002; de Matos and Clegg 2013). Likewise, the literature on environmental and sustainability management for the most part neglects the role of qualitative changes made at the firm level (e.g., mission, structure, culture) in the course of implementing new environmental practices (Müller and Siebenhüner 2007; Siebenhüner and Arnold 2007), especially in relation to SMEs (Klewitz and Hansen 2014).

Nevertheless, given that SMEs contribute to economic development by virtue of their sheer number and increasing share of employment and gross domestic product (Van Gils 2005; Brammer et al. 2012), there is a growing concern over the need to identify and understand the business case for ecopreneurship (Schaltegger et al. 2012). In line with this, Lee (2009) emphasises that, in order “to promote SME investments in sustainable business practice” (p. 1106), it is essential to identify and understand how SMEs “change through a process of adopting and implementing sustainability internally and externally” (p. 1105).

2.2 Organisational Change and SMEs

Consequently, it would be beneficial to understand how sustainability-related change unfolds in SMEs (Hind et al. 2013). With regard to change in general, it is assumed that SMEs have several characteristics that counteract their efforts to become more sustainable (Jennings and Beaver 1997; Hamann et al. 2009). For example, it is widely recognised that SMEs often lack the resources, in terms of money, time and human capital (Van Gils 2005; Bos-Brouwers 2010), to make the desirable sustainability-related changes within their organisations (Lee 2008). In particular, they lack the

knowledge, skills, and expertise to pursue the long-term strategic change necessary to drive sustainability (Lavery 2004), owing to their often adopting a firefighting management style (Ates and Bititci 2011). In addition, change within SMEs is considered to be managed in a highly personalised way, as the vision, mission and goals of the organisation are strongly influenced by the intentions and behaviours of the business owner (Beaver and Prince 2004; Moore and Manring 2009). As a consequence, change in SMEs is often seen as implicit (Bergman et al. 2006), or even as “a process distinguished by reactive, short-term oriented, incremental behaviour” (Ates and Bititci 2011, p. 5603).

However, given the increasing customer pressure for SMEs to embrace environmental sustainability (Miles and Covin 2000; Masurel 2007; Williams and Schaefer 2013), and the need for innovative responses and new product development (Hanna and Walsh 2002), sustainability-related change in SMEs is required in order to sustain competitiveness (Zhang et al. 2006; Klewitz and Hansen 2014).

Two types of change can be differentiated that can be synthesised into a third type, that is, the process view. Whereas planned change is intended rather than implemented on impulse (Lewin 1951), emergent change is complex and continuous, resulting from opportunities and threats that arise. The process view of change incorporates the characteristics of both the planned and emergent change perspectives, and suggests that there is “a purposeful (i.e. planned or intended) set of activities in change projects that leads [...] the content of change to emerge” (Ates and Bititci 2011, p. 5605; see also Pettigrew and Whipp 1993). Since the objective of this article is to explore how qualitative changes associated with sustainable development actually unfold in SMEs, clearly a process approach to studying change is appropriate.

However, the literature on organisational change (e.g., Argyris 1993; Weick and Quinn 1999), does not offer any research with an incontrovertible focus on sustainability-related change processes. Very few contributions directly address subcategories of this phenomenon like culture (e.g. Harris and Crane 2002; Howard-Grenville 2006). While a range of studies examine organisational change processes regarding technological and market-oriented innovations, environmental and/or

sustainability-oriented change processes have only rarely been the focus of empirical studies in general (Siebenhüner and Arnold 2007), and still less so in relation to SMEs (Lee 2009; Hind et al. 2013).

Generally speaking, this raises the importance of a process-based analysis of the qualitative changes in SMEs associated with a shift to sustainable development. The basis for the analysis is the application of Lewin's (1951) influential concept of change, which differentiates between the *unfreeze*, *change*, and *refreeze* processes. The unfreezing of the equilibrium (=status quo) can be understood as preparing for the required change. This can be accomplished by (1) increasing driving forces, which are those forces that direct behaviour away from the status quo, (2) decreasing restraining forces, which are those forces that hinder movement away from the existing equilibrium, or (3) combining the two approaches. Thus, unfreezing involves recognising the need for change, identifying what changes need to be made within the organisation, and preparing for the change by increasing driving forces and/or decreasing forces of resistance. The change itself is implemented in the course of the change process. Here, through changes to the organisation's resource base, organisational structure (e.g. the chain of command or formalisation) and organisational processes, new values, attitudes and behaviours are developed. This occurs through an iterative learning process in which options are identified, selected, implemented and evaluated by trial and error (Lewin 1951; see also Ates and Bititci 2011). In the course of refreezing, change must become embedded in the organisation so that it can be sustained over time. If it is not, members of the organisation will revert to the old equilibrium state, doing things as they did in the past. The objective here is therefore to stabilise the new situation by reinforcing new behaviours. Within the present study, these three sub-processes of change provide the structure for systematising ecopreneurs' responses to the qualitative dynamics associated with implementing environmental instruments and concepts in SMEs.

3 Method

3.1 Delphi Method

The Delphi method refers to a structured research process systematically combining expert knowledge and opinion through several iterations of feedback to arrive at an informed group consensus on a complex problem (Weber and Ladkin 2003; Donohoe and Needham 2009). Originally invented in the course of an American Air Force-sponsored RAND Corporation study in the 1950s intended to predict military interventions, the Delphi method has been widely applied in management areas including forecasting, public policy analysis, and project planning (Chang and Wang 2006; Chen and Hsieh 2012), leading to various modifications of the original technique (see Gupta and Clarke 1996 for an excellent historical overview of the method).

