

# Sustainable Development and Business Models of Entrepreneurs in the Organic Food Industry

Albert Jolink<sup>1</sup> and Eva Niesten<sup>2</sup>

<sup>1</sup>Rotterdam School of Management, Erasmus University, Rotterdam, The Netherlands

<sup>2</sup>Utrecht University – Copernicus Institute of Sustainable Development, Utrecht, The Netherlands

## ABSTRACT

The business case for a sustainable firm, in particular the business case for new entrepreneurial initiatives responding to environmental demands, is increasingly receiving attention from practitioners and scholars. This article contributes to existing literature on business models, sustainable development and entrepreneurship, by applying components of business models to the practices of entrepreneurs that have a goal of environmental sustainability and a focus on the mass market (i.e. ecopreneurs). We define the ecopreneurial business model and specify four varieties of this business model, which consist of different combinations of environmental scope and a focus on the mass market and profitability. The distinguishing factor of the ecopreneurial business model is that it transforms disvalue into value, thereby creating greater customer value for environmentally concerned consumers. The results are based on a substantial set of interviews among ecopreneurs in the organic food and beverage industry in the Netherlands.

Keywords: sustainable development; business models; business cases; entrepreneurs; value creation; value capture

## Introduction

The environmental concerns across the globe have set the urgency for companies to adjust their production and services in line with the demands for corporate responsibility. Although many have preached the people–planet–profit trinity, only a selection of entrepreneurs has managed to position these elements on the same positive scale. Making a profit out of environmental concerns is becoming a choice to marry planet and profit, and contributes to sustainability goals in society.

In the academic literature, the business case for a sustainable firm is increasingly becoming a subject of study, in particular for new entrepreneurial initiatives responding to social demands (see, e.g., Hockerts and Wüstenhagen, 2010; Moss et al., 2011; Schaltegger et al., 2012). The literature on sustainable entrepreneurship has focused on identifying the motivations that constrain and promote sustainable entrepreneurs (e.g. Kirkwood and Walton, 2010), and on suggesting typologies that define and categorize sustainable entrepreneurs (e.g. Schaltegger, 2002; Schaper, 2002; Walley and Taylor, 2002; Young and Tilley, 2006). As the opportunities in the green sector are still accumulating and entrepreneurial activities in this sector are also expanding, Shepherd and Patzelt (2011) call for a structured research agenda on sustainable entrepreneurship. Research should focus on the dual characteristic of sustainable entrepreneurship, and include both what needs to be sustained (e.g. the environment) and what needs to be developed (e.g. economic gains) (Shepherd and Patzelt, 2011). In other words, the study of sustainable entrepreneurs must illustrate the diverse priorities given to environmental issues and the market effect of the business (see, e.g., Schaltegger, 2002).

We respond to this call by identifying and exploring the business models of sustainable entrepreneurs. We argue that the identification of business models of sustainable entrepreneurs will reveal the dual identity, i.e. environmental priority and market effect, which supports the balancing act of planet and profit of sustainable entrepreneurship (Moss et al., 2011). Within the broader set of sustainable entrepreneurs, we focus on the ecopreneur, taking ecopreneurs to be the entrepreneurs who have a focus on the mass market but with a sustainable goal (Schaltegger, 2002). Our main question is how the specific relationship between sustainability and economic performance, which ecopreneurs attempt to foster, impacts on the specific business models of ecopreneurs, or, how ecopreneurs make their business models work.

This article contributes to the existing literature, by applying components of the business model (Morris et al., 2005; Zott et al., 2011) to ecopreneurial practices, and by specifying the ecopreneurial business model. We illustrate how the ecopreneurial business model can result in four different varieties of models through which ecopreneurs focus on both the mass market and on achieving a sustainable goal.

Transforming an industry is an important element of the vision of ecopreneurship. It is mainly through an exploration of the mechanisms creating ecopreneurial opportunities that we can convey the ways in which their business models contribute to the environmental concerns in society (Moss et al., 2011). By analyzing the ecopreneurial business model, this article also confronts traditional entrepreneurial business models with their underlying constructs: ecopreneurs do not take traditional business for granted, which is reflected in their business models and in their business cases for sustainability to environmentally concerned consumers (Cohen et al., 2008; Schaltegger et al., 2012).

In the next section, we will discuss sustainable entrepreneurship and focus on ecopreneurs. Based on the integrative framework on business models offered by Morris et al. (2005), we will develop the ecopreneurial business model. We will explain how ecopreneurs create and capture value, by replacing disvalue with value. In the section on method, we describe how the data were extracted from interviews with Dutch ecopreneurs in the organic food and beverage industry. In the section on results, we will categorize the Dutch ecopreneurs on the two scales of environmental effect and mass market effect, and identify four ecopreneurial business models for the Dutch ecopreneurial practices. In the final sections, we will note some of the limitations and practical implications of this study and conclude on how the ecopreneurial business model contributes to a more sustainable future.

## Entrepreneurs and Sustainability

In the early 1990s, environmental concerns were positively linked to entrepreneurial opportunities, and publications referred to 'environmental entrepreneurs', 'green entrepreneurs' and 'eco-entrepreneurs' involved in business activities (Bennett, 1991; Berle, 1991; Blue, 1990). The businesses identified in these publications included waste/recycling, natural/organic foods, greener products or technologies such as solar energy production. The history that emerges out of these businesses is a mixed story of business failure, limited survival, some growth and many mergers and acquisitions. Still, 60% of these businesses actually survived, and remained some- where scattered along the different life-cycle stages of their industry (Holt, 2011). The question of the reason for their survival remains unanswered. Had consumers taken an environmentally conscious turn or had green entrepreneurs identified an emerging environmental opportunity that offered a business model to earn money through environmental concerns? Quinn (1971) was an early adopter of the idea that sustainability could be a business opportunity. In his pioneering article 'Next big industry: environmental improvement', he argued that an 'ecology movement' could provide profitable new markets for business expansion rather than simply being a drain on economic activity. Since the 1970s, the green producers' movement as well as consumers' movement for green products and processes have sought to redefine the way business is further executed, often inspired by idealistic motives. These movements suggest a variety of initiatives of eco-conscious producers, consumers or concerned citizens to internalize, minimize, neutralize or anticipate on environmental externalities. As a result, a new type of good and service has been introduced that is eco-friendly (Pastakia, 1998) emerging out of the actions of a new breed of eco-conscious change agents who can be called 'ecological entrepreneurs'. Pastakia (1998) categorized these ecological entrepreneurs as 'individuals or institutions that attempt to popularize eco-friendly ideas and innovations'. Eco-friendliness was defined in terms of products or processes that are caring for ecosystems and meanwhile endeavor to generate positive externalities for the environment.

### *Sustainable Entrepreneurship*

In recent years the attention to sustainable development, on the one hand, and the mounting studies on entrepreneurship, on the other, have found common ground in sustainable entrepreneurship (Schaltegger and Wagner, 2011). Shepherd and Patzelt (2011) define sustainable entrepreneurs as entrepreneurs who aim to integrate both what needs to be sustained (nature, environment, communities) and what needs to be developed (economic gains and non-economic gains to individuals and society). Sustainability is, then, understood in the sense of the Brundtland Commission as 'development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs' (Brundtland, 1987). This integrated view can be described as sustainability- driven entrepreneurship, and is supported by recent empirical studies that demonstrate this growing movement of such entrepreneurs in practice (e.g. Cohen and Winn, 2007; Dean and McMullen, 2007; Dixon and Clifford, 2007; Schaltegger and Wagner, 2011).