The benefits and drawbacks of the Delphi method have been extensively discussed in the literature. Delphi advocates argue that the technique allows for a repeated inclusion of experts in diverse geographic locations and with a range of areas of expertise (Okoli and Pawlowski 2004; Czinkota and Ronkainen 2005). Additionally, its application enables the experts to be challenged indirectly (Donohoe and Needham 2009). According to Dalkey and Helmer (1963), who first developed the Delphi method for corporations, controlled interaction as a main characteristic appears to be more conducive to and aid the gradual formation of a considered problem. In fact, the Delphi method is well suited for addressing emerging issues and complex problems such as sustainable development, climate change and cultural sensitivity (Miller 2001; Donohoe and Needham 2007). Opponents of the Delphi method have criticised the sampling and use of experts. They argue that there is a clear potential for bias in the selection as the exact composition of the panel can affect the results obtained (Keeney et al. 2001; Donohoe and Needham 2009). Another problem is reflected in the unclear definition of consensus and the optimum number of iterations (Hasson et al. 2000). Finally, attrition or low response rates due to the long temporal commitment may lead to biased outcomes and conclusions (for a comprehensive discussion of the pros and cons of the Delphi method see, Donohoe and Needham 2009).

Since the Delphi method has been applied to a variety of research contexts because it is structured to be an inclusive, flexible and reflexive process that facilitates (but does not force) consensus (Donohoe and Needham 2009), specific guidelines have been suggested for conducting and presenting this iterative technique (Crisp et al. 1997; Sumison 1998; Hasson et al. 2000):

- i. It is suggested a panel of between 8 and 16 experts is selected.
- ii. Experts from different areas should be included on the panel.
- iii. The Delphi process should start with an initial interview guide (round 1) which acts as an idea generating strategy.
- iv. Propositions should be developed after round 1.
- v. Two or three rounds of iterations, that is, sequential questionnaires interspersed with controlled feedback and the interpretation of the expert opinion, are recommended. The number of iterations is based on the consensus of the experts.
- vi. The response rate over all iterations should be more than 70 per cent.
- vii. The results of each iteration should be reported separately.
- viii. Graphical representation and textual presentation should be used for reporting the results.

3.2 Justification of the Delphi Method

For this study, the Delphi method was chosen as research method for the following reasons:

- i. This study's research question ("How does the qualitative change process associated with a shift to sustainable development unfold in SMEs?") is explorative in nature. Therefore, qualitative methods are most suitable to answer the research question properly.
- ii. Consensus methods such as the Delphi technique have been recommended for theory development and answering research questions with limited theoretical knowledge (Hasson et al. 2000). The results of our literature review suggest that the findings on qualitative changes induced by a shift to sustainability in the SME context are still scarce, motivating the choice of a consensus method.
- iii. The Delphi method is a well-established qualitative consensus technique that is "used to address complexity and uncertainty in an area where knowledge is imperfect, where there are no correct answers or hard facts, and consensus of expert opinion is considered an acceptable second choice" (Donohoe and Needham 2009, p. 417). It is in this context that Kaynak and Macauley (1984, p. 90) spoke of the Delphi as "a unique method of eliciting and refining

group judgement based on the rationale that a group of experts is better than one expert when exact knowledge is not available". Hence, the explorative nature of this study justifies the choice of the Delphi method. The choice has the additional purpose of encouraging the discussion of different viewpoints on sustainability-related change processes in SMEs.

- iv. The Delphi method's main advantage is that it allows individuals to deal with a complex group problem (Okoli and Pawlowski 2004). Organisational changes in general and sustainability-related changes in particular are highly complex processes. Many of the organisation's stakeholders and organisational dimensions are likely to be affected by such change processes. Again, the integration of different viewpoints is crucial to this study.
- v. Qualitative approaches such as the Delphi method deal with a low number of study participants. The overall population of respondents in our study (sustainable wine growers in Austria) is relatively small. This makes a quantitative approach almost impossible.

Two rounds of iteration were used for data collection. Semi-structured interviews were used in both iterations. This specific design has been applied successfully in various scientific disciplines such as management, marketing, and international business (e.g. Melnyk et al. 2009; Korten et al. 2010) and has been successfully utilised for developing sustainability-related concepts and frameworks (Donohoe and Needham 2009).

3.3 Participants and Data Collection

The unit of analysis is small and medium-sized wineries that have undertaken the process of sustainable organisational change. As the selection of experts has been labelled a critical success factor in Delphi studies, it was necessary for the participants to understand the research issues and for them to represent a range of views. Therefore, the following selection criteria were applied:

- i. The participant had to be the working owner (or chief executive) of an SME.
- ii. The enterprise in question had to have made serious efforts to become sustainable (as exemplified by investments or certification).
- iii. The sustainability-related change process must have started at least three years earlier.

A stratified sampling approach was used in order to recruit participants. First, the wine-growing region of Lower Austria was selected. Lower Austria is popular for its high-quality wine (certified by the Austrian Wine Marketing Board). It covers half of the total wine-growing area in Austria in terms of vineyard acreage. Second, wineries in the area of Lower Austria were selected based on the above criteria. A list of wineries was used to select and contact the respondents. For validation purposes, five additional interviews were conducted in iteration one (three farmers, one beer maker and one sustainability consultant). Table 1 offers an overview of the characteristics of all the Delphi participants and their wineries.

Table 1: List of Delphi Participants

Participant	Role	Industry	Sales (€)	Employees	Yearof Change	Iteration1	Iteration2
R1	Business Owner	Wine	3 million	20	2005	✓	✓
R2	Business Owner	Wine	NA	5	2005	✓	✓
R3	Business Owner	Wine	4 million	23	2006	✓	✓
R4	Business Owner	Wine	2 million	15	2006	✓	✓
R5	Business Owner	Wine	600.000	3	2008	✓	✓
R6	Business Owner	Wine	NA	NA	2006	✓	✓
R7	Business Owner	Wine	NA	NA	2002	✓	✓
R8	Business Owner	Wine	NA	12	2004	✓	
R9	Chief Executive	Farmer	NA	NA	1989	✓	
R10	Chief Executive	Farmer	NA	3	2007	✓	
R11	Business Owner	Farmer	NA	NA	2010	✓	
R12	Chief Executive	Beer	21 million	100	2004	✓	
R13	Expert	Consulting	NA	NA	NA	✓	

Note: All business owners are working owners.