The literature on sustainable entrepreneurship has shown at least two pathways. On the one hand researchers have focused on the identification of the motivations that constrain and promote sustainable entrepreneurs (e.g. Kirkwood and Walton, 2010), and on the other hand they have suggested frameworks that can be used to define, categorize and explain the notion of sustainable entrepreneurship in a generic sense (Shepherd and Patzelt, 2011). Typologies of sustainable entrepreneurs (e.g. Schaltegger, 2002; Schaper, 2002; Walley and Taylor, 2002; Young and Tilley, 2006) have been created in order to come to grips with the many-faceted groups of sustainable entrepreneurs. These pathways address the different aspects of sustainable entrepreneurship but also illustrate the academic evolution of identification, categorization, explanation and synthesis of a new and relevant phenomenon in entrepreneurship studies. So far, to our knowledge, the literature on business models for sustainable entrepreneurship has received little attention.

### *Ecopreneurship*

We define ecopreneurs as a subcategory of sustainable entrepreneurs. Ecopreneurs focus on the mass market with a sustainable goal, and they are profit oriented and environmentally concerned at the same time. Ecopreneurship is focused on the sustenance of nature and life support, in the interest of opportunities to foster future products, processes and services for economic gains to individuals and society. Ecopreneurship is not synonymous with sustainable entrepreneurship because it does not explicitly cover, for example, sustaining communities, and the development of non-economic gains for individuals and societies (Shepherd and Patzelt, 2011). Nor is ecopreneurship synonymous with social entrepreneurship, as it does not emphasize the contributions of entrepreneurship to a wider variety of societal problems, separate from the environmental

concerns of society (Shepherd and Patzelt, 2011). However, as other authors have recently observed (e.g. Schaltegger and Wagner, 2011), ecopreneurs have nevertheless felt the need to address the social, sustainable and institutional consequences of their efforts while stressing the environmental problems.

In an attempt to classify ecopreneurs, Isaak (2002) made a distinction between two types of ecopreneur: 'green businesses' and 'green-green businesses'. A 'green business' is a conventional business that has subsequently 'discovered the cost and innovation and marketing advantages, if not the ethical arguments, for "greening" their existing enterprise' (Isaak, 2002). The 'green-green business' category involves companies that are designed to be green from the start, in both their processes and products, and aim at transforming the sector towards a sustainable development. In this paper, the ecopreneurs are 'green-green businesses', as they are companies that are designed to be green from the start. Ecopreneurs are entrepreneurs who experience a constant tension between making profit and staying fully sustainable as companies (Dixon and Clifford, 2007). Some ecopreneurs may observe opportunities to improve and transform the industry by creating a sustainable company, but the short-term costs of creating a sustainable company could drive ecopreneurs away from their environmental goals (Pacheco et al., 2010). Making money may compete on an equal footing with solving environmental problems, but in most cases the ecopreneur will consider both goals as two sides of the same coin. Making money could therefore be both a means and an end. Consequently, ecopreneurs may initiate and design sustainable business models, which will trigger innovations and efficient use of resources in order to compete in the market (Porter and Van der Linde, 1995).

### *The Ecopreneurial Business Model*

Whereas most of the literature on sustainable entrepreneurship has focused on the identification of sustainable entrepreneurs, the ecopreneurial business model has received little attention. As Schaper (2010) has argued, adopting a sustainable business framework may create new opportunities for entrepreneurs, including the reconfiguration of existing business models. The question here addresses what this ecopreneurial business model may involve.

As Zott and Amit (2007) have argued for business models in general, the ecopreneurial business model would address the issues related to value creation and value capture by ecopreneurs. In this perspective, the ecopreneurial business model becomes the unit of analysis, indicating how business is done by the ecopreneur (Zott et al., 2011). Following Morris et al. (2005), we take a business model to be 'a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture, and economics are addressed to create a sustainable competitive advantage in defined markets'. It also answers the following basic questions that shape the business model (Morris et al., 2005). (a) How and for whom will the firm create value? (b) What is the firm's internal source of advantage and how will this provide the basis for its external positioning? (c) How will the firm make money, and how does this relate to the firm's scope and size and time ambitions?

(a) How and for whom will the firm create value? Value creation for consumers has long been recognized as an important driver for present and future purchase decisions and consumer behavior. In the case of ecopreneurs, value creation addresses what customers value, but also what customers do not value. The environmentally concerned consumers of food and beverages, for instance, do not value the use of pesticides in food, the creation of waste or the lack of environmental protection in the production of food and beverages (see, e.g., Lockie et al., 2002). These same consumers may also extend their concerns to social issues, such as health safety and value standards of animal welfare (see, e.g., Harper and Makatouni, 2002), only to illustrate how environmental concerns and social concerns can easily be blended (Schaltegger and Wagner, 2011). In this article we will restrict ourselves to the environmental concerns, and translate these into customer value.

Taking customer value created by firms as a concept that can be either positive or negative (Figure 1), we will assume that environmentally concerned consumers are able to distinguish between customer value and customer disvalue (or negative value) of an eco-product and a non-eco-product on the basis of the characteristics of the product itself and the related environmental characteristics. When applied to the food and beverage industry, this implies that these consumers may value non-organic food, but disvalue some of the characteristics of non-organic food (e.g. the use of pesticides in non-organic food or the creation of waste). Figure 1 offers a schematic representation of the two types of product, the non-eco-products and the eco-products, and illustrates the differences in value and disvalue between the two types of product, as perceived by environmentally concerned consumers. In the left column, the non-eco-product, consumers attribute a certain amount of value to the product itself, equal to the surface of the column above the line (solid area). They also attribute a certain amount of

disvalue to this non-eco-product equivalent to the surface of the left column below the line (dashed area). In the right column, the eco-product, consumers may attribute the same amount of value of a non-eco-product to a comparable eco-product for the consumption of the product itself (solid area). The consumers, however, will also value that the eco-product has lower or no negative environmental effects, and therefore does not offer any disvalue. The eco-product replaces the disvalue with value for the environmentally concerned consumer (dashed area: 'transformed disvalue into value'). When compared with a non-ecoproducer, the ecopreneur will create a higher customer value for the environmentally concerned consumers by offering at least an equivalent product but reducing some of the customer disvalue created by the non-ecoproducers (i.e. the use of pesticides or the creation of waste), and hence adding an additional amount of consumer value, possibly equivalent to the disvalue (i.e. by leaving out the pesticides or reducing waste).

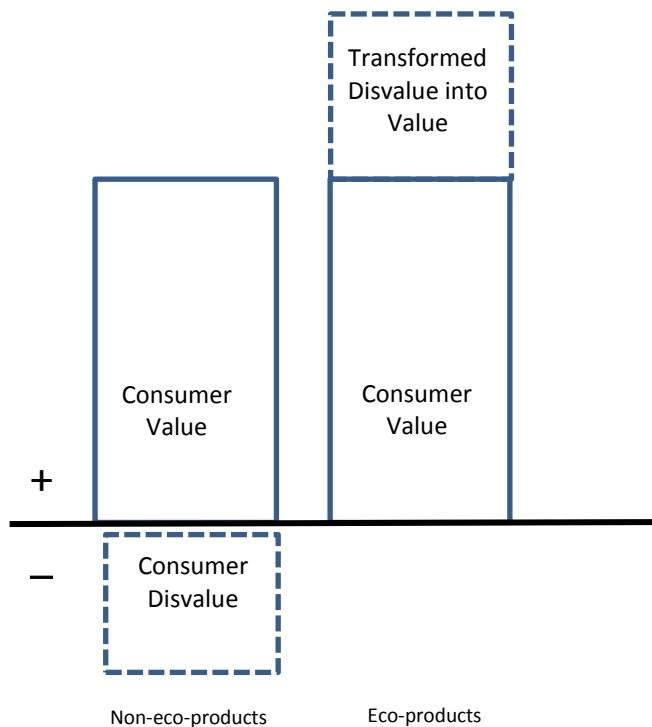


Figure 1. Schematic representation of replacing consumer disvalue by consumer value

Whether the customer's disvalue is real and absolute, or foisted and perceived, remains a question of debate, but leads in the differentiation of eco-products and non-eco-products to the dissociation of customer value and customer disvalue. We will assume that not all customers will experience the disvalue of the non-eco-products to the same degree: some customers may have a larger environmental concern than other customers and may be convinced that eco-products may contribute more to their concern.

(b) What is the firm's internal source of advantage and how will this provide the basis for its external positioning? The ecopreneurs may address the customers' environmental concerns, in part, by their own environmental concerns, entrepreneurial conviction and societal ideologies, revealed by their ecopreneurial practices. As Keogh and Polonsky (1998) have argued, ecopreneurs need to possess certain (internal) commitments: affective commitment, involving the individual's emotional attachment to, identification with and involvement in supporting environmental concerns; continuance commitment, involving commitment based on the economic and social costs that the individual associates with disregarding environmental concerns, and normative commitment, involving the individual's sense of obligation to continue supporting environmental concerns. Kirkwood and Walton (2010) found that ecopreneurs have comparable motivations to entrepreneurs in general, apart from their green motivations. In a study on Austrian, German and Swiss ecopreneurial firms, Petersen (2005) found a strong influence of 'credibility' and 'reputation of the company' on the firms' competitive strategies. These commitments and motivations are specific for ecopreneurs and contribute to the formation of communities of common interests (Torjusen et al., 2001), such as a community of eco producers and environmentally concerned consumers. The ecopreneurs may build on their commitment through their

networked connections of kindred ecopreneurs, including suppliers in the value chain of their products, which will contribute to what Morris et al. (2005) refer to as ‘a sustainable marketplace position’. The business model of ecopreneurs to replace disvalue by value is largely based on this strategic network (Gulati, 1998; Osterwalder et al., 2005; Zott et al., 2011), by recognizing and acknowledging the nature of the products of kindred ecopreneurs but also by the necessity to integrate these intermediate products into their own production process. In many countries, these networked connections are recognized by eco-labels or similar warrants of eco-certification. These certificates are subsequently integrated into the branding of the eco-products. The eco-certification also partitions the market into eco-products and non-eco-products, and facilitates ecopreneurs positioning themselves in the marketplace in which both products are offered. If, and when, the ecopreneur only competes with non-eco-products, the ecopreneur will capitalize on the disvalue created by the competitors. This implies that the ecopreneur will create a higher customer value (for the environmentally concerned consumers) than the producer of non-eco-products, replacing the disvalue by value.

In a dynamic context, the composition of the market for eco-products and non-eco-products may change, depending on (1) the ability of the ecopreneur to leverage the disvalue into value and (2) the composition of the consumers. In the first case, the ecopreneur will continue to replace disvalue by value as long as disvalue continues to exist; in the second case, consumers may or may not change their appreciation of eco-products and the share of environmentally concerned customers may therefore change. If, and when, all non-eco-products have been substituted by eco-products and the ecopreneur ends up competing with other ecopreneurs, the disvalue associated with the products of the competitors can be presumed to be absent and the market positioning of the ecopreneur will most likely be based on a cost-driven business model (Zott and Amit, 2007). In the end, ecopreneurs may even consider selling up to larger mainstream firms (Kearins and Collins, 2012).

(c) How will the firm make money, and how does this relate to the firm’s scope and size and time ambitions? The ability of the ecopreneurial business model to generate money will run parallel with the readiness of consumers to appreciate the replacement of disvalue by value. Ecopreneurs can thus capture value in the customer’s concern for environmental degradation. The degree to which the value capturing of the ecopreneurial business model is effective depends on what Morris et al. (2005) refer to as a firm’s ‘sustainable marketplace position’ and its ‘investment model’. The sustainable marketplace position is achieved by a firm’s commitment including its networked connections (see question b) and its business case. The business cases of ecopreneurs are restricted to those instances in which (i) the value proposition is profit oriented and environmentally concerned at the same time, and (ii) the environmentally-concerned effect is achieved by engaging in a profit-oriented activity (Schaltegger et al., 2012). A firm’s investment model takes a forward-looking perspective, and is determined by its scope and size and time ambitions (Morris et al., 2005). In the case of the ecopreneur, these scope and size and time ambitions vary in the environmental concern of the company and in the market effect of the business. We will define scope along the dimension of lower environmental concern versus higher environmental concern, and size and time ambitions along the dimension of a relatively small portion of the mass market versus a relatively large portion of the mass market that is achieved and pursued by the ecopreneurs.

## Method

Although ecopreneurs operate at every stage of the eco-supply chain, from farming to waste disposal, we have opted for those ecopreneurs that operate in the processing and retail of organic food and beverages (eco-products) in the Netherlands. On the basis of the definition of ecopreneurship presented above (ecopreneurship is focused on the sustenance of nature and life support, in the interest of opportunities to foster future products, processes and services for economic gains to individuals and society), we have selected a set of 23 ecopreneurs from three groups of entrepreneurs (Table 1): those who have been eco-certified by the Dutch government through the SKAL organization, those who have been funded by the Triodos Bank, as one of the main green funding organizations for eco producers in the Netherlands, and those who are neither eco-certified nor funded by Triodos Bank but have a clearly stated environmentally responsible policy<sup>1</sup>. The products they offer are quite diverse, and may range from bread to ice cream or from meat to fruit juices. To ensure that the sample has considerable variation (Eisenhardt and Graebner, 2007), the selection of ecopreneurs has also been based on differences in scope and size and time ambitions. In all cases, the ecopreneurs in the sample reported that they

---

<sup>1</sup> Out of the group of 23 ecopreneurs, 17 have been SKAL certified, 10 are financed by Triodos bank and 7 are both SKAL certified and financed by Triodos Bank. Three ecopreneurs are neither SKAL certified nor financed by Triodos Bank but have a clear statement on their environmental responsibility

generate new products, services, techniques and organizational modes that substantially reduce environmental degradation.

<b>Ecopreneur</b>	<b>Product</b>	<b>Certification</b>
1	Fruit juices	SKAL
2	Organic beverages	SKAL
3	Disposables	Environmental
4	Seasoning and condiments	SKAL
5	Food processing	SKAL
6	Trade in vegetables and fruit	SKAL
7	Food processing	Triodos
8	Trade in vegetables and fruit	SKAL/Triodos
9	Trade in vegetables and fruit	Environmental
10	Organic coffee	SKAL
11	Catering	Triodos
12	Trade in vegetables and fruit	SKAL
13	Bread production	SKAL
14	Meat processing	SKAL/Triodos
15	Wholesale in vegetables and fruit	SKAL/Triodos
16	Soy processing	SKAL/Triodos
17	Wholesale in vegetables and fruit	SKAL
18	Ice cream production	SKAL/Triodos
19	Processing of vegetables and fruit	SKAL/Triodos
20	Soups	SKAL/Triodos
21	Vegetarian products	Triodos
22	Wheatgrass	Environmental
23	Wholesale in organic groceries	SKAL

The data collection is based on multiple cases following the ‘sampling logic’ rather than the ‘replication logic’ (Yin, 2009). Following Eisenhardt (1989), the cases have been chosen to fill theoretical categories, rather than to obtain statistical evidence on the population, hence aiming for theoretical sampling rather than statistical sampling. Consequently, the multiple cases may illustrate an emergent theory.