In December 2012, the first iteration of interviews was carried out with 13 participants. These interviews were conducted by well-trained interviewers (not the authors). The length of those interviews ranged between 45 and 90 minutes. The trained interviewers audio-recorded and transcribed all of their interviews.

The Delphi method commenced with an open-ended questionnaire asking the 13 participants about the drivers, organisational redesigns, challenges, and environments of sustainability-related organisational change. In total, 30 questions were asked. Additionally, the participants were asked to explain and discuss the change process in detail. Finally, the participants were encouraged to explain their future sustainability plans. The interview guide of iteration one is shown in Appendix B.

Then, in a second iteration of interviews, in December 2013, the main results of the first round were presented to all the wine growers, again by well-trained interviewers (and again not the authors). Unfortunately, only seven interviews could be carried out since one interviewee from the first iteration declined to participate in the second. The interviewees were encouraged to comment on the findings and share their opinions again. The lengths of these interviews ranged between 30 and 60 minutes. The interview guide for the second iteration consisted of ten main questions and more than 20 probing questions. The trained interviewers again audio-recorded and transcribed all of the interviews. The interview guide of iteration two is shown in Appendix C.

3.4 Analysis and Interpretation

As stated above, all transcripts were audio-recorded and transcribed by trained interviewers who were not the authors. Two authors coded the transcripts and all authors were involved in analysing and interpreting the data. NVivo10 software was used for coding, paraphrasing, reducing and generalising the data. The entire process of coding and analysis was based on the seminal work of Lang et al. (2014). An example of the coding process is given in Appendix A. More details are available from the authors on request.

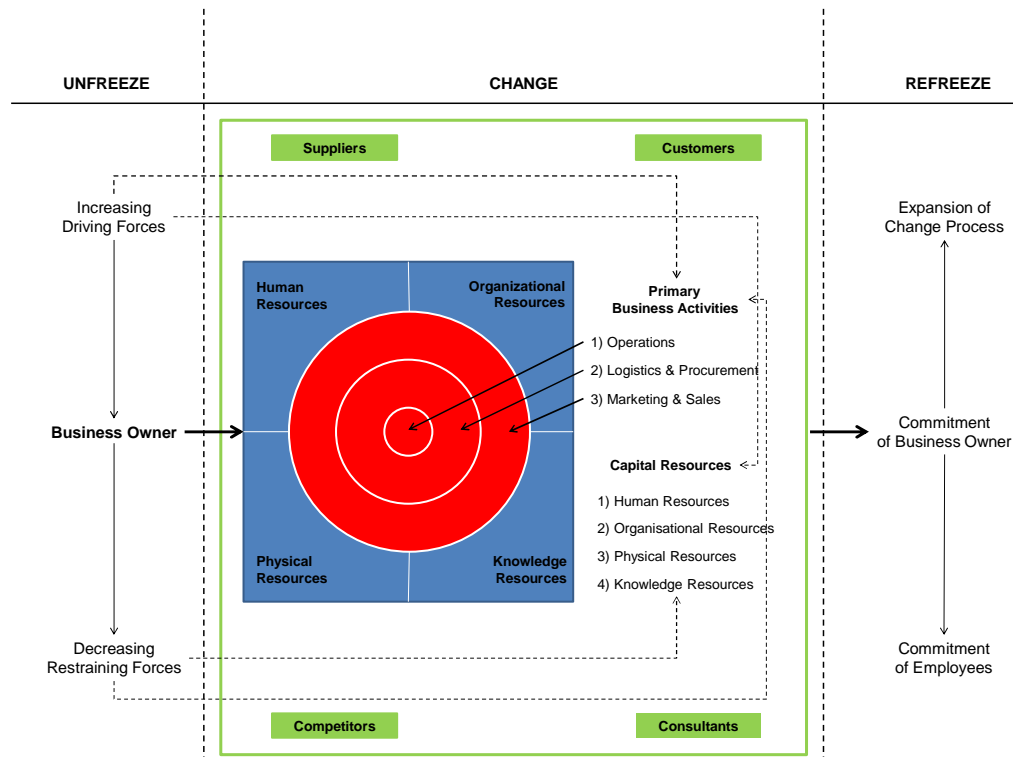
The process of coding and interpretation was theoretically embedded into adaptive theory. Adaptive theory was developed by Layder (1998) and uses both inductive and deductive elements for the development of theory. Adaptive theory assumes that the social world is complex and multi-faceted. It focuses on the multiple interconnections and relationships of individuals, activities, and organisations. The theory is characterised by the integration of influences from extant theories and empirical data (Layder 1998). It overcomes the limitations of the simple black-and-white perspectives used in both deductive and inductive theories and approaches, and has been named one of the most influential theories in qualitative research (Silver and Lewins 2014). In this regard, abductive coding is seen as a guiding principle of empirically-based theory construction and integrates data and theory in the coding process (Timmermanns and Tavory 2012). In this study, the theoretical framework of

Lewin (1951), the interview guide and the interview transcripts have been integrated into the coding process.

4 Findings

The results of the Delphi study are summarised in Figure 1. The process model of organisational change induced by a shift to sustainability will be discussed below, following the theoretical framework of Lewin (1951). In other words, the process model can be grouped into three stages: unfreezing, changing, and refreezing. With regard to the change stage, the process model consists of three different layers: primary business activities, capital resources, and stakeholders. In order to ensure the traceability of the empirical findings, the results of the empirical analysis are linked to statements made by the interviewees.

Figure 1: Process Model of Sustainable Organisational Change



Note: The first layer (primary business activities) is represented by red circles. The second layer (capital resources) is represented by the blue square. The third layer (stakeholders) is represented by the green rectangle.

4.1 Unfreezing

The first stage of the sustainability-related organisational change process, that is, the preparation for the change, consists of increasing the following *driving forces* and decreasing the following *restraining forces*:

The most frequent driving force behind the organisational change is a *strong and comprehensive positive attitude towards sustainability* held by the business owner (and his/her family in the case of family businesses). The majority of the interviewees also emphasised the importance of environmental protection in the primary sector in general, and in the wine industry in particular. Nevertheless, the business owners (and their families) influence the sustainability-related processes of qualitative change with their *vision of a sustainable business*, for the most part. This is reflected in the following statement:

Yes, as a matter of principle, we want to shift the business to sustainable methods, preferably organic, because we have the aim of declaring that the wine is produced that way, that we conduct ecological measures, that we work ecologically sustainably [...].