The initial information was collected from reports, company websites and articles as a starting point. In the next step, the 23 semi-structured interviews were, in most cases, conducted with the owner of the company as respondent. The ecopreneurs were interviewed on their activities in the industry and the market and were asked to indicate their customer base. The data obtained through these interviews are qualitative and address the constructs that we mentioned above, and that typify ecopreneurs: perceptions on customer value; commitment; business cases; marketplace position; environmental scope, and size and time ambitions of the business. The perceptions of customer value were assessed on the basis of the characterization by the ecopreneurs of their customers. The questions on commitment also inquired into the networked connections of the ecopreneurs and how the commitment and connections relate to their competitive advantage. With respect to the business cases, we considered whether ecopreneurs view making money as a means or an end, and whether they aim to achieve

a new more sustainable world or improve the sustainability of the existing world. The marketplace position was based on whether firms indicated they were cost driven or differentiation driven (Zott et al., 2011). The environmental scope was assessed on the basis of the range of eco-products and services: the number of eco-products as part of the total range of products of the company (all to none). To gather information on size and time ambitions, the ecopreneurs were asked about their estimated market share and for their intentions to grow the business in the near future.

The interviews were subsequently coded in order to facilitate comparisons and to find a pattern or structure in the data. The data were triangulated by a variety of means (Eisenhardt, 1989; Strauss and Corbin, 1998; Yin, 2009). Data have also been gathered through visiting several of the selected companies, in order to obtain a deeper understanding of the companies' activities.

## Results

### *How and For Whom Will the Firm Create Value?*

The ecopreneurs in our sample are all focused on creating a more sustainable world, and on turning some of the disvalue in the food and beverage sector into value for consumers who wish to purchase their eco-products. What is also obvious from our interviews with the ecopreneurs is that they have to create value by balancing their sustainability ideals with running a viable business. A few ecopreneurs have therefore made the distinction between being entirely sustainable and acting in the most sustainable manner. Some ecopreneurs are convinced that it is impossible to be entirely sustainable. This is illustrated by the following quote of ecopreneur 20: 'life can never be fully sustainable otherwise we would not exist'. He wishes to become more sustainable but believes 'it is impossible to build an entirely sustainable factory that is profitable'. It is a continuous balancing act between the two, as illustrated by ecopreneur 13: 'it is impossible to fully implement my principles of sustainability, because for example our company vehicles cannot drive on electricity'. Nevertheless, he has the incentive to enforce sustainability aspects in the future. This suggests that ecopreneurs are continuously considering whether they choose to be profitable without acting in the most sustainable manner or being sustainable and possibly diminishing profit. This confirms what has been argued by Pacheco et al. (2010), that entrepreneurs can have the desire to improve the industry by creating a sustainable company, but the short-term costs of creating a sustainable company have restrained them. Ecopreneurs are not discouraged by undertaking a costly environmental initiative. It is, however, a balancing act between short-term economic objectives and long-term sustainability objectives to become and stay profitable.

### *What is the Firm's Internal Source of Advantage and How Will This Provide the Basis for its External Positioning?*

In order for ecopreneurs to replace some of the disvalue by value for consumers, they have to possess some commitment, involve their network of partner firms in the value chain and consider the most effective way of positioning their products in competition with other ecopreneurs and retailers of non-organic food and beverages.

### Commitment of Ecopreneurs

All ecopreneurs stated that what should be sustained is the environment. In several cases the ecopreneurs equated the environment with the ecosystem and the necessity to preserve natural resources. Some argued that sustaining the environment is related to, if not equated to, a healthy life. It has been argued that ecopreneurs mostly influence the company with their personal goals and preferences in such a way that these are reflected in the company's goals (Schaltegger, 2002). All ecopreneurs in our sample are strong believers in their own business concept and/or product(s) and in how to achieve their goals. They represent and shape the 'face' of their company. They believe that their company is an instrument in sustaining the environment, and that the company should be developed in order to sustain the environment. As ecopreneur 14 stated, 'it is our ambition to further preserve the eco-business which I consider as a personal challenge and I hope that I can make a valuable contribution to this'. It is also through the company that some ecopreneurs believe they can contribute to the future: 'Truly sustainable is having a long-term perspective; you're basically making a decision for the children of your grandchildren' (ecopreneur 2). Other ecopreneurs develop their business in order to show non-eco-firms that sustainable business can also be economically justifiable. As ecopreneur 2 argues, 'if you want to be sustainable, you must be profitable. Otherwise you run on grants and remain working in the non-profit sector'.



## Networked Connections and Eco-certification

The distinction between eco-products and non-eco-products in the Dutch food and beverage industry is regulated through eco-certification. When asked whether the range of products is eco-certified, several ecopreneurs indicated that they are not exclusively producing, selling or trading eco-certified products. In fact, a tension in offering fully certified eco-products was reported several times. One of the antecedents of this tension lies in the resources themselves, supplied by companies in the value chain. In spite of the regulations, ecopreneur 12 stated ‘the main bottlenecks in the organic supply chain are the resources. It is often hard to trace the resources and whether they meet the quality requirements’. The supply of resources is a process that a company to a certain extent can influence but never fully secure. As a result, it appeared that many ecopreneurs offer both eco-certified and non-eco-certified products. Another antecedent of the tension between eco-products and non-eco-products lies in the business of eco-products. Ecopreneur 17 is convinced that eco-products could never substitute the whole conventional food market, simply because it is impossible. He asserts that ‘if every product is grown organically, we would not have enough food’. The availability of eco-resources and the feasibility to produce fully certified products are also the drivers for these ecopreneurs. The ecopreneurs realize that their environmental concerns will ultimately have to be addressed. As ecopreneur 13 states, some of the resources in his production chain are not organically grown, and ‘I have asked if it is possible to grow these resources organically which is possible only if you order in large volumes, which we cannot’.

## Marketplace Positioning: Costs versus Differentiation

The ecopreneurs, addressing the mass market for eco-products, are well aware of the variety of consumers populating the extent of the sustainable food market. Ecopreneur 23, for instance, distinguishes between ‘dark’ green consumers and ‘light’ green consumers. The ‘dark’ green consumer is the one that often buys eco-products and substitutes conventional products for eco-products. The ‘light’ green consumer can be defined as the consumer who makes a comparative assessment between eco-products and non-eco-products and price is often considered as the most important factor in this assessment. As the ecopreneur proceeds to address the mass market for eco-products, the number of price-sensitive consumers tends to increase and setting the right price for the products becomes an issue. Several ecopreneurs argue that further growth of their company is required to address the price sensitivity of consumers, as is illustrated by ecopreneur 16: ‘the prices of our products are still high, hence expected further growth is expected to lead to economies of scale and lower consumer prices’.

The interviews have shown that Dutch ecopreneurs have divergent pricing strategies and can be divided into two broad groups. One group has a clear price strategy and makes a deliberate consideration when setting the price by comparing the existing market price of eco-products and conventional products. This is illustrated by the statement of ecopreneur 11, exploiting a highly competitive eco-label in supermarkets: ‘the price difference between conventional products and eco-products needs to be reduced’. Another large-scale ecopreneur, ecopreneur 23, indicates ‘we are trying to become more efficient in order to be able to reduce costs and subsequently lower our prices’. Ecopreneur 5 indicates that eco-products should be able to compete on quality, but also indicates that ‘we set the price based on its production costs however never above the market price of A-brands’. This group of ecopreneurs is gradually adapting to a cost-driven business model (Zott et al., 2011).

The other group determines the price based on their belief of what is ‘fair’. Complementing the consumers’ perspective on price fairness (Dekhili and Achabou, 2012), this group of specialized, smaller-scaled ecopreneurs is less convinced of the rightfulness of the market price. According to Dixon and Clifford (2007), the higher price of the eco-product is defensible, and when the consumers can be convinced of the greater environmental benefits and quality of the eco-product they are willing to pay for it. Still, marketing this quality is one of the main challenges of the Dutch ecopreneurs. For example, ecopreneur 14 says ‘it is difficult to explain why eco-products are more expensive, even though it has a reason’. Ecopreneur 13 asserts that ‘we do not have a special price strategy’ and he does not know what the prices of his competitors are. His eco-bread production attracts customers willing and, above all, able to pay the price. The ecopreneurs argue that their prices are ‘fair’ and therefore defensible. Ecopreneur 15 points out that ‘consumers favor “a good feeling” more than the price’, although he admits that they have to pay attention to the prices because competition is fierce. This group of ecopreneurs is still embedded into a differentiation-driven business model (Zott et al., 2011).

Although the majority of the ecopreneurs acknowledges consumer behavior, price elasticity and the degree of competition as factors influencing their price strategy, each ecopreneur will translate these factors to the

characteristics of their own product to establish their concern for both the environment and their economic ambitions.

*How Will the Firm Make Money, and How Does This Relate to the Entrepreneur's Scope and Size and Time Ambitions?*

Business Cases for Sustainability

Ecopreneurs can capture value in the customer's concern for environmental degradation through their business cases. The business cases of ecopreneurs must be profit oriented and environmentally concerned at the same time (Schaltegger et al., 2012). Linnanen's (2002) statement about ecopreneurs, 'making money and making the world better', is represented in a variety of ways by the Dutch ecopreneurs.

A first distinction that can be made among the Dutch ecopreneurs is between those who aim to 'make a better world' and those who aim to 'make the world better'. The first group of ecopreneurs has a clear vision of what is to be developed and has a precise end state in mind ('a better world'). These ecopreneurs are not only convinced that their envisaged world is better than the present world but also believe in their strict rules and practices to achieve this better world and they will never compromise. Although they may realize that a better world may not be achieved just by them, their main aim is to motivate others to adopt the same vision and to create a mass movement. Opposed to this first group, the second group of ecopreneurs aims for sustaining and possibly improving the present state of the world. This second group believes that 'life can never be fully sustainable' (ecopreneur 20), but replacing non-eco-products by eco-products may lead to a gradual process of improvements of the world. Hence, extending the consumer base to adopt eco-products may reduce the further degradation of the environment. These ecopreneurs may end up optimizing the eco-content in a value chain without ever attaining a fully eco-certified value chain.

A second distinction that can be made among Dutch ecopreneurs is between those who consider making money a means and those who consider making money an end. Although all ecopreneurs consider making money necessary for their business, the strategy of the first group of ecopreneurs is largely focused on sustaining the environmental concerns. The second group of ecopreneurs has a relatively strong inclination to develop economic profits for themselves. Out of these distinctions we can formulate four 'business cases for sustainability' (Schaltegger et al., 2012) encountered in our set of ecopreneurs (see Figure 2):

- (A) 'making money by making a better world'
- B) 'making money by making the world better'
- (C) 'making a better world by making money'
- (D) 'making the world better by making money'.

Business cases A and C have a strong emphasis on replacing disvalue by value. The ecopreneurs are addressing the customers with a strong environmental concern. Business cases B and D have a lower priority on environmental concerns and the firms combine eco-products and non-eco-products to address a larger customer base. Business cases A and B have a lower priority of reducing costs and prices, either because the firms believe they have a 'fair' price or because they are able to manage a portfolio of higher and lower priced products. Business cases C and D offer the customers their products at lower prices, mainly competing in the market with non-eco-products.

**Figure 2. Four ecopreneurial business cases for sustainability**

	Money as a means	Money as an end
State	<i>A: 'making money by making a better world'</i>	<i>C: 'making a better world by making money'</i>
Process	<i>B: 'making money by making the world better'</i>	<i>D: 'making the world better by making money'</i>

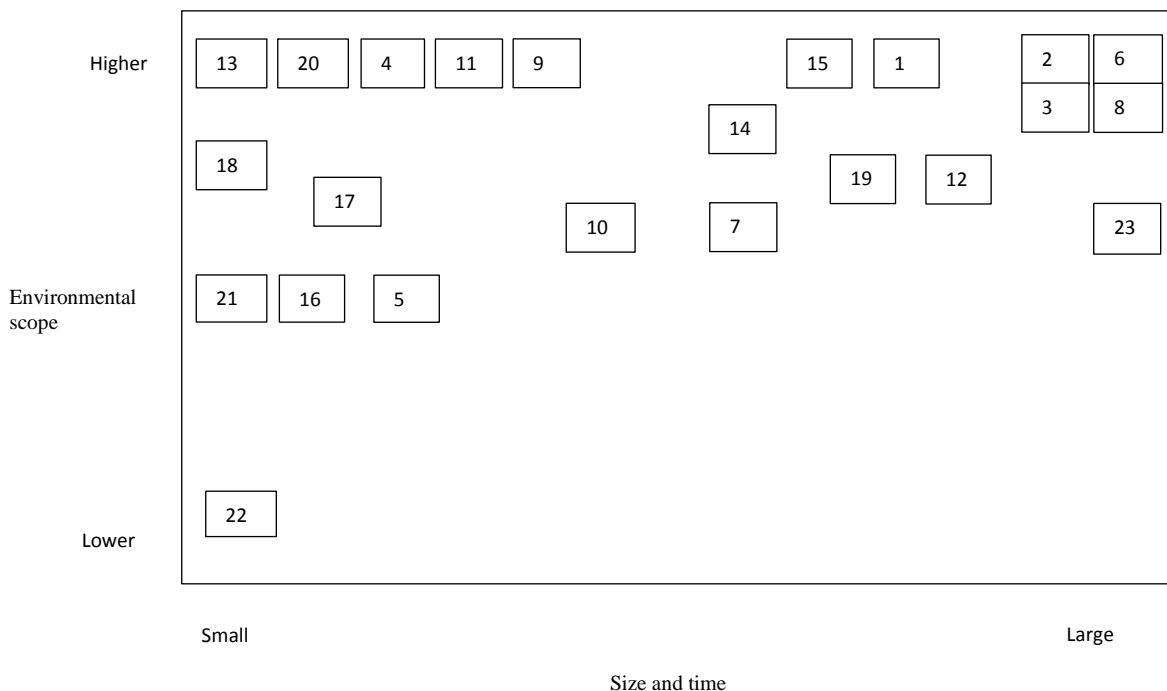
**Investment Model: Scope and Size and Time Ambitions**

The environmental scope of the ecopreneurs is conveyed by the number of eco-products as part of the total range of products of the company (low environmental concern versus high environmental concern). The size and time ambitions are illustrated by the estimated market share and the orientation to growth of ecopreneurs (relatively small portion of the mass market versus relatively large portion of the mass market). The 23 ecopreneurs have been positioned in Figure 3, in which the numbers correspond to the ecopreneurs.