A related driver that directs behaviour away from the status quo is the goal of *increased quality of wine (production)*, which can be attained through organic production of wine (e.g. the decision to reduce or even avoid artificial fertilisers, and adopt manual harvesting of the grapes). Furthermore, *economic pressure* and substantial changes in the wine industry are seen as a major driver of the recognition of the need for organisational change, as one interviewee states:

[...] smaller businesses or wine producers in countries with smaller industries, as in Austria, will have, in the long run, no other choice than to focus on sustainable, high-quality products. The future lies in the manual growing methods, and manual work means producing in an ecologically sound way [...].

Scrutiny of the context of organisational change through a shift to sustainability identified two main *restraining forces that have to be decreased*: a lack of knowledge about changing to sustainability, and the resistance of (key) employees. Our interviewees had started the process of

organisational change several years earlier. At that time, *knowledge about the sustainable production of wine* was scarce. All the business owners reported that it was difficult to obtain useful information. As a result, in order to decrease this restraining force, some business owners had recruited external, international consultants, and/or built strategic alliances with competitors.

To overcome the second restraining factor, the *resistance of (key) employees*, the business owners had shared their visions and their knowledge with (key) employees and supervisors. The employees had also been sent to workshops and training sessions about sustainable production. The business owners reported positive outcomes from these workshops in terms of their employees' skills and attitudes to sustainability. In this context, some participants also reported that it would be necessary to dismiss employees if they did not develop a willingness and commitment towards the sustainable change process.

Whereas driving forces largely relate to recognising the need for change, thus affecting the vision, mission and goals of the business owner, it can be assumed that the perception of restraining forces enables the identification of the changes that need to be made within the organisation. It is through the increase in the driving forces and decrease in the restraining forces that the business owner prepares the organisation for the sustainability-related change (see Figure 1 and related arrows from and to the business owner).

4.2 Changing

The process of implementing the organisational change associated with sustainability is shown at the centre of Figure 1. Three different layers of the change process can be distinguished: (A) primary business activities, (B) capital resources, and (C) stakeholders. (A) *Primary business activities (the first layer)* are at the heart of the change implementation process. It starts with a (A1) change in *operations* (the production of wine), where in this case artificial fertilisers are replaced by organic ones. Moreover, the use of (B3) *machines* is reduced and the amount of manual work increases substantially. It is important to mention that this change in operations occurs through an iterative

learning process in which options are evaluated by trial and error. This is reflected in the following statement:

For we wine growers, this means that we have to rethink everything. There is no formula that you can apply. It is not the same every year. It is a continuous process of training, gaining experience and interpreting the knowledge gained throughout this process, correctly, and at the right moment, as well as applying it [...] in big steps – in fact, it is more like many small steps [...].

The (A) primary activity of wine production is strongly connected with all four (B) *capital resources (the second layer)*. As mentioned above, the wine growers have had to adapt their capital resources based on the revised sustainable production. In terms of (B1) *human resources*, employees had to be trained regarding new production techniques and additional workers had to be acquired. Additionally, *new management levels* or inter-organisational changes were necessary to deal with the increased level of planning and communication (B2) required. The change in (B4) *knowledge resources* was supported by (C) *external relationships (the third layer)* with (1) *competitors* (strategic alliances), (2) and universities, *consultants/experts* and a governing body called Demeter (*the third layer: stakeholders*). Again, this is an example of the interplay of all three layers and the complex process of organisational change required to target sustainability.

[...] it was also external. I was always in contact with professors at my university in Germany who really supported me with important information. I have also had the help of organic consultants who visited us regularly and accompanied us into the vineyards for inspections. My uncle has also been a strong resource. He is rather eco-obsessed and has supported me throughout in all aspects.

Following the change in (A1) *operations* (wine production), (A2) *logistics and procurement* (primary business activities) must be realigned and adapted according to the principles of sustainability. The wine growers reported that they had revised their (B2, B3) *transportation and storage systems* (the wine cellars). Moreover, (C3) *suppliers* had to be chosen carefully or sometimes existing ones had been replaced (e.g. those suppliers of artificial fertilisers). Again, the complexity and multi-layered process becomes evident. Based on the change in primary activities (logistics and

procurement), capital resources (e.g. organisational and physical resources) need to be adjusted, which in turn affects the third layer of the process model (stakeholders such as suppliers).

Finally, (A3) *marketing and sales* are affected by the organisational change towards sustainability. The entire change process only makes sense if the entire value chain is adapted and realigned. In other words, there must be a coherent strategy, from production through logistics to marketing and sales. The emphasis on the quality and sustainability of production makes a wide variety of marketing strategies possible, but also requires a thorough communication plan with regard to the (C4) sustainability-sensitive *customer*, as one interviewee states:

We have done our best to explain to our customers what we are all about. On the one hand, this is about sustainability. On the other hand, it's about our wish to be as individual as possible. But of course this has to be communicated [...] the more individual and extravagant a product is, the more one has to communicate with the customers. To some extent, the customers make the shift to sustainability together with us, because they say, we are interested in organic wines, and also possibly because we are not only searching for sustainability, but also for more individuality [...].

4.3 Refreezing

As in the unfreezing stage, the business owner plays a vital role in the last phase of the change process, during which the new situation is stabilised. All the business owners interviewed were highly committed to sustainability and the change process their businesses had undergone. This commitment was made up of visible outcomes (e.g. improvements in wine quality and increased sales) and invisible benefits such as emotional and social gratification. These outcomes and benefits were communicated continually to all employees so that the change would become embedded in the organisation through *employee commitment*. If new behaviours are not reinforced through staff appraisals and passing on direct customer feedback, employees tend to revert to the old state of equilibrium. One business owner summarised the effect of the change process on the employees as follows:

Even those employees who seemed rather ambivalent about our vision are now fully committed. This is evident when we hear positive feedback from our customers telling us how much they love the new wines. Suddenly our employees can really see that the path we chose was the right one.