In Figure 3, the environmental scope is measured on the vertical axis. The figure illustrates that some ecopreneurs have a higher environmental scope than others. Ecopreneur 11, for instance, indicates that he has adopted the principle to care for the environment as much as possible by being as sustainable as possible. It is his objective to make his product accessible for everyone, but realizes that he is in a market in which the

customer is ‘somewhat of a freak’. This creates some challenges to expand the customer base. Ecopreneur 6 believes that it is possible to be profitable and completely sustainable at the same time. He has a strong ideal of making the world a better place.

**Figure 3. Ecopreneurs: Environmental scope, size and time**



On the horizontal axis the size and time effect of the business is measured. In all cases the ecopreneurs target the mass market, yet the effect differs between ecopreneurs. Figure 3 shows that for instance, ecopreneurs 6, 8 and 23 serve a relatively large portion of the mass market, whereas the target group of ecopreneur 22 is still relatively small.

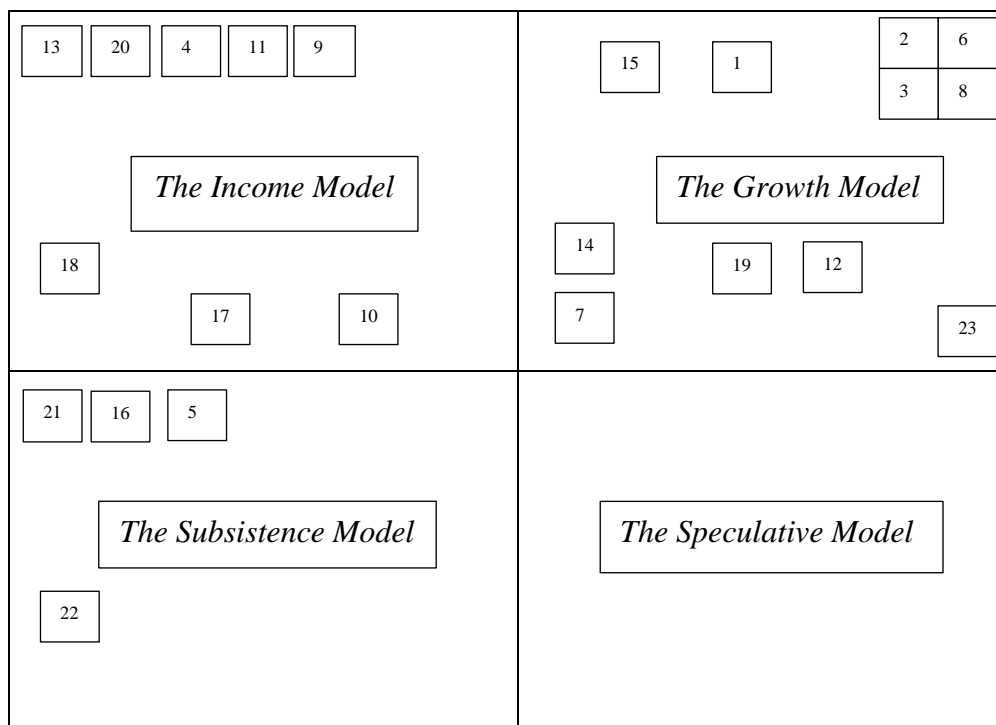
Ecopreneurial business ventures are, at their commencement, operating in advance of the mass market (Schaper, 2010). Schaper (2010) argues that, without the hard core of pioneer consumers, ecopreneurs run the risk of effectively ‘walking alone’ and eventually failing. Like ecopreneurs, such pioneer consumers are not only curious but also convinced of their self-effectiveness, knowing that they may become the critical mass for sustainable development (Schaper, 2010). Isaak (2002) argued that ‘the key is to bring green–green businesses to a critical mass and thereby assure sustainable development’. The critical mass of pioneering consumers can subsequently provoke the collective acceptance by the mass market. The pivotal role of the consumer is also acknowledged by the Dutch ecopreneurs. This is illustrated by ecopreneur 15, who claims that ‘all power lies with the consumer’.

#### Four Business Models of Ecopreneurs

In the previous sections, we have analyzed the different elements of the ecopreneurs’ business model, such as the ecopreneurs’ value creation, commitment and networked connections, business cases and investment models. On the basis of this analysis, we offer four varieties of ecopreneurial business models: the income model, the subsistence model, the growth model and the speculative model. We use the same terms as Morris et

al. (2005), but extend their interpretation to varieties of business models, and apply these to the case of ecopreneurs (Figure 4).

**Figure 4. Four categories of ecopreneurial business models**  
(Numbers refer to entrepreneurs in the sample)



Model 1: The Income Model

In the income model, the ecopreneurs aim at generating an ongoing and stable income. Making money is considered a means, and these ecopreneurs have a clear vision of what needs to be developed. The ecopreneurial firms adopting this model are relatively small and have a small market effect. They are convinced that starting small is important, as this creates a solid foundation from whereon they can expand. With this model they believe they are able to persist in their environmental goals. By giving the consumer the proper information they can convince the consumers to buy eco-products. As ecopreneur 1 emphasizes, 'food should become enjoyable again for consumers', and an insight in the background of the products may stimulate this. Once the consumers have been convinced, a higher price will be accepted or taken for granted by the consumer. As ecopreneur 10 argues, 'If customers think of the price as a problem, this is not the customer with the right mind-set and should therefore not belong to the target audience'. The goal of these ecopreneurs is to give consumers the opportunity to eat good and healthy food. As the emphasis is more on convincing the consumer and creating a community, these ecopreneurs do not think that price for eco-products should be leading. As ecopreneur 13 states, 'I don't feel like dropping my prices because I am doing something special and people should pay for that'. Most ecopreneurs adopting this model believe that customers are not price sensitive: 'it is the service and the product that matters; if it is of high quality, customers are not particularly price sensitive' (ecopreneur 17). Making profit is a means for these ecopreneurs, but this is achieved in a sustainable way and they are willing to reduce profits if this implies that they can be more sustainable. As ecopreneur 18 contemplates, 'when I invented this concept it had something to do with the future. I am truly committed because I think that our concept, nowadays our brand, is extraordinary. Although we do not make a fortune out of it at the moment, it is all about doing something different, something that is lasting'. Their main goal, i.e. making a better world, is primarily supported by a loyal consumer base sharing the ecopreneurs' conviction. These ecopreneurs believe that growing and reaching the mass market needs to be done by being transparent and ensuring that the consumer is properly informed.

#### Model 2: The Subsistence Model

In the subsistence model, the ecopreneurs' goal 'is to survive and meet basic financial obligations' (Morris et al., 2005). Making money is a means to improve the present state of the world. These ecopreneurs believe they need to make a compromise in order to reach a broader audience and a higher profit. Ecopreneur 5 wants to become more sustainable, but states that 'the existence of the company is also important, and sometimes this means making a compromise'. This compromise is made because these ecopreneurs are relatively small and eco-resources are expensive or not available to them. This is illustrated by ecopreneur 16: 'we cannot certify our business processes because we are dependent on other companies that are producing for our products'. 'Besides, if we demand that our suppliers become more sustainable, I am doomed to fail'. The limited availability of organic raw materials may create a situation in which the ecopreneur needs to choose a non-certified eco-product in order to reach the mass market consumer. Their first ambition was not necessarily to set up a sustainable company, but eco-products turn out to be of higher quality. They like the idea of sustainability, but do not emphasize the ecological aspect too much as this might scare away the consumers. They believe that their efforts will make the world (gradually) better, in part by addressing environmental concerns and in part by emphasizing the need to link the environmental and social consequences of their activity. Often the ecopreneurial activity is a balancing act between short-term economic objectives and long-term sustainability objectives in order to become and stay profitable. The group of ecopreneurs adopting this strategy concedes that 'further enhancement of sustainability is something for the future' (ecopreneur 16). There is a strong belief that networks of ecopreneurs could improve their future market position. As ecopreneur 21 argues, 'we can reinforce and help each other in order to collectively enlarge our market share and improve the perspective and acceptance of our products'.

#### Model 3: The Growth Model

In the growth model the emphasis lies on investing, and reinvesting, for the long term, both in financial terms and in relational terms. As one of the ecopreneurs emphasized, 'We believe in personal contact and open communication with our customers, which in turn results in long-lasting relationships' (ecopreneur 19). The ecopreneurs who have adopted this strategy combine a priority for environmental performance as a business goal, the economic consequences of a large market effect, and the institutionalization of their green business in society. These ecopreneurs consider making money an end, but also have a clear vision of what needs to be

developed. They believe that it is possible to be profitable and completely sustainable at the same time. They all have a strong ideal of making a better world. Their current market effect is large, in part because these ecopreneurs have a strong product and in part because of prior experiences in business and working with partners in a large network in this industry (see, e.g., Rodgers, 2010). As ecopreneur 12 states, 'the collaboration of multiple partners has contributed to the success because we have been able to develop a multi-brand that is recognized by the consumer'. These ecopreneurs fully internalize all the externalities: they do not amortize certain costs on the environment and they are transparent about this. The important difference from other models is that these ecopreneurs believe that a large market can also be reached by being transparent about their goals and being accountable for their products to the consumers. As ecopreneur 6 argues, 'Transparency and traceability are very important to reach the mass market'. In the eyes of the ecopreneurs in the growth model, being sustainable implies that they can be profitable. They focus on large supermarkets and companies in the Netherlands and abroad to sell their products. The size of their firms has made them realize that they are entering a different league. As one of the ecopreneurs mentions, 'If organic becomes mainstream this can have a tremendous effect on the price of organic products' (ecopreneur 2). In the growth model, the ecopreneurs are competing not only with eco-products but also with non-eco-products. Although the balance between environmental concerns and economic gains remains their reason for existence, the efficiency argument appears to become more dominant: 'we are trying to become more efficient in order to be able to reduce costs and subsequently lower our prices' (ecopreneur 23).

#### Model 4: The Speculative Model

In the speculative model the goal is to establish a profitable business before selling out (Morris et al., 2005). The ecopreneurial strategy would be to make money with eco-products, although the environmental performance as a business goal would have a lower priority. These ecopreneurs believe in making the world better by selling eco-products, but their emphasis on developing economic gains would have prevalence. This strategy could be adopted by non-ecoproducers switching to green (rather than green-green) operations, capitalizing on the consumer potential for eco-products. The model emphasizes a short-term focus with a large market effect. In our group of 23 Dutch ecopreneurs, none opted for a strategy to prioritize profits and to compromise on environmental performance as a business goal.

## Discussion

The field of sustainable entrepreneurship is vast, and carving out a subfield of ecopreneurship is a precarious endeavor. This article has attempted to fill in some of the details on the basis of an ecopreneurial business model illustrated with empirical evidence from Dutch ecopreneurs. Our findings come with limitations, but also offer some practical implications for policy-makers and practitioners.

### Limitations

The ecopreneurial business model is largely based on the replacement of disvalue by value. The subjective nature of this transformation can be seen as a limitation, as this 'transformation' is largely in the eye of the beholder/customer. The creation of value out of disvalue, in environmental terms, may seem like a smart marketing gimmick of ecopreneurs, yet the overwhelming evidence on environmental deterioration appears to prepare the consumer for more sustainable products. The article has offered more insight into the variety of ecopreneurs, even though a (potentially) interesting section of ecopreneurs, i.e. those adopting the speculative model, has received limited empirical support. It is quite likely that our selection bias for green-green firms excluded those ecopreneurs adopting the speculative model. A larger cross-sectional analysis of this population could, in the future, strengthen the robustness of some of our findings. Finally, the dynamics within the ecopreneurial field are scarcely covered. Although several indications have been noted, such as the pricing consequences in a mass market with hybrid consumers, the interviews do not allow for a dynamic analysis among ecopreneurs. A future longitudinal study of ecopreneurs could offer new insights on the dynamics within this field and add to the insights on business model innovations.

### Practical Implications

Several practical implications can be deduced from the ecopreneurial business model that is outlined in this article. As the business model is largely based on replacing disvalue by value, the success of ecopreneurs will depend on the consumers recognizing the disvalue of non-eco-products, and the reduction in disvalue by eco-

products. One of the practical implications is the need to inform consumers of the possible hazards related to the production of food, by both policy-makers and ecopreneurs. Some ecopreneurs have been successful in convincing environmentally concerned consumers, but the relatively small and stable share of eco-products in the total consumption of food and beverages (ca. 20% for The Netherlands) indicates that other consumers have not incorporated the disvalue of their purchases into their decisions yet.

As the ecopreneurs themselves have observed, replacing disvalue by value is complicated by the inability of ecopreneurs to fully eco-certify their value chain. This results either in eco-products that are not certified or in producers that revert to a less strict system of certification (e.g., seafood has a multitude of certifying agencies). Ecopreneurs revert to competing on other values (e.g. taste or tradition) or compete in a less transparent domain of eco-certificates. Both implications, i.e. information for the consumer and inability to fully eco-certify, have consequences for the ecopreneurial business model. One of the consequences that stands out is the fragmentation of the market for eco-products, as some of our ecopreneurs observed. Both consumers and producers contribute to the creation of niche markets, deviating from the transformation of the entire industry. The above implies that sustainable development through ecopreneurial activities is highly uncertain without a considerable degree of institutionalization, either through larger ecopreneurs or through government involvement, and the environmental ecology may be partly in the hands of the organization ecology.

## Conclusion

The academic field of sustainable entrepreneurship is only just developing. This article contributes to the growing body of literature on sustainable entrepreneurship by focusing on the business model of environmentally concerned entrepreneurs addressing the mass market (i.e. the ecopreneurs). Although the literature on sustainable entrepreneurship has claimed a favorable role for the socially and environmentally concerned entrepreneur in the transformation toward a green business setting, the pursuit to study the ecopreneurial practices has been limited. By combining the literature on sustainable entrepreneurship with the empirical research on business models, we explore the mechanisms of value creation and value capture by green and profit-oriented businesses, and make several important contributions to the literature.

First, we demonstrate that business models of ecopreneurs not only create value for environmentally concerned consumers, but also transform some of the disvalue of non-eco-products into value. The ecopreneurs in our sample replace disvalue by value by eliminating or reducing the harmful effects of the production of food and beverages on the environment. Second, we show that the internal source of advantage of ecopreneurs is their continuous and personal commitment to sustainability goals, which distinguishes their business model from the business models of non-eco-products. They position their offerings by adopting either a differentiation-focused strategy or a cost-based strategy. Third, and building on Schaltegger's business case for sustainability, we identify different business cases of the ecopreneurs in our sample. These ecopreneurs either aim to create a better world, or they aim to improve the present state of our world, and they achieve these environmental goals by considering making money as either a means or an end. Fourth, we also distinguish between different investment models adopted by the ecopreneurs in our sample, based on their different environmental scopes and their different time and size ambitions. Finally, on the basis of our analysis of these business model elements, we offer four varieties of the ecopreneurial business model: the income model, the subsistence model, the growth model and the speculative model.