Finally, all the interviewees reported that the change process was a long-term project or even one without end. All the primary and secondary activities of a company can be environmentally optimised (*expansion of the change process*). Future projects mentioned by the interviewees included solar technology, energy autarchy, packaging and ecological agriculture.

4.4 Validation Check and Iteration Two

Five interviews were conducted with non-winegrowers in order to validate and contrast the results (please refer back to Table 1 for an overview). The interpretation of these interviews suggests the multi-layer process model could be generalised to other industries. All participants confirmed the hierarchy of primary business activities, the changes to capital resources, and the need for the integration of stakeholders. In contrast to the interviewed wine growers, though, the farmers also highlighted economic reasons for initiating the change process.

A second iteration of interviews was conducted to validate the results (and the model). The second round of data collection was limited to wine growers only, who were presented with the results of iteration one and asked explicitly whether they agreed or disagreed with a defined set of propositions (see Appendix C). The response was a resounding endorsement of the formulated propositions, as all seven interviewees agreed with all the statements without reservation.

5 Discussion

This paper addresses two issues of fundamental importance for the management practice of SMEs and related academic research: First, the concept of sustainable development has come to be discussed as a potential panacea for SMEs facing an increasingly competitive landscape. Second,

organisational change is analysed as a complex and risky process for SMEs and their stakeholders. Interestingly, it shows that major gaps remain in the knowledge of how sustainability-related organisational change processes actually unfold in SMEs. To close this gap, the qualitative change that takes place in small and medium-sized wineries striving for sustainability was analysed using the Delphi method.

The findings of the current study align with previous research (Beaver and Prince 2004; Ates and Bititci 2011; Williams and Schaefer 2013) in that they underline the paramount importance of business owners to the sustainable development of SMEs. Without the entrepreneurial mindset and commitment of business owners (driving forces), preparing for sustainable change – or *unfreezing* the equilibrium – would be inconceivable. On the one hand, business owners are motivated by a more or less precise sustainability-related vision for their winery, while on the other hand they are striving to improve the strategic position of their organisations through individualisation, improvements in product quality and cost structure, and adjustments to meet changing consumer needs. Hence, considering the increasing number of small and medium-sized Austrian wineries under financial pressure, the transformation towards sustainability is not only a question of altruistic conviction, but also an attempt to exploit a profitable gap in the market. Interestingly, the heuristic that sustainability leads (at least in the long term) to competitive advantages and business success was broadly accepted by the business owners in our study; whereas respondents in other studies have indicated that they do not believe that customers can be won or costs reduced through sustainability-related organisational change (e.g. Revell and Blackburn 2007). Further research is required to evaluate the success rate of such transformations and their lasting impact on SMEs.

To facilitate sustainability-related change, business owners must instil a sense of urgency (by decreasing restraining forces) in their colleagues, employees and often their families (Birkeland 2002; Siebenhüner and Arnold 2007; Hind et al. 2013). Failure to do so might encourage the tendency to revert to the status quo or remain in the comfort zone (Kotter 1995). This study shows that sustainability-related organisational change is clearly a team project. Sustainable transition is resource-intensive and includes investment not only in the training of employees and the business owner, but also in machinery, external consulting, etc. It therefore involves considerable risk for all parties

involved. To reduce potential resistance, business owners need to consider and address this issue, convey to the relevant parties both the individual and organisational opportunities relating to the change process, and anticipate existing or potential crises (Kotter 1995). Dealing with the last aspect may require assistance from a consultant. Moreover, launching the sustainability-oriented transformation and instilling a sense of urgency will not be sufficient to unfreeze the equilibrium. To be successful, organisations will need to repeatedly support the process and recall their vision for the future if they are to counter the emergence of restraining forces, such as the resistance of employees.

The findings of this study clearly confirm that sustainability-related change in SMEs cannot be superficial and must embrace the whole organisation (van Marrewijk and Hardjono 2003; Martinuzzi and Krumay 2013). This study also shows that primary business activities are at the core of organisational *change*. This seems to be true both when the organisation is performing well, and when it is coming under economic pressure. In the former situation, adjustments of operations, logistics or marketing imply changes in previously successful activities, increasing the potential for resistance. A lack of resources can hinder the transformation of primary activities and further increase uncertainty. In that case, the conviction of the ecopreneur may be tested, particularly in the case of unanticipated setbacks to the change process. To address this issue, a tactic of seizing on quick-wins (e.g. the first self-made organic vintage wine) early in the change process – one adopted by very few ecopreneurs interviewed – would seem useful and promising (see also Kotter 1995).

Alterations at the level of primary business activities have a direct influence on capital resources (Barney 1991) such as human, organisational, physical, and knowledge resources. For example, organisations will need to rethink their human resources approach and style of management, particularly if they have tended to adopt a firefighting management style (Ates and Bititci 2011). Changes at this level are particularly difficult for SMEs owing to their lack of resources (Van Gils 2005; Lee 2008; Hamann et al. 2009). Related to that, new concepts for marketing and sales will require SMEs and their owners to change their communication strategies. In our context, for example, small business owners in the wine industry are often not used to communicating proactively with employees, suppliers, customers, and other stakeholders. Although most of these issues could be solved by bringing in external expertise, SME business owners are often uncomfortable with receiving

advice from consultants as they are used to being solely responsible for the operation. Nevertheless, a move from one stage to another involves serious adjustments to resources and requires acquiring additional knowledge and the adoption of new behavioural patterns on the part of the whole staff, including the business owner, especially with regard to managing stakeholder relationships.

Once sustainable processes have been implemented, business owners must strive to stabilise the new situation (*refreezing*). At this point, the inherent limitations of SMEs suddenly benefit the sustainable change process. The limited resources available to SMEs mean adjustments to infrastructure, operations, and human resources cannot be undone without major economic losses or even jeopardising the entire organisation. In other words, the decision to become a sustainable business is definite and forces ecopreneurs to persist in their attempts to overcome reoccurring problems and doubts. The (usually) low number of employees in SMEs facilitates communication, and should help business owners to motivate, control, and expand the change process. For this reason, employees should revert less readily to former habits, and become accustomed to new behaviours quickly, just as long as the business owner sets an example. Consequently, most of the business owners interviewed in this research did not regret taking their steps towards sustainability, but stated that sustainable change was an ongoing process.

6 Conclusions

Acquiring an in-depth understanding of the qualitative changes associated with a shift to sustainability in SMEs is important, not only from a scientific perspective but also from a practical one. Hence, this study makes the following contributions to existing knowledge.

First, the study applied Lewin's concept of change to the context of SMEs. As a result, it offers rare and systematic insights from a procedural point of view, and not only snapshots of specific isolated moments. This approach makes it possible to draw a differentiated picture of the transition within each individual organisation. It also provides a longitudinal perspective on sustainability-oriented change by analysing SMEs at two points in time. The approach permits the critical validation

of the study's findings and, even more importantly, observation of the changes at multiple levels (e.g. primary business activities and capital resources).

Second, because “a small business is not a little big business” (Welsh and White 1981, p. 18; see also, Tilley 2000), empirical insights drawn from change processes in big companies are not comparable to such ambitions in SMEs. This study contributes to existing knowledge by identifying the determinants of sustainable change in SMEs. Focusing on technical or market-oriented innovations, the existing literature emphasises differences between large enterprises and SMEs in terms of resources, knowledge, and skills (e.g. del Brío and Junquera 2003; for an overview see, Bos-Brouwers 2010). In addition, the current research identifies novel influencing factors and patterns of sustainability-oriented change, such as the vision of individual ecopreneurs, or the concerns of employees and particularly family members, which drive or hinder change in SMEs.

Third, national governments, universities and certification authorities are often uncertain of how best to support SMEs (Large 2011). Without knowledge of the qualitative changes in SMEs that are associated with the implementation of environmental practices, a successful form of support is impossible to achieve. Yet, finding a way to offer such support is of critical importance given the social and economic impact of SMEs, in addition to their environmental relevance (Lee 2009; Klewitz and Hansen 2014). This study provides informed guidelines for improving the management of sustainable change in SMEs (see Lee 2009), and addresses the critical moments at which the support or advice of external organisations is paramount.

Finally, as stated previously, the study reveals evidence of the exceptional role ecopreneurs play in change processes in SMEs. These ecopreneurs – usually business owners – initiate, motivate, manage and control change processes from beginning to end. Along with functional factors (e.g. increased product quality) and economic factors (e.g. higher revenues), emotional aspects (e.g. self-fulfilment) are particularly important drivers for them. The change from industrial to sustainable organisational processes gives the business owners additional impetus, as sustainability has altruistic and optimistic connotations. Hence, the multidimensionality and complexity of the factors underlying change processes in SMEs are revealed.

7 Limitations and Avenues for Further Research

Aside from the new and substantive learning derived from this study, there are some limitations indicating directions worthy of further research.

First, the explorative Delphi technique helped us to develop a rich understanding of the qualitative change processes associated with a shift to sustainable development in SMEs. However, the Delphi technique per se also carries specific weaknesses, in terms of the sampling procedure or the integration of experts that limit the generalisability of the findings to other industries and regional contexts. Consequently, future research could approach sustainable change processes (a) from a more quantitative perspective by increasing the sample size substantially, (b) by using robust and diverse quantitative measurement instruments and (c) adhering to quantitative quality criteria for empirical research.

Second, working business owners and chief executives were questioned in this study. Future studies might include the perspective of other stakeholders as well. The findings of this study lead the authors to recommend including suppliers and employees of SMEs that have recently undertaken a sustainable organisational change. The complexity and relevance of qualitative sustainable change in SMEs makes the integration of more heterogeneous stakeholders a necessity.

Third, all of the entrepreneurs included in this study were male. While this reflects the distribution of social roles in the area of farming, there being systematic differences associated with the implementation of new environmental practices in SMEs managed by men and those managed by women cannot be ruled out. Thus, a more gender-balanced approach is needed in future research to counteract this limitation and further improve the generalisability of our findings.

Fourth, the findings stem from only one industry, namely farming/wineries. On the one hand, focusing exclusively on this industry provided access to detailed knowledge, and hence facilitated an exhaustive analysis of the research problem. On the other hand, such a narrow focus limits the generalisability of the findings to other contexts. Thus, replicating this study in different industries and cultural backgrounds would help define the scope of the statements generated here and would help to

confirm their generalizability. Additionally, studies examining SMEs from other sectors (e.g. production or service sectors) might yield different results.

Fifth, the interview guidelines (i.e. the measurement instruments) used here represent an early attempt to capture the complex nature of sustainable change processes. Although the results clearly support the approach chosen, more sophisticated measurement instruments would be necessary to understand how qualitative change happens under diverse conditions and periods. In addition, efficacious measurement scales are necessary to delve into the complex dimensionality of the phenomenon. However, the methods and findings of this study provide a solid basis for future research on the topic.