Following from the varieties in ecopreneurial business models, the interactive nature of environmental circumstances and economic motivations becomes clear: environmental degradation offers new entrepreneurial opportunities, and new ecopreneurial activities are required to circumvent further degradation. Further- more, we observe how the gradual differences in environmental goals and economic ends can lead to different approaches to capture value and consequently to different degrees of effectiveness to transform the industry: exclusive priority to environmental concerns with a small market impact may be as effective as a low environmental priority with a larger market impact. Our article has shown that, through an exploration of the business models of ecopreneurs, we can grasp some of the complexity through which firms can contribute to a more sustainable future.

## Acknowledgement

We thank Naomi van Hijfte and Dominique Martens for research assistance.



## References

- Bennett S. 1991. *Ecopreneuring: the Complete Guide to Small Business Opportunities from the Environmental Revolution*. Wiley: New York.
- Berle G. 1991. *The Green Entrepreneur: Business Opportunities that can Save the Earth and Make You Money*. Liberty Hall: Blue Ridge Summit, PA.
- Blue J. 1990. *Ecopreneuring: Managing for Results*. Scott Foresman: London.
- Brundtland GH. 1987. *Report of the World Commission on Environment and Development: Our Common Future*. Oxford University Press: Oxford.
- Cohen B, Winn MI. 2007. Market imperfection, opportunity and sustainable. *Journal of Business Venturing* 22(1): 29–49.
- Cohen B, Smith B, Mitchell R. 2008. Toward a sustainable conceptualization of dependent variables in entrepreneurship research. *Business Strategy and the Environment* 17: 107–119.
- Dean TJ, McMullen JS. 2007. Toward a theory of sustainable entrepreneurship: reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing* 22(1): 50–76.
- Dekhili S, Achabou MA. 2012. Price fairness in the case of green products: enterprises' policies and consumer perception. *Business Strategy and the Environment*. DOI: 10.1002/bse.1763
- Dixon SEA, Clifford A. 2007. Ecopreneurship – a new approach to managing the triple bottom line. *Journal of Organizational Change Management* 20(3): 326–345.
- Eisenhardt KM. 1989. Building theories from case study research. *Academy of Management Review* 14(4): 488–511.
- Eisenhardt KM, Graebner ME. 2007. Theory building from cases: opportunities and challenges. *Academy of Management Journal* 50(1):25–32.
- Gulati R. 1998. Alliances and networks. *Strategic Management Journal* 19(4): 293–317.
- Harper GC, Makatouni A. 2002. Consumer perception of organic food production and farm animal welfare. *British Food Journal* 104(3–5): 287–299.
- Hockerts K, Wüstenhagen R. 2010. Greening Goliaths versus emerging Davids – theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. *Journal of Business Venturing* 25(5): 481–492.
- Holt D. 2011. Where are they now? Tracking the longitudinal evolution of environmental businesses from the 1990s. *Business Strategy and the Environment* 20: 238–250.
- Isaak R. 2002. The making of the ecopreneur. *Greener Management International* 38: 81–91.
- Kearins K, Collins E. 2012. Making sense of ecopreneurs' decisions to sell up. *Business Strategy and the Environment* 21: 71–85.
- Keogh PD, Polonsky MJ. 1998. Environmental commitment: a basis for environmental entrepreneurship? *Journal of Organizational Change Management* 11(1): 38–49.
- Kirkwood J, Walton S. 2010. What motivates ecopreneurs to start businesses? *International Journal of Entrepreneurial Behaviour and Research* 16(3): 204–228.
- Linnanen L. 2002. An insider's experiences with environmental entrepreneurship. *Greener Management International* 38: 71–80.
- Lockie S, Lyons K, Lawrence G, Mummery K. 2002. Eating 'green': motivations behind organic food consumption in Australia. *Sociologia Ruralis* 42(1): 23–40.
- Morris M, Schindehutte M, Allen J. 2005. The entrepreneur's business model: toward a unified perspective. *Journal of Business Research* 58(6): 726–735.
- Moss TW, Short JC, Payne GT, Lumpkin GT. 2011. Dual identities in social ventures: an exploratory study. *Entrepreneurship Theory and Practice* 35(4): 805–830.
- Osterwalder A, Pigneur Y, Tucci CL. 2005. Clarifying business models: origins, present and future of the concept. *Communications of AIS* 16: 1–25.
- Pacheco DF, Dean TJ, Payne DS. 2010. Escaping the green prison: entrepreneurship and the creation of opportunities for sustainable development. *Journal of Business Venturing* 25(5): 464–480.
- Pastakia A. 1998. Grassroots ecopreneurs: change agents for a sustainable society. *Journal of Organizational Change Management* 11(2): 157–173. Petersen H. 2005. The competitive strategies of ecopreneurs: striving for market leadership by promoting sustainability. In *Making Ecopreneurs*, Schaper M (ed.). Ashgate: Aldershot. 174–190.

- Porter M, Van der Linde C. 1995. Toward a new conception of the environment–competitiveness relationship. *Journal of Economic Perspectives* 9(4): 97–118.
- Quinn JB. 1971. Next big industry: environmental improvement. *Harvard Business Review* 49(5): 120–131.
- Rodgers C. 2010. Sustainable entrepreneurship in SMEs: a case study analysis. *Corporate Social Responsibility and Environmental Management* 17(3): 125–132.
- Schaltegger S. 2002. A framework for ecopreneurship: leading bioneers and environmental managers to ecopreneurship. *Greener Management International* 38: 45–58.
- Schaltegger S, Wagner M. 2011. Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business Strategy and the Environment* 20(4): 222–237.
- Schaltegger S, Lüdeke-Freund F, Hansen EG. 2012. Business cases for sustainability: the role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development* 6(2): 95–119.
- Schaper M. 2002. The essence of ecopreneurship. *Greener Management International* 38: 26–30.
- Schaper M (ed.). 2010. *Making Ecopreneurs: Developing Sustainable Entrepreneurship*. Gower: London.
- Shepherd DA, Patzelt H. 2011. The new field of sustainable entrepreneurship: studying entrepreneurial action linking ‘what is to be sustained’ with ‘what is to be developed’. *Entrepreneurship Theory and Practice* 35(1): 135–163.
- Strauss A, Corbin J. 1998. *Basics of Qualitative Research: Grounded Theory Procedures and Technique* (2nd edn). Sage: London.
- Torjusen H, Lieblein G, Wandel M, Francis CA. 2001. Food system orientation and quality perception among consumers and producers of organic food in Hedmark County, Norway. *Food Quality and Preference* 12(3): 207–216.
- Walley EE, Taylor DW. 2002. Opportunists, champions, mavericks...? Typology of green entrepreneurs. *Greener Management International* 38: 31–43.
- Yin RK. 2009. *Case Study Research: Design and Methods*. Applied Social Research Methods Series (4th edn). Sage: Thousand Oaks, CA.
- Young W, Tilley F. 2006. Can business move beyond efficiency? The shift toward effectiveness and equity in the corporate sustainability debate. *Business Strategy and the Environment* 15(6): 402–415.
- Zott C, Amit R. 2007. Business model design and the performance of entrepreneurial firms. *Organization Science* 18(2): 181–199.
- Zott C, Amit R, Massa L. 2011. The business model: recent developments and future research. *Journal of Management* 37(4): 1019–1042.