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APPENDIX A

Business Activities	Operations (A1)	Logistics & Procurement (A2)	Marketing & Sales (A3)
Capital Resources			
Human Resources (B1)	<i>From the beginning, you have to get your staff on board with you. We sit down just like we did at school. Here they learn how to harvest the grapes, transport them to the cellar, and how musts differ in taste. Here they will also come to understand what it means to do biological work. (R1)</i>	<i>We certainly have a completely different team than we did a few years ago. Of course, a good number have stayed with us and continued following our vision. However, I also have completely new employees who are ready to become a part of the team. (R1)</i>	<i>Even those employees who seemed rather ambivalent about our vision are now fully committed. This is evident when we hear positive feedback from our customers (SH3) telling us how much they love the new wines. Suddenly our employees can really see that the path we chose was the right one. (R4)</i>
Organisational Resources (B2)	<i>To begin with, we had the initial production reorganised – the grapes and the cellar.</i>	<i>Structural organisational changes go hand in hand. We have tried to build in a certain middle management because I cannot do it all myself. I simply ask for people who are responsible. For example, we have a cellar master who, to a large extent, makes decisions independently. (R3)</i>	<i>...but we also restructured sales. For example, sales activities begin with packaging and distribution, which at the same time requires thought on how to get the product to the customer. Here we initiated huge changes regarding the organisational structure. (R8)</i>
Physical Resources (B3)	<i>I had to first develop a concept and then begin making my initial investments. I had to look at how many tractors and how much manpower I really had available to cover the entire vineyards in a short amount of time. (R2)</i>	<i>On one hand, I certainly made some savings, for example with material input. On the other hand, I made some massive investments, such as in the wine cellar reconstruction (SH1). (R5)</i>	<i>In the next few years, I am going to put a stronger emphasis on export. Up until now, we have stayed within Germany, but in the future I would like to expand to other countries. This also means that I am going to have to raise my marketing budget accordingly. (R7)</i>
Knowledge Resources (B4)	<i>I was always in contact with professors at my university in Germany who really supported me with important information. I have also had the help of organic consultants (SH4) who visited us regularly and accompanied us into the vineyards for inspections. My uncle has also been a solid resource. He is rather eco-obsessed and has supported me throughout on all aspects. Additionally, a friend of mine who is also a winegrower has shared his experience (SH2). (R3)</i>	<i>With organic wine-growing, I had to go through a certain rethinking process because I had to know exactly what I was going to need over the next year. For example, what would I need to do in the case of heavy rainfall? Or of too much sun? (R7)</i>	<i>We have done our best to explain to our customers (SH3) what we are all about. On the one hand, this is about sustainability. On the other hand, it's about our wish to be as individual as possible. But of course this has to be transported and communicated [...] the more individual and extravagant a product is, the more one has to communicate with the customers. (R4)</i>

Coding Scheme:

- R Respondent
- BA Business Activity (1 = Operations, 2 = Logistics & Procurement, 3 = Marketing & Sales)
- CR Capital Resources (1 = Human Resources, 2 = Organisational Resources, 3 = Physical Resources, 4 = Knowledge Resources)
- SH Stakeholders (1 = Supplier, 2 = Competitors, 3 = Customers, 4 = Consultants)

APPENDIX B – Interview Guide Iteration #1

GUIDELINES FOR THE INTERVIEW „CONVERTING TO SUSTAINABLE METHODS“

(italic type indicates possible use)

1. Welcome

2. Introduction

Before we begin the interview, I would like/*We would like* to introduce myself/*ourselves*. My name is /*Our names are* _____.

I am/*we are* interested in your reasons for converting to sustainable production/winegrowing/supply, how the conversion process ran out, and how the conversion has affected your company. *Due to the thorough nature of this topic, we are conducting the interview in pairs. We will alternate asking you questions and, at the same time, make sure we do not forget to cover any important points.*

With your permission, I would like to/*we would like to* record this conversation so that I/*we* can accurately transcribe the interview later without having only my/*our* memory/*memories* to rely on. **Naturally I will/*we will* handle all recorded material according to applicable data protection laws.** Under no circumstances will any of your personal information be shared or publicised.

In order to ensure that I/*we* cover every question and do not forget anything over the course of the interview, I have/*we have* developed a guide. It is possible that at some point during the interview you may encounter difficulty understanding a question or find that a question is not worded clearly. If this happens, please tell us right away. Finally, I /*we* would like to emphasise once again that **this interview is not concerned with the current media discussion on the issue of sustainable methods/sustainable business management; I/*we* am/*are* only concerned with your own personal perspective on this issue.**

Naturally, I would like to/*we would like to* thank you in advance for your willingness to talk with us today!

Interviewee:	Interview Time/Duration:
Age:	Place:
Gender: f <input type="checkbox"/> m <input type="checkbox"/>	Date:
	Interviewers:

3. Beginning the Interview

Background Questions for Interviewees/Co-workers

1. *What is your position at your company?*
2. *What tasks are you responsible for?*
3. *When did you start working at your company?*

Questions on Sustainability and Bio/Organic Products

4. *What is your personal opinion on the issues of sustainability and bio/organic products?*

4. Focus on Reasons for Conversion and Time Period

1. Why did you/your company switch to sustainable methods?
2. When did the thought occur to integrate the issues of sustainability and organic production into your company?
3. When did *you/your* company actually make the switch towards sustainability (*with a concentration on sustainable methods*) (Date)?
4. What were the driving forces?

5. Concentration on the Conversion Process

1. Please explain how the conversion process was implemented (in the respective divisions). What were the individual steps taken?
2. Which divisions (purchasing, production, commodity/services) has your company had converted to sustainable methods?
3. What challenges were you confronted with in the course of the conversion process?
4. *Who was responsible for the conversion process?*
5. Who was involved in the conversion process (*internally – which divisions/externally – advisors, suppliers, competitors, co-operation partners*)?
6. In what ways were employees brought into the process?
7. How long did the conversion process last?
8. How cost intensive was the conversion?

6. Focus on the Effects of the Conversion

1. In your opinion, how did the conversion to sustainable methods affect the company?
2. What effect did the conversion have on your company's mission (purpose/goal)?
3. What changes to goals/targets and strategies came out of the conversion?
4. What effect did the conversion have on your company's planning activities and politics (finances, personnel policy)?
5. How is your organisation structured? Were any structural changes made in comparison to the time before the conversion?
6. *What company divisions and departments were affected by the conversion?*
7. What effect did the conversion have on internal processes (operational procedure, planning and decision-making processes)?
8. How did the conversion affect your resources?
 - a. Which acquisitions needed to be made so that the company could continue to *produce/supply* sustainably?
 - b. To what extent have costs increased since the conversion (and in which departments)?
 - c. How did the conversion affect your company's success (turnover/sales, profit)?
 - d. How did the conversion affect the number of employees?
9. How have tasks, responsibilities and required skills changed for you and your co-workers?
10. What effect has the conversion had on your company culture?
 - a. To what extent have changes occurred in *your/your co-workers* values, attitudes and manner of conduct?
 - b. What values, attitudes and manners of conduct are present today, and how are they different to those present before the conversion?
11. *To what extent has the management style changed since the conversion?*
12. *How have roles and tasks changed since the conversion?*

13. Since converting to sustainable methods, how does your company deal with internal conflicts?
14. How have your co-workers responded to the conversion?
15. How did the external field (distributors, customers, competition) react to your company's conversion?
16. What effects could you still expect to observe?

7. Conclusion

1. If you could start over, would you convert to sustainable methods all over again?
2. What would you do differently?
3. What goals have you set in sustainability for the future?

Thank you for your interview!

8. Final Information

Founding Year:	Turnover:
Company Director:	Number of Employees:

APPENDIX C – Interview Guide Iteration #2

GUIDELINES FOR THE INTERVIEW „CONVERTING TO SUSTAINABLE METHODS“

(italic type indicates possible use)

(red indicates additional help with the question)

1. Welcome

2. Introduction

Before we begin the interview, I would like/*We would like* to introduce myself/*ourselves*. My name is /*Our names are* _____. I would like to/*we would like* to conduct an interview with you on the issue of “**Converting to Sustainable Methods within the Wine Industry.**”

We already talked with you regarding this topic one year ago. In this interview we are interested in any developments and changes that have occurred over the past year.

With your permission, I would like to/*we would like to* record this conversation so that I/*we* can accurately transcribe the interview later without having only my/*our* memory/*memories* to rely on. **Naturally I will/*we will* handle all recorded material according to applicable data protection laws.** Under no circumstances will any of your personal information be shared or publicised.

In order to ensure that I/*we* cover every question and do not forget anything over the course of the interview, I have/*we have* developed a guide. It is possible that at some point during the interview you may encounter difficulty understanding a question or find that a question is not worded clearly. If this happens, please tell us right away. Finally, I /*we* would like to emphasise once again that **this interview is not concerned with the current media discussion on the issue of sustainable methods/sustainable business management; I/*we am/are* only concerned with your own personal perspective on this issue.**

Naturally, I would like to/*we would like to* thank you in advance for your willingness to talk with us today!

Interviewee: Age: Gender: f <input type="checkbox"/> m <input type="checkbox"/>	Time of interview: Place: Date: Interviewer:
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3. Beginning the Interview

Background Questions for Interviewees (*only to be asked when interviewing different people from the same company*)

1. *What is your position at your company?*
2. *What tasks are you responsible for?*
3. *When did you start working at your company?*

Questions on Sustainability

4. Did your personal opinion regarding the issue of sustainability change in any way during the conversion process? *If yes, in what way?*

4. Focus on Reasons for Conversion and Responsibility

1. What were the reasons for converting to sustainable methods? Which of these were most important? (*better quality, higher revenue, competitive pressure, consumer demand, or self-interest*) **If questioned, please read each category individually!**
2. Which people/groups were involved in the conversion process?
 - a. *Who initiated the conversion?*
 - b. *Who was responsible for the conversion process?*
 - c. *Who was involved in the conversion process? (internally – which divisions/externally – advisors, suppliers, competitors, co-operation partners)*
 - d. *Was the staff brought into the decision-making process? Did they need to be persuaded?*

5. Concentration on the Conversion Process

1. Which divisions (purchasing, production, commodity/services) has your company had converted to sustainable methods? Which divisions have been converted during the last year?
2. Please explain how the conversion process was implemented. What were the individual steps in this process?

6. Focus on the Internal and External Effects of the Conversion

1. In your opinion, how did the conversion to sustainable methods impact the business? Which effects have arisen during the last year?
 - a. What effect did the conversion have on your company's mission (purpose/goal)?
 - b. Which company divisions and departments were affected by the conversion?
 - c. How is your organisation structured? Were any structural changes made in comparison to the time before the conversion?
 - d. What effect did the conversion have on internal processes (operational procedure, planning and decision processes)?
 - e. How did the conversion impact the staff? Have roles and tasks changed? Did the number of staff increase due to the conversion?
 - f. How has the conversion impacted your work climate? Were there any internal discussions or even conflicts? If yes, how were these conflicts resolved?
2. How did the external field (distributors, customers, competition) react to your company's conversion?
3. How did the conversion impact the company's financial situation?
 - a. Which acquisitions needed to be made so that the company could continue to *produce/procure* sustainably? Which of these occurred in the last year?
 - b. How did the conversion affect your turnover (in the last year)?
 - c. Would you say that the conversion has already redeemed itself/payed off? *If no, will it and when?*
4. Which effects could you still expect to observe?

7. Results of the First Wave of Interviews

As we have already mentioned, we conducted the first round of interviews last year. In connection with this, we would like to share with you some of the main ideas resulting out of that interview and invite you to comment on them. More specifically, we would like you to indicate whether these statements apply to your company and the conversion process it has undertaken. Whether the statements apply to your company or not, we would appreciate it if you could also give us a short explanation for your answer.

1. The initiative to convert to sustainable methods is strongly driven by the personal initiative and entrepreneurial spirit of the company's owner.
2. Because initiative came mainly from the company's owner, the staff needed to be convinced of the necessity for conversion during the process.
3. The conversion process ran in different phases. Mostly it began with production factors.
4. The conversion process included most, if not all of the company's divisions.
5. For a successful conversion process, it is necessary that external resources or advisors are included.
6. Conversion to sustainable methods is financially worthwhile.
7. The conversion to sustainable methods has both functional (better quality) and emotional (I feel better as an entrepreneur when I produce sustainably) advantages.

8. Conclusion

1. If you could start over, would you convert to sustainable methods all over again?
2. Which factors would you say are imperative for a successful conversion process?
3. What would you do differently?
4. What goals have you set in sustainability for the future?

Thank you for your interview!

8. Final Information

Founding Year:	Turnover:
Company Director:	Number of Employees: