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Niche Developments in the Tourism Accommodation Sector

BSc Tourism Thesis – XT080312

Roxanne Bleijenberg - 910710071050
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Abstract

Sustainability has been an important global issue for decades and it is being adopted by most industries (Warnken, Bradley & Guilding, 2005). Also in the tourism accommodation sector sustainable measures are increasingly being taken by providers. However, there is still a high variation in awareness, understanding, interpretation, interest and implementation of environmental sustainability in the accommodation sector (Hobson & Essex, 2001). The aim of this research project was to find out how sociotechnical innovations for sustainability occur in the accommodation sector. The opportunities and constraints to broader implementation of sustainable technology in this sector were also explored. This was done by doing a comparison on two leading and progressive, yet very distinct project cases of Cradle2Cradle Islands and Landal GreenParks. The theory on strategic niche management was used as a basis for the research questions, but openness and flexibility to new information allowed for adding different insights to the existing literature. Qualitative research methods were used, such as desk research and interviews. The findings of this research have indicated that constraints to broader implementation lie in difficulties with the technologies itself, lack of marketing and the preferences of the users of technology or the tourists. The most important opportunities for broader implementation of sociotechnical innovation are the internal opportunity of marketing, the global discussion on sustainability, the initiatives of accommodation providers and the course of time, which will have to continue developing in a co-evolutionary way.

Keywords: sustainability, technology, innovation, accommodation, tourism, strategic niche management, transition management,

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1. Introduction

In the past decades the concept of sustainability has become increasingly important. It has become a global goal to live and work sustainably in all industries and at all levels (Warnken, Bradley & Guilding, 2005). Tourism is a resource-intensive industry, and its viability is dependent on the quality of the resource base, so for this industry it is particularly important to be accountable in terms of sustainability at both local and global scales (Lu & Nepal, 2009; Hobson & Essex, 2001). Especially environmentally integrated tourism development has been a major focus in the debate on sustainable tourism (Lu & Nepal, 2009), which has become of growing concern in the accommodation sector. Technology can be seen as a promising field for improvement of sustainability in many industries, including the tourism accommodation sector (Buckley, 2012). The concern for the environment has become particularly apparent in holiday parks. For example well-known European holiday parks such as Center Parcs and Landal GreenParks are increasingly concerned with their environmental performance, which is expressed in their strategies for becoming greener corporations. Many of these strategies rely on implementation of more sustainable forms of technology and do not only apply to their business operations, but also to the parks and are even implemented to the actual holiday houses. Both corporations are experimenting with sociotechnical innovations inside the holiday houses in order to improve their environmental performance. Even though a growing amount of accommodation providers are taking sustainable measures, there is still a high variation in awareness, understanding, interpretation, interest and implementation of environmental sustainability in the accommodation sector (Hobson & Essex, 2001). This is demonstrated by the fact that not every holiday park corporation is as much concerned with its environmental performance. An example is Roompot, another large player in the European holiday house accommodation sector. This corporation does not specifically mention sustainability or the environment in their business strategies on the website (Roompot Vakanties, 2014). This indicates that this company is expressing less concern and this supports the findings of Hobson and Essex (2001) that there is still a high variation between the environmental awareness and implementation of accommodation providers.

It would be interesting to find out what are the constraints to broader implementation of sustainable technology in the accommodation sector and more importantly, what are the opportunities. Currently, application of sociotechnical innovations in the accommodation sector is mainly seen in niches. Single projects are carried out by separate organizations which are still taking very different approaches. Technology design and user demands have not stabilized, which means that sustainable technology implementation in accommodations has not yet become a market niche and that it is long from being implemented in broader society (Schot & Geels, 2008). In order to explore the constraints and opportunities, two leading and progressive, yet very distinct project cases will be examined; the Eternal Holiday House on the Dutch island Ameland and the eco-bungalows of Landal GreenParks, situated in Aalden, Drenthe. Choosing two distinct project cases will serve well to provide a more comprehensive insight in niche developments in the accommodation sector.

To find the constraints and opportunities for broader implementation of sustainable technology in the accommodation sector, this paper will start with an extensive literature review on sustainable tourism, technological developments and particularly strategic niche management and related theory. The literature review forms the basis for the formulation of the research questions mentioned below and therefore this literature has shaped the entire paper.

1.1 Research questions

The main question for this research project is:

1. How do sociotechnical innovations for sustainability occur in the accommodation sector?

The sub-questions are:

2. What has been the role of expectations and visions in both niches?
3. What has been the role of social networks in the development of both niches? E.g. how do guests respond to the sociotechnical innovations in both cases and how is this affecting implementation?
4. In what ways have both niches resulted in learning processes?
5. What are opportunities and constraints for these niches to develop into a market niche and eventually induce a regime shift?
6. What is the potential of sociotechnical niches in holiday houses to induce a broader shift towards sustainable development in the accommodation sector?

In order to address the main question, this research project will make use of the two cases of niche development mentioned above. Sub-questions 2, 3 and 4 will analyse the internal factors of both niches and form the basis for a comparison. Sub-questions 5 and 6 will focus on niche-regime interaction. Question 5 requires an analysis of external factors that may or may not contribute to wider processes of structural change at the regime level. Question 6 will be the basis for a tentative discussion.

As stated before, this paper will start with an extensive literature review. In the following section the methodology will be discussed. Then the interview results will be given for both the Eternal Holiday House and the Landal GreenParks eco-bungalows, which will form the basis for the discussion section. In the discussion section a comparative analysis of the results will be done and the results will be linked with the literature in order to gain new insights. Eventually the main research question can be answered and the conclusion can be drawn.

2. Literature review

2.1 Sustainable tourism

Since the Conference on Sustainable Development in Rio de Janeiro in 1992, sustainable development has gained greater attention from national governments, all kinds of industries, researchers and communities and various policies, strategies and accreditation schemes have been designed to implement sustainable development (Warnken, Bradley & Guilding, 2005). Sustainability is a concept which is defined, interpreted and implemented in very different ways by individuals, social groups and other stakeholders (Lu and Nepal, 2009). Four basic principles for the concept have been considered: "(1) the idea of holistic planning and strategy-making; (2) the importance of preserving essential ecological processes (2) the importance of preserving essential ecological processes; (3) the need to protect both human heritage and biodiversity and (4) development based on the idea that productivity can be sustained over the long term for future generations" (WCED, 1987 as cited in Lu & Nepal, 2009, p. 5-6). The World Tourism Organisation (WTO) has applied these principles to tourism and formulated the sustainable tourism definition as "meeting the needs of present tourists and host regions while protecting and enhancing opportunities for the future" (WTO, 1998 as cited in Lu & Nepal, 2009, p. 6).

The tourism industry in specific has taken many initiatives to realise sustainability, because of the environmental and socio-cultural impacts that it has (Warnken et al., 2005). Tourism corporations have promoted their green practices in two ways: (1) by incorporating the principles of sustainable development into planning, policy and regulatory frameworks, which has occurred in all levels of the industry and (2) by establishing accreditation and award schemes, which monitor and reward sustainable tourism achievements (UNEP, 1998 and Buckley, 2002 as cited in Warnken et al., 2005). Whether these strategies have actually made the tourism more sustainable is doubtful.

In the study by Warnken et al., 2005) it is argued that green accreditation schemes are insufficient for promotion of sustainable environmental practices in the tourism industry. Their study on accommodation providers in Queensland, Australia has pointed out that not one of the corporations considered could provide proof for having the green accreditation (Warnken et al., 2005). Other authors even claim that the tourism industry is not yet close to sustainability and that there is limited evidence of its implementation in practice, for example because some people and organisations in tourism are still using political approaches to get access to public natural resources and to avoid environmental confinements (Buckley, 2012; Sharpley, 2009).

A study by Hobson and Essex (2001) has indicated that the awareness and appreciation of the concept of sustainable tourism amongst tourism providers are limited. It was often interpreted as the short-term preservation of the industry and the operators were focused on economics, rather than environmental matters. This resulted in the fact that implementation of sustainable practices was modest and only the simplest solutions such as energy conservation were paid attention to (Hobson & Essex, 2001). In the same study it was found that large accommodation companies which were financially supported and encouraged to work sustainably by the parent company or headquarters were more likely to adopt sustainable management practices. Small businesses did not have the time, resources or interest for environmental management practices (Hobson & Essex, 2001). This research project will also have a strong focus on environmental sustainability, social and economic sustainability will be considered.to a lesser extent.

2.2 Tourists' perceptions of sustainability

Sustainable action is required not only on the side of tourism providers, but also from the tourists themselves (Budeanu, 2007). One of the research questions will partially be about the role of guests in the implementation of sociotechnical innovations in the tourism sector, which makes this a relevant topic for this paper. Tourism demand has a strong influence on the sustainable choices of providers it is stated that the low support from customers is an important barrier to progress towards sustainable tourism (Budeanu, 2007). The same goes for technological niches. The preferences of the users of technology have a large impact on the development of a niche and its chances to cause a regime shift, as the user is considered in both the internal factors and the external factors of niche development (Schot & Geels, 2008; Hoogma et al., 2002; Kemp et al., 1998). Therefore this paragraph will explore how tourists perceive sustainability during their holiday. Tourists' perceptions of encounters with technological innovations inside the accommodation have not been explored in existing literature, so this is a topic that this research paper will attempt to make a contribution to.

According to Gössling, Hall, Brudvik and Aall (2012), consumers are increasingly aware of environmental issues. In the European Union, 95% of the citizens know that environmental protection is important and 72% is willing to pay extra for environmentally friendly products. However, the demand for these products remains low (Gössling et al., 2012; Budeanu, 2007). For tourism in specific, it was found that 70-80% of tourists have high concerns for eco-social components of a holiday, but only 10% actually convert these concerns into purchasing decisions and most tourists are not willing to change their behaviour for the sake of sustainability goals (Budeanu, 2007). Budeanu (2007) has stated that informative tools are widely available for creating a shift towards more sustainable tourist behaviour, but these tools only influence the attitudes and do not address the perceived barriers to more sustainable behaviour, such as habits, convenience and personal preferences. Both the industry and the authorities are responsible for the provision of incentives to tourists to adopt more sustainable behaviour. In the destinations, the authorities need to create the institutional contexts and infrastructure for easy access to alternative products and simultaneously, the industry needs to invest in innovations, of which they are uncertain whether the customer will be interested, and provide incentives for sustainable tourist behaviour (Budeanu, 2007). The industry therefore has a double challenge, but even though it might seem difficult, Budeanu (2007) is positive about the opportunities of sustainable tourism.

Miller, Rathouse, Scarles, Holmes and Tribe (2010) have a different attitude towards a sustainable tourism future. In their study they have done focus groups amongst different types of tourist in order to gain insight in the tourist's understanding of sustainable tourism and it was found that tourists have a low level of awareness about the impacts of tourism and appropriate response options. If the respondents had basic knowledge of impacts, then they knew about tangible impacts such as littering, instead of intangible impacts such as global warming (Miller et al., 2010). Furthermore, it was found that the respondents were not willing to change their overall behaviour unless developing countries and other people would also change. The research showed that tourists would consider more domestic holidays and more sustainable travel methods, but they would not travel less or undertake different activities during their holidays (Miller et al., 2010). The authors believe that still many changes are needed about the patterns of behaviour by the public in order for tourism to become more sustainable (Miller et al., 2010).

There is much more literature available on tourists' perceptions of sustainability on their holidays, but these two studies are well representative of the research base and they show that the tourist is not willing to change their behaviour for the sake of the environment. These are strong findings which can be tested in this paper.

2.3 Technological developments

According to Buckley (2012), the main concern of sustainability is that the aggregate impacts of human activity threaten the survival of mankind and the ecosystems on which they depend. The author states that impacts dependent on the size and distribution of the global population, its social organisation (including civil society, economy and governance) and the consumption, pollution and protection of nature have grown due to human reproduction and competitive consumption, but these factors can be changed and their impacts can be reduced by technological means (Buckley, 2012). Technological improvements in energy use, water management, materials conservation, waste treatment and recycling can reduce impacts such as waste generation and resource consumption on a local scale, even though these have both increased on a global scale (Buckley, 2012). A lot of research has been done on the potential of various specific technological advances to contribute to sustainable development (Buckley, 2012), but this is beyond the scope of this research paper. Instead, perspectives on how to achieve greater sustainability through technology development will be discussed. Unfortunately the type of technological innovations relevant for this paper has not received much attention in the tourism literature. The focus has been more on aircraft technology or ICT. Therefore papers unrelated to tourism will be discussed.

An optimistic perspective on industry-driven technological developments towards greater sustainability was written by Nidumolu, Prahalad and Rangaswami (2009). They believe that the quest for sustainability will force companies to change their perception of products, technologies, processes and business models and believe in innovation as the key to gaining competitive advantage. Nidumolu et al. (2009) have identified five stages that companies will encounter during their journey to becoming more sustainable. The first stage is about learning to view compliance with norms as an opportunity for innovation. This means that the companies will need to anticipate and shape new regulations for sustainability. In stage two the technology companies need to make their value chains sustainable by increasing efficiencies and redesigning their operations. In the third stage it is about designing sustainable products and services, by the development of new ones or redesigning existing ones to become eco-friendly. In the fourth stage, the technology companies will need to develop a new business model, which means that they will have to find new ways to capture value and change the basis of competition. In order to accomplish this, they will need to understand the demands of the consumers and find different ways to meet these, whilst keeping track of what the competition is doing. In the final stage so-called next-practice platforms need to be created. This means that innovations should be developed by questioning implicit assumptions behind our practices and challenging existing paradigms (Nidumolu et al., 2009). This model is a business oriented view on the development of innovation and technology and it does not consider any difficulties with the implementation of the technology. The authors simply assume that the companies are able to forecast what innovations will be needed and demanded in the future and that their technologies will lead to sustainability.

2.4 Strategic niche management

Strategic niche management is another perspective on achieving sustainability through technology development and it recognises to a greater extent the issues that technology producers are facing. This is because it is aimed at ambitious and radical technologies. Strategic niche management has not been used for studying tourism before, but it seems highly relevant and especially applicable to the recent technological development in the accommodation sector. Extensive theory is available on strategic niche management, which will be thoroughly discussed in this paragraph, because it will form the basis for this research paper. The problem was first recognized by Rosenberg in 1976 (as cited in Schot & Geels, 2008), who claimed that new technologies often have difficulties competing with established

technologies on the market and that this would form an obstacle for sustainable technologies to become embedded in society. Building on this problem, Kemp, Schot and Hoogma (1998) have introduced the approach of strategic niche management. The authors had raised the question how newly developed sustainable technologies could be exploited in a system of dominant technological regimes and offered strategic niche management as the solution. The concept of the technological regime initially came from innovation literature (Kemp et al., 1998). It was claimed that the technological regime or paradigm accounted for problem-solving activities of engineers. According to Kemp et al. (1998), technological and economic actors would draw from this regime and use it as a starting point for searching for improvements in product and process efficiency, which has now become equivalent to the search for sustainability. Dosi (as cited in Kemp et al., 1998) claimed that the technological paradigm has an effect of exclusion, because it confines the imagination of engineers and withholds them from searching for alternative technological possibilities, not only due to the consensus of engineering beliefs, but also due to beliefs as to what the market wants. According to Dosi (as cited in Kemp et al., 1998), acting upon the anticipated wants of the market is called *ex ante* selection and this is how technological change occurs. That is why, in origin the theoretical approach to strategic niche management is essentially humanist. It is based on social constructivism and constructive technology assessment and assumes that technological design is determined by the active involvement of societal actors, through anticipation, reflexivity (co-evolution of technology and societal effects) and societal learning (both *ex ante* and *ex post* learning) (Van Vliet, 2014).

In their article, Kemp et al. (1998) claim that the market is not the only factor affecting technological change and have introduced seven factors potentially influencing technology. The first factor consists of all kinds of technological factors, which may form barriers to technological development, because it may require complementary technologies that are not available or expensive to use. Furthermore, the technology has not been tested on a large-scale, which would lead to unforeseen redesigning (Kemp et al., 1998). The second factor that might be a barrier to technological change is government policy and the regulatory framework, because even though governments are often committed to sustainable development and funding particular research and design projects, they are unclear about specific technologies needed which leaves manufacturers in uncertainty. The regulatory framework can be a barrier for example due to existing safety rules or other regulation (Kemp et al., 1998). The third factor consists of cultural and psychological barriers. People have gotten used to existing technologies and the unfamiliarity with new alternatives often leads to scepticism beforehand. The fourth factor consists of economic barriers on the demand side. These have to do with users' preferences, risk aversion and the willingness to pay for the new technologies, since they have not yet proven what they are worth. The fifth factor according to Kemp et al. (1998) is related to the supply side and production. For specific industries and corporations it can be quite risky to start with the development of a new product or service, because it is not certain whether the consumer will be interested. The sixth barrier lies in infrastructure and maintenance, according to Kemp et al. (1998). Introduction of new technologies may require adaptation of the existing infrastructure. Furthermore, professionals will have to get acquainted with the new technology in order to provide service and maintenance. These can be very lengthy processes. The seventh and final factor of influence on technology development is the societal and environmental effects that new technologies may have. Even though new technologies can solve problems, they can also create new undesirable effects (Kemp et al., 1998). Together these seven interrelated factors form a structure and give rise to specific patterns in technological change. This is called the technological regime.

In their article, Kemp et al. (1998) have proposed strategic niche management as the only feasible way to influence the seven factors mentioned above and to manage the change process to another regime

without transition problems. Other strategies such as providing incentives for the technology or through a planning process of technology implementation have proven to be ineffective, and the only way to intentionally transform regimes is by using the dynamics of socio-technical change and exerting pressures to steer this into desirable directions (Kemp et al., 1998). In other words, policy-makers will have to make sure that co-evolution of supply and demand produces desirable outcomes, which means that they are not working towards a goal, but aiming for experimentation and process management (Kemp et al., 1998). Strategic niche management offers the means to do so, because it involves the creation of protected spaces for specific applications of a new technology, which creates an opportunity for it to develop into something which is actually used (Kemp et al., 1998). In Figure 1 the process of regime transformation according to the view of Kemp et al. (1998) is shown. It starts with technological niches, they grow and become more evident in the regime and eventually with the help of policy-makers they are transformed into market niches, when the technology starts to become part of the market and finally a regime shift will take place, when the technology becomes the most evident within the regime.

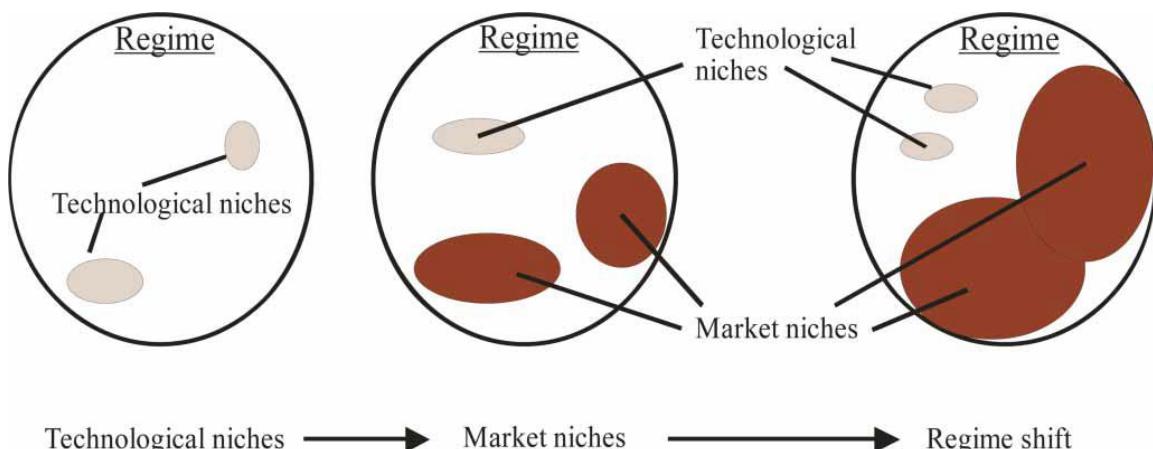


Figure 1 – Initial view of the regime shift (Schot & Geels, 2008)

2.5 Niche internal processes

According to Schot and Geels (2008), strategic niche management was developed for application to the management of “(1) socially desirable innovations serving long-term goals such as sustainability and (2) radical novelties that face a mismatch with regard to existing infrastructure, user practices, regulations etc.” (p. 539). In previous literature they have identified three internal niche processes necessary for success, success being defined as the transformation of a niche into a market niche and into a regime shift. These prerequisites will be discussed below.

1. Formulation of expectations and visions. Every niche should have certain expectations in advance, because they shape learning processes, attract attention to the niche and they make sure that the niche is continually protected and nurtured (Schot & Geels, 2008).

According to Kemp et al. (1998), in the beginning of the development of a new technology, its value still needs to be proven, because there are still many opposing forces. In strategic niche management, it is necessary for the interested actors to do so by making promises and raising expectations about the technology. These promises are particularly powerful if they are shared and credible and supported by facts and tests, specific with respect to technological, social and economic aspects in order to provide guidance and if they are related to a societal problem which existing technologies cannot solve (Kemp et al., 1998; Schot & Geels, 2008). However, empirical research has shown that visions and expectations of

the new technology are not as much developed by learning processes as was expected (Schot & Geels, 2008).

2. Building social networks. This is needed for acquiring representatives of the niche, for interactions between stakeholders and to provide the resources required, such as money, people and expertise (Schot & Geels, 2008).

According to Kemp et al. (1998), development of the new technology should not be dominated by the industry, but the users and third parties, such as citizen groups and environmental groups, should also have the opportunity to contribute their ideas. Schot and Geels (2008) rephrased this and stated that the social network should be broad, including many types of stakeholders. They have added that the social network should also be deep, meaning that the people representative of organisations should have the ability to "mobilise commitment and resources within their own organisations and networks" (Schot & Geels, 2008, p. 541). Caniëls and Romijn (2008a) have complemented this view on social networks in strategic niche management with the social network analysis. They have claimed that not only the number of actors is important for learning processes and experimentation, but also the nature and quality of the relationships between the actors. One should also take notice of the different roles actors play and dominant stakeholders within the network (Caniëls & Romijn, 2008a). A central problem in technology development however, is that technology producers such as organisations, governments and firms have the tendency to exclude other actors. They focus on the technological development first and neglect the social aspects (Schot & Geels, 2008).

3. Going through learning processes in the dimensions of technical aspects and design, user preferences, cultural meaning, infrastructure and maintenance networks, industry and production networks, regulations and government policy and societal and environmental effects (Schot & Geels, 2008).

According to Hoogma, Kemp, Schot and Truffer (2002), learning processes should consist of both first order learning and second order learning. First order learning occurs when actors within the niche learn about how to improve the technology design, about user preferences and how to create policies to accommodate adoption (Hoogma et al., 2002). For the niche to result in a regime shift, second order learning is also required. This means that the ideas about the technology design, user preferences and regulations should also be questioned and explored in order to enable co-evolutionary learning, in which producers, users and third parties such as governments are involved in making technological choices, demand and regulatory options (Hoogma et al., 2002).

2.6 Niche external processes and the multi-level perspective

The three previously mentioned prerequisites for successful strategic niche management are aimed at the internal niche developments. According to Caniëls & Romijn (2008b), individual projects often remain in the niche stage, so one of the major concerns in strategic niche management is the process by which niches evolve into viable market niches and ultimately contribute to a regime shift towards sustainable development. Examination of the external factors can create a greater understanding of how the regime shift can occur. According to Caniëls and Romijn (2008b), Schot and Geels (2008) and Lovell (2007), external factors can have a large impact on whether or not wider processes of structural change are caused and are in fact even necessary, because niche innovations need broader forces and processes to bring about a regime transformation. According to Hoogma et al. (2002), experiments done in niches have been isolated events so far and have only an indirect influence on the regime.

For a more in-depth examination of niche external processes, Schot and Geels (2008) have come up with the multi-level perspective to understand how transitions in technological regimes come about. In the existing literature, Schot and Kemp (2008) have identified three analytical levels, which together now form the multi-level perspective. The first level is the micro-level, which is formed by niches in which radical novelties emerge. The second level is the meso-level, which consists of the sociotechnical regime, which is the stable, large-scale system of current technologies (for example transport and energy systems). It is called a sociotechnical regime, because the system does not consist of technology only, but also scientists, policy makers, users and other interest groups contribute to its pattern (Bijker, 1995 as stated in Schot & Geels, 2008), as well as science, culture, policy, industry, markets and user-preferences (Schot & Geels, 2008). The regime refers to routines, beliefs, rules and normative roles in the technological system. The third level of the multi-level perspective is the macro-level, which consists of a deeply embedded sociotechnical landscape which is beyond the direct influence of niche and regime actors. Elements of this environment may be macro-economics, macro-political developments and deep cultural patterns and changes in these elements usually take place slowly (Schot & Geels, 2008). This is the level that niche developers are hoping to be able to influence by taking over the regime level, but this is difficult due to so-called lock-in, which means that the existing regime is stabilised (Schot & Geels, 2008). In figure 2 the multi-level perspective is visualised.

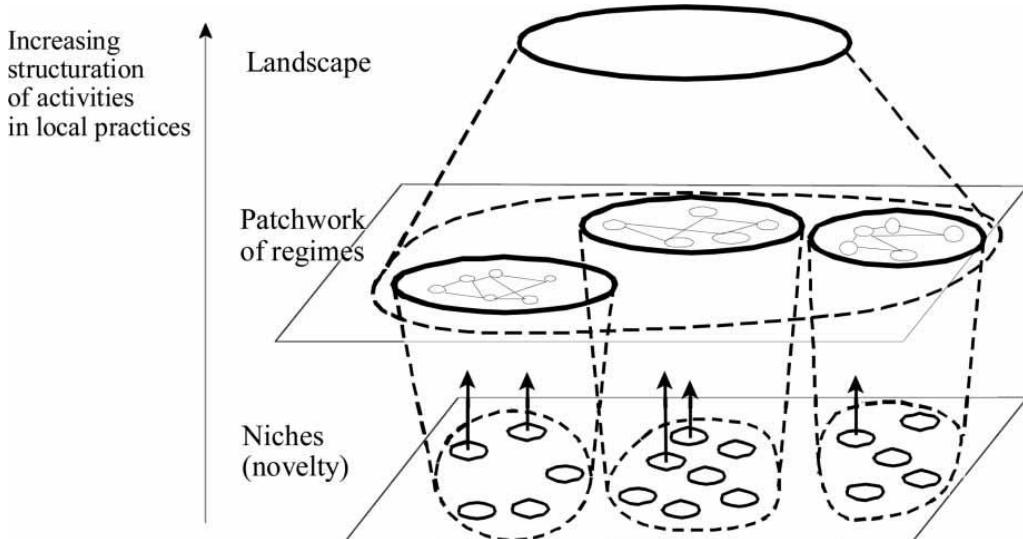


Figure 2 – The multi-level perspective as introduced by Schot and Geels (2008).

The main message of the multi-level perspective is that technological change occurs through interactions at three different levels and it works as follows: the niche develops internally, the landscape is changing, which creates pressure on the regime and the regime is destabilized, creating opportunities for niche innovations (Schot & Geels, 2008). This perspective is different from the initial view on regime transitions by Kemp et al. (1998), as shown in Figure 1. It is no longer believed that the regime shift is a bottom-up process. Rather, simultaneous developments and interactions between the levels will induce a regime shift. This is a type of co-evolution which is different from the co-evolution mentioned in the earlier literature on strategic niche management, because now it is about simultaneous developments and influences between the different levels, whereas in earlier theory co-evolution meant simultaneous developments of technology and users. Furthermore, it was found that niches are sometimes adopted from the start in order to solve specific problems and in other cases it takes a while for the niche to be adopted in the regime. This indicates that niches can develop very differently and may eventually replace the old regime or become a part of the existing regime (Schot & Geels, 2008).

According to Schot and Geels (2008), niche developments cannot only be conceptualised at the local level, but at the global niche level simultaneously. If a certain niche development occurs in multiple local projects, it can become an emerging field or niche at the global level. This occurs when local networks of actors start with one or several projects for specific reasons at the local level (Schot & Geels, 2008). These projects, which are often explorative and ill-defined, form examples for the global niche level and this is how the technological niche can become more specific, articulated and stable (Schot & Geels, 2008).

The multi-level perspective offers greater insight and possibilities for examination of niche external processes that influence the regime shift and it offers several factors such as technology itself, the users and their preferences, scientists, policy and policy makers, culture, the industry and markets, but these were not elaborated. How exactly these factors can influence the regime and whether they are constraining or beneficial to a successful adoption of a niche development in the existing regime remains unclear, so this needs further research which will be attempted in this paper.

2.7 Niche policy and governance

Strategic niche management was initially developed in order to steer sustainable innovations and transitions using policies. The theory has generated a lot of policy advice about how to develop networks and how to manage the visioning and learning processes. However, strategic niche management has not often been applied prescriptively, but mainly for ex-post evaluations of particular case studies (Schot & Geels, 2008). It is recognised by Schot and Geels (2008) that strategic niche management is not the grand solution to achieving sustainable technological development. Market incentives, regulation and technology forcing will also have to play a role in this process. However, it is argued that the relevance and value of doing experiments in niches should not be neglected and strategic niche management is a useful addition to existing policy instruments (Schot & Geels, 2008).

The government is the main actor involved in the management of niches. However, the government cannot be the only actor involved, because a multi-actor approach is required for the niche to succeed (Schot, Hoogma et al., 1994; Rip & Kemp, 1998 as stated in Lovell, 2007). In strategic niche management it is often assumed that the government is capable of making strategic decisions about systemic change and that they are powerful enough to do so (Schot, Hoogma et al. 1994 as stated in Lovell, 2007). However, it is argued that governments are actually too deeply embedded in the socio-technical system, which causes difficulties with implementation of radical changes. Rather, the government would focus on incremental innovations (Smith, 2003 as stated in Lovell, 2007).

Lovell (2007) has examined the role of the government and the politics of strategic niche management more in-depth by doing a case study on low-energy housing in the UK. Low-energy housing niches have mostly been developed by entrepreneurial people working for non-governmental organisations and have not been part of a governmental strategy, but the government has expressed a growing interest for environmental sustainability in low-energy housing niches, for example through funding of new projects and by trying to disseminate technological innovations in existing projects to the wider housing sector (Lovell, 2007). However, this should not be directly interpreted as proof of a coherent niche strategy, because the government may have other motives for their interest in these niches. In fact, the findings of Lovell (2007) indicate that the socio-technical change in the low-energy housing case has been unstrategic and ad hoc. Privatisation in the housing sector has decreased governmental power and this makes it difficult to govern radical socio-technical changes, because there is no single actor with the capacity to manage long-term changes. The policy capacity of the government has reduced due to a deeper embeddedness in the socio-technical system (Lovell, 2007). What Lovell (2007) concludes from

these findings is that one motivation for the government to express their interest for low-energy housing niches and provide funding is that they gain credibility for their policies on sustainability. Their involvement proves in some way that action is being taken. This can be criticised because these actions are not part of a coherent strategy on niche management and the government only stimulates the NGOs and the private sector to develop niches because they are unable to implement changes themselves (Lovell, 2007). On the other hand, it might be that governments prefer niches over sector-wide regulatory changes, because niches are less likely to threaten the powerful interests in the existing socio-technical regime (Lovell, 2007). This is a field that still needs further investigation.

2.8 Transition management

As there have been some practical limitations and criticisms on strategic niche management, such as the frequent lack of second-order learning, the fact that visions and expectations in experimental projects do not evolve sufficiently in response to learning processes and the fact that it has proven to be difficult for niches to become embedded in the broader society (Schot & Geels, 2008), the alternative approach of transition management was developed. The reason for reviewing the literature on transition management here is because it might be relevant for the discussion sector of this paper. Transition management is a multi-actor, forward-looking and adaptive governance approach aiming for long-term transformations that yield sustainability benefits (Kemp & Loorbach, 2006). The difference with strategic niche management is that it focuses on strategic envisioning and taking small steps towards this vision, while simultaneously doing and learning (Kemp & Loorbach, 2006; Schot & Geels, 2008). It is believed that this way of technology management might help to overcome the problem that often certain actors are excluded from the development and the focus being on the technology instead of on the social aspects. However, the external processes incorporated in strategic niche management may also cover for this problem (Schot & Geels, 2008).

In a recent paper, transition management has been applied to tourism by Gössling et al. (2012) in an article that explores the transition management literature to provide a theoretical framework for policy implementation processes and stakeholder involvement in sustainable tourism. A lack of strategic reviews of existing initiatives was identified, so multiple pro-sustainability initiatives taken by supranational institutions and organisations in tourism are discussed in the paper with the aim of finding out whether transition management makes a suitable theoretical framework to facilitate sustainable tourism practice (Gössling et al., 2012). From their case study on Norway it was found that it is unlikely that tourism businesses on a global scale will voluntarily take action towards greater sustainability, so a self-regulative industry will not work. Analysis in their paper has also suggested that even though consumers recognize the importance of environmental issues, their demand for environmentally friendly tourism products remains low, which makes an ineffective tool for achieving change (Gössling et al., 2012). Therefore, Gössling et al. (2012) have concluded that state intervention is the only possibility to achieve tourism transitions through steering of tourism networks and policy articulation of future sustainable regimes at a national scale. The essential starting point would be to define a desirable future and to create a positive stance of the stakeholders towards government intervention in achieving that future. Currently, many stakeholders are confronted with too many choices, which leads to inaction amongst them. Transition management implemented by the government is promised to be a meaningful theoretical framework and a successful method to facilitate regime change in tourism (Gössling et al., 2012).

The paper by Gössling et al. (2012) reviewed is based on just one case study in which transition management might be successful, but there is no evidence yet. If government intervention is the key to reaching sustainable tourism, then it is also dependent on the political structure and national

jurisdictions, so it might not work in every country. For this research paper strategic niche management remains the basis, because it explores the potential of industry initiatives instead of government initiatives to be successful in working towards greater sustainability.

3. Methodology

In order to address the research questions, the theory of strategic niche management and the multi-level perspective were used. The goal of this research project was to gain a better understanding of niche developments in the accommodation sector, so strategic niche management is a very appropriate theory to reach this goal. Another goal is to find out what constraints and opportunities for broader societal implementation are and to assess the potential of a shift towards sustainable development. The multi-level perspective offers a suitable framework for doing so, because it allows for exploration of external factors, not only within the niche, but at multiple levels. Using theory for the formulation of research questions indicates a deductive research. In some way the research questions provide a basis for testing whether the theory is applicable to technological developments in the accommodation sector as well. However, also inductive methods were used, because the researcher has been flexible and open to new information which did not fit in the existing theories. Unexpected information could give new insights which can be useful for theory building and adding new insights to existing literature. Furthermore, the main research question "How do sociotechnical innovations for sustainability occur in the accommodation sector?" is not dependent on the theory and is open to other perspectives as well.

3.1 Comparative case study

The research strategy that was employed in this research project is a comparative case study, because a comparison of two different niches and the levels they are operating in could provide a more thorough understanding of the topic. The case of the C2C Islands' Eternal Holiday House on Ameland was chosen because it is a typical example of a strategic niche development in the accommodation sector. The project was carried out in the Netherlands, which makes it easy to contact the actors involved and there was already quite some documentation available on this case. The case of the eco-bungalows of Landal GreenParks was chosen because it is a clear example of an industry initiative to create a more sustainable accommodation, which makes a nice contrast with the other case that was chosen, since this was not an industry driven project. Again it was convenient that this project was carried out in the Netherlands, so that the company and the employees involved could be contacted easily and there would be no language barriers. Other industry cases in the Netherlands were also explored, but none of them were as distinctive as the eco-bungalows of Landal GreenParks.

3.2 Data collection

In order to answer the main research question "How do sociotechnical innovations for sustainability occur in the accommodation sector?" the following sub questions were formulated:

- What has been the role of expectations and visions in both niches?
- What has been the role of social networks in the development of both niches? E.g. how do guests respond to the sociotechnical innovations in both cases and how is this affecting implementation?
- In what ways have both niches resulted in learning processes?
- What are opportunities and constraints for these niches to develop into a market niche and eventually induce a regime shift?

The data collection methods used to find an answer to these four questions were desk research and semi-structured in-depth interviews. Desk research was done to find the more general information about the cases and how and for what reasons their projects were carried out. Only official websites and documents were used to retrieve information from the internet. This information was complemented with the data from the interviews. In advance of conducting the interviews a checklist of topics that

needed to be covered was set up, which resulted in natural conversations which were open to topics that were not on the list. In this way, the informants were enabled to provide new insights and additional information for theory building. One of the interviews was conducted in person and the other three were done by telephone. All of the interviews were recorded using a smart phone.

The final question about the potential of sociotechnical niches in holiday houses to induce a broader shift towards sustainable development in the accommodation sector was answered in a tentative discussion based on the existing literature complemented with the research findings.

3.3 Sampling

In order to acquire the information needed, purposive sampling methods were used. The informants of the interviews were selected based on their knowledge and expertise and for the specific purpose of the study. It required some desk research and phone calls to the actors involved to find out who would be the best persons to inform the researcher about the cases, but soon the right people were found and appointments for doing interviews were made. The guest informant from Landal Aelderholt was found on the internet on a Dutch website for travel reviews and then approached through a social network website.

3.4 Data analysis

The audio recordings of the four major interviews were transcribed into written text documents, which made them suitable for coding. First of all, the four interviews were read multiple times. Next, the researcher identified overarching, important themes in each of the interviews and these were described in the results section. The small interview with the guest of the eco-bungalow at Landal Aelderholt was also coded and a few themes could be derived from this. Even though the researcher had the existing theory on strategic niche management in mind during the interviews, open coding was used and the themes that were identified were different from the preconceived topics. This is supportive of the aim of this study to add new insights to the existing literature. However, it has not been completely open, because specific notions and topics were asked for in the interviews, which might have influenced the results.

3.5 Ethics

When doing social research, one should work ethically responsible in order to maximise the chance for valid and honest participant responses. Both intrinsic and extrinsic research ethics (Hammersley & Traianou, 2010) were considered during the execution of this research project.

Intrinsic ethical issues that came across were dedication, objectivity and independence. Dedication to the research project means that the researcher should set priorities and can only do one task at a time. Work and leisure should be separated (Hammersley & Traianou, 2010). This was not difficult to manage, because for example during the interviews the researcher really had to take on the role of a specialist. Furthermore, the researcher has been focused when working on the paper. The researcher put an effort into being objective, which means that the researcher should not let his or her own interpretation become evident in the research (Hammersley & Traianou, 2010). During the data collection phase interviews were done and it was very important to ask for clarification during the interviews if something was not clear, so that the researcher would not interpret it in the wrong way. In addition it was tried not to ask guiding questions. The researcher also remained independent, which means that the direction of the research was not guided by an external organization, such as Wageningen University or a specific informant that has given a lot of input. The interviews were treated equally, no matter what the contents were and all the information was incorporated.

Extrinsic ethical issues that were encountered during this research were protection of privacy and respect for autonomy. In advance of the interviews the interviewees were told that they were participating on a voluntary basis and they were allowed to refuse answering certain questions. They were told that they were allowed to withdraw from the project at any time. Furthermore, it was assured that information would be treated anonymously and the interviewees were asked whether they allowed tape recording of the conversation. By treating the informants in this way, the chances of acquiring complete and valid information are higher (Hammersley & Traianou, 2010).

4. Results

The results section is divided into two sections, one for the case of the Eternal Holiday House and one for the case of the eco-bungalows at Landal Aelderholt. Both paragraphs will start off with a description of the case, using information gathered through desk study. Secondly the results from the interviews will be given in multiple paragraphs based on the categories derived from the interview analyses.

4.1 Eternal Holiday House

The first case study that was examined in this research is a recent project of the organization Cradle to Cradle Islands (C2C Islands), which is a partnership between 22 international participants from local and regional island governments, water boards, private companies and knowledge institutions, working together to make islands more sustainable (Sombekke & Hansen, 2012). The partnership and the projects they execute are funded by the European Union Regional Development Fund (Sombekke & Hansen, 2012). C2C Islands has recently carried out an ambitious project with the goal to "transform and rebuild an existing holiday house on Ameland into an eternal holiday house that will be energy- and water positive without decreasing the level of comfort and health standards of today and the future and taking material choice into consideration" (C2C Islands, 2014). The project is based on the cradle to cradle concept by Braungart and McDonough (2000), who have claimed that the conflict between industry and the environment is a design problem, which can be transformed into eco-effectiveness by three design principles: waste equals food, use of solar energy and celebrate diversity. In practice, this means that the Eternal Holiday House is equipped with a vacuum toilet, a kitchen grinder, a digester (septic tank), a gas light, and a recycle shower. After the project had finished, some technical adaptations were made to the holiday house. It was also found that the occupants of the holiday house have different use patterns and cannot always be included and trained in the operation of the sustainable equipment (Sombekke & Hansen, 2012). This will be elaborated in the research results and findings.

4.2 Interview results

To gather more in-depth information about the development of the Eternal Holiday House, interviews were conducted with the current manager and the former manager of the project. The current manager of the Eternal Holiday House is an employee in the position of environmental manager at the water supply company involved with the project. The former manager of the Eternal Holiday House is working as a project manager at a water technology company which is doing research for sustainable water management together with other companies and research institutes from all over Europe. Their research program is defined by both the private and public water sector and conducted by leading universities. Both of the interviewees have been involved in the planning and design of the Eternal Holiday house and monitoring of the results. In the paragraphs below the most important topics derived from the interviews will be discussed in-depth.

4.2.1 Problem identification

At the start of both interviews with the informants of the Eternal Holiday House (see appendices), the emphasis was on the issues surrounding water and energy, which the experiment attempted to address. On the Dutch island of Ameland, water in particular is scarce, because more than 60 per cent of the water that is used on the island comes from the shore. This water is transported through a pipeline in the Waddenze, which is a costly procedure, since it needs maintenance and it will have to be replaced some time. Another issue causing water scarcity on the island is that tourism numbers are high during the summer season, dramatically increasing the demand for water in this period. The water supply company on the mainland is simply expected to be able to provide this water. Another problem that was identified by the water supply company is that other than with electricity and natural gas, water is cheap in the

Netherlands and there are hardly any incentives for people to reduce their water usage, except on the Dutch islands where water scarcity occurs in the peak periods of tourism. The municipalities of the Dutch islands have expressed their concern about this issue and together they have come to the ambition to be completely self-sufficient in water and energy by the year 2020. This is why the collaboration with the water supply company, the water technology company and the C2C Islands organisation and other stakeholders was initiated.

These interview results indicate that there was a specific local problem which the stakeholders involved decided to tackle.

4.2.2 Reason for a holiday house

The next topic that was discussed in both interviews was why a holiday house was chosen to do this experiment. As a result of the collaboration between the municipalities, the water companies and C2C Islands, multiple solutions for water use reduction were identified, such as vacuum toilets and recycle showers. There was a desire to demonstrate these options in practice, so a location for the experiment was needed. This location was not hard to find, because the water supply company already owned several holiday houses on the island of Ameland, which turned out to be perfectly suitable for renovation using the cradle to cradle principles. In practice this meant that sustainable materials were used, water technology was implemented and also some sustainable energy innovations were implemented, such as the grinder and a digester turning waste into biogas. By one of the interviewees it was stated that if the water company had not owned the holiday houses, they would have obviously contacted other tourism entrepreneurs to find a holiday house or a hotel for doing the experiment.

The interview results indicate that the choice for a holiday house was made out of convenience considerations. It was a coincidence that the water supply company owned these holiday houses and no further thought was given to possible implications.

4.2.3 Implications of testing in a holiday house

The choice for a holiday house had some advantages, for example it was convenient because the water supply company already owned the house. Another advantage according to both of the interviewees was that the tourists who encounter the innovative technologies inside the holiday house might take this into consideration for implementation in their own home, once their equipment needs replacement. In this way, sustainable technologies can become more adopted and widespread in society. However, the disadvantages of experimenting with innovative technologies in a holiday house were manifold. Once the interviewees were asked about this more specifically, it was found that the holiday house was not an ideal location for testing for four reasons. First of all, the tourists were often lacking the motivation to use the innovative technologies and actually save water and energy. It was stated in the interviews that the tourists found many of the sustainable applications inconvenient and troublesome and one of the interviewees made the following interpretation:

"People should be more conscious about energy and water use, but in fact they can be very indifferent and if they have paid a lot of money for a holiday, they do not want any hassles" – Informant 1.

The tourists' attitude was not unjust, because there were some inconveniences in the holiday house, such as a bad smell coming from the grinder and the extra time and work it cost to clean the recycle shower. The second reason was that the tourists were unfamiliar with the technologies and did not know how to use them appropriately, even though manuals were provided on a tablet computer that was available in the holiday house. One of the managers had the idea that tourists simply do not want to make the effort to read and learn how to use the equipment in the house and that they should have done more about

communication to the customer. The third reason that the holiday house was not an ideal way to experiment with innovative sustainable water- and energy saving technologies was that there was no service or maintenance organisation present on the island. There was just one person from the water company available for service calls, but this is not what this person was specifically hired for. The final reason was that some technologies required continuity in order to work well, whereas the holiday house is not always occupied. This was especially valid for the digester, which relied upon a constant supply of waste to stay in operation and otherwise it would stop working. Of course this is a very technology specific issue with implementation inside a holiday house.

According to the interviewees, these problems would not have occurred if the experiment was done in a normal house for a single family, because these people would have had the motivation to work with the technologies for the sake of water and energy use reduction, they would have read the manuals to for once and for always have the knowledge how to use the equipment and service would have been less urgent than in a holiday house. Furthermore, the digester would have had a constant supply of waste to keep working properly. This is why both interviewees stated that in hindsight, it would have been better to do the experiment in a normal house instead of a holiday house. One of them referred to a successful project that was carried out in Sneek, the Netherlands, where a small neighbourhood has applied biogas production on a larger scale, which now supplies a large part of the central heating of the houses. In this case, there were motivated people involved who collectively managed to make this into a success, but biogas production in a single holiday house with different guests has turned out to be ineffective.

4.2.4 User responses

In the interviews it became clear that the responses of users were asked for in a survey. Sometimes the users did not reply, but sometimes they did and most often these responses were negative. When equipment had been out of order during the visit, the survey would be full of complaints. According to one of the interviewees, people would have no comments if everything went alright, so that is why most of the completed surveys are negative. Unfortunately the access to these survey results was denied.

4.2.5 Implications of innovative technologies

More general implications of implementation of innovative technologies were also touched upon in both interviews. Five innovative technologies were implemented at the start of the project, but eventually only one is left in the house and the others were taken out. The prototypes used were simply brought to the market too soon. For example the producer of the recycle shower admitted that they should have put more effort into development before introduction to the market. Furthermore, the grinder caused a bad smell and the vacuum toilet turned out to be a vulnerable system in the beginning. These problems would have also occurred if the innovations were implemented in a family home, but according to the interviewees, these issues would have been taken for granted, because it is for the sake of the environment and these people would want to make some sacrifices to save water and energy. This opinion is reflected in the following quote:

"These techniques are not fully developed yet and issues may arise, but if you are motivated to save energy and water, I can imagine that you would take these issues for granted" – Informant 1.

4.2.6 Different from commercial companies

In the interviews it became clear several times that the managers were aware that this project was very different from projects carried out by commercial accommodation companies. First of all, it was stated by one of the interviewees that their project is not comparable with holiday parks with for example the Green Key label, which use sustainability as a marketing tool, because these parks do not take any risk

with their innovations, in the opinion of informant 1. Another sign that the Eternal Holiday House project is different from commercial operations is the marketing style. The holiday house is rented out to employees of the water supply company and it is not being marketed to third parties. It has only been a project of C2C Islands and the goal was never to profit from the experiment as if they had been innovative entrepreneurs. In fact, funding also came from C2C Islands and these subsidies were used to build the technologies in the holiday house. That is why the payback period of the equipment was not paid attention to. For many of the technological innovations, such as the grinder, the digester and the recycle shower it would have taken a long time before the reduced energy and water costs would offset the high costs of purchase.

4.2.7 Integrated approach of stakeholders

According to informant 1, this project is a good example of an integrated approach to tourism planning and water usage. All of the stakeholders such as the water supply company, the water technology company, the province and the municipality, were working together in the C2C Islands organisation, which increased the sense of interconnectedness between them. In one of the interviews it was stated that in the past these organisations did not have such an integrated approach, because the municipalities would develop policies to attract more tourism and the water supply company was simply expected to account for the enormous rise in water demand. It was stated that:

"They were not used to thinking about this integrally, but this is really different now. This project has created greater insight in each other's interests and has made the actors aware that one's actions affect the other" – Informant 1.

This project has pointed out that there are still many opportunities for a closer cooperation, not only in this case and not only concerning water management, but also in other parts of society and concerning energy management as well. One of the interviewees stated that they were actually lucky to be part of the C2C Islands organisation, because otherwise it would have been too difficult to implement the ideas. This can also be seen in the more general ambition of the Waddeneilanden to become self-sufficient in water and energy provision by 2020. There are so many different stakeholders. Water supply company, water treatment company, electricity and gas companies, the municipality which designs policies and eventually the stakeholder whose interest in a reduction of water and energy use is highest is the tourism entrepreneur. But this entrepreneur needs to make arrangements with all the other stakeholders to get ideas implemented, which is often an impossible task, because ultimately none of the actors feel responsible for solving the issue.

4.2.8 Sustainable accommodations on a greater scale

A topic that was also touched upon during both interviews is how to reach sustainable accommodations on a greater scale. Both interviewees believed that the tourism entrepreneur needs to play the biggest part in this process. According to one of the interviewees, it could be that sustainable accommodations start expanding on the Waddeneilanden, a location with specific issues surrounding water and energy management, which makes it the perfect place for development. The tourism entrepreneurs will have to make an effort to contact all the stakeholders and try to get their cooperation and once they succeed, fellow entrepreneurs will see this and also attempt this. The entrepreneurs need to do this for their own interest, because it saves them a lot of money on the water and electricity bills. Funding is often out of the question, because municipalities for example claim to have the best intentions and to support such initiatives, but eventually they will rarely provide money for funding. Both interviewees have stated that this will ultimately have some sort of snowball effect and that it will automatically be implemented on a greater scale. It will spread over the islands, to the shore of the Netherlands, and even across borders,

especially to regions where water scarcity is an issue. According to the interviewees, these regions might pick up on developments occurring in the Netherlands and in this way the sustainable accommodations can become more widespread, even on a global scale. One of the interviewees stated:

"Think globally, act locally is an expression that is very much applicable to this situation. I believe that if individuals show the possibilities, they automatically contribute to a much larger, global objective" – Informant 2.

From the interviews it appears that the tourism entrepreneur is ought to have the greatest responsibility to increase the offer of sustainable accommodations, but one of the interviewees also elaborated on the role of other stakeholders. In the view of informant 2, municipalities should provide subsidies and they should have an advising role, together with the water and electricity provision companies. Also there might be tourism industry associations involved, which could give the right example and stimulate sustainable accommodation development. Green Key is an example of measures that tourism associations are taking. Not much is expected from the tourist. One interviewee stated:

"If consumers would collectively choose for sustainable accommodations, they can force the industry to increase the supply, but I do not expect this to happen in the near future" – Informant 2.

One of the interviewees stated that maybe this process can be accelerated by campaigns, but all in all both interviewees believed that the tourist is not the actor who is capable of forcing such a major change.

4.3 About Landal GreenParks

The second case study that was studied in this research project is the Landal GreenParks Aelderholt holiday park. The park is situated in Aalden in the province of Drenthe and recently it has been expanded with 30 sustainable holiday houses, called eco-bungalows (Loohuis Installatiegroep, 2014). Many energy saving technologies have been applied inside the holiday houses, such as water saving shower heads, water saving toilets, a water indicator, three-layered glass windows only on the south side of the house, a high degree of insulation of the walls and roof and a thermostat with a motion sensor which automatically switches off when no movements are being recorded. (Loohuis Installatiegroep, 2014; Landal GreenParks, 2014). Even the building materials were chosen sustainably. The facades of the holiday houses are made of natural stone or wood and any wood that was used is either sustainable European wood or it was granted the FSC label. Ten of the newly built holiday houses are equipped with solar panel installations (Loohuis Installatiegroep, 2014).

4.3.1 Wyndham Worldwide

Landal GreenParks is owned by Wyndham Worldwide, a large multinational which owns and operates many types of accommodations. Wyndham is the parent company of Landal GreenParks, so their environmental policies also influence those of Landal GreenParks. Wyndham has initiated a special Green program in 2006, which focuses on sustainability across the company. Their focus is on innovation and aims for the development of sustainable programs that deliver economic benefits on a global and local scale (Wyndham Worldwide, 2014). Amongst their main areas of focus are energy use reduction, water use reduction and recycling, improving air quality, minimizing waste and more.

4.3.2 Green Key label

Landal GreenParks Aelderholt possesses the Green Key label, which is an eco-label awarded to accommodation providers which meet the requirements of working sustainably. The prerequisites for obtaining the Green Key label are (1) education of staff, clients and owners towards increased sustainable development and environmental awareness in leisure establishments, (2) environmental

preservation by the reduction of the environmental impact of each establishment, (3) economical management by the reduction of consumption meaning a reduction of costs, (4) marketing strategy by the promotion of the Green Key label and the establishments using the Green Key icon and (5) strengthening of the tourism and leisure branch by taking responsibility broader than their individual establishments (Green Key, 2014).

4.4 Interview results

To gather more in-depth information about the development of the eco-bungalows at Landal Aelderholt, interviews were conducted with Landal's program manager of sustainable business and the manager of development Benelux. The program manager of sustainable business could provide information about Landal GreenParks' vision and strategies in general and how projects such as the eco-bungalows come into existence. The manager of development Benelux had been involved with the project in specific and could answer some more in-depth questions about this particular development. In the paragraphs below the most important topics and findings derived from the interviews will be discussed extensively.

4.4.1 Sustainability mission and vision

In both interviews Landal GreenParks' general mission and vision on sustainability was mentioned. It was not explained, but it was identified as a general reason for execution of the project of the eco-bungalows at Landal Aelderholt. According to one of the interviewees, the mission and vision are assigned by the parent company Wyndham and Landal GreenParks needs to find ways to give meaning to this vision and contribute to the mission. They are completely free to choose how this is done, so Wyndham only provides the main guidelines. Doing the project on the eco-bungalows, has been a way to work towards the greater mission of working sustainably.

4.4.2 Seize opportunities

Both of the interviewees have confirmed that the way that such projects often come into existence is by seizing opportunities. The development department of Landal GreenParks is responsible for making new plans and most often they are approached by a third party, such as a property developer, who wants to see if Landal GreenParks is interested in their project plans and whether they would be willing to put their brand on the holiday park once it is finished. The development department will then discuss this with the marketing department of Landal GreenParks, so the sales director and his team, and if they believe that this is something that fits with the overall vision of Landal and it can be marketed, then Landal will make an agreement with the property developer and the opportunity is seized.

A specific remark was made about this way of working that this leaves less opportunity for Landal GreenParks to implement their sustainable measures in the holiday houses. The initiator of a project possesses the land, the power and the capital for the development, so what Landal tries to do in this case, is to include a paragraph on sustainability in the policy documents of the development. It was stated that:

"Even if Landal GreenParks is not the initiator of the project, we will ask the developer to dedicate attention to sustainability. Is this enforceable? To a lesser extent of course" – Informant 2.

4.4.3 Owner and initiator of the project

In the case of the eco-bungalows at Landal Aelderholt it was not a matter of seizing opportunity. The land at the Aelderholt holiday park is owned by Landal GreenParks, so it was their own initiative to develop the eco-bungalows in the way that they did. This is a very exceptional case, because normally Landal is not the owner and initiator of the project. They have approached a developing construction company to help them formulating and executing the plans and eventually the holiday houses were sold to private individuals. One of the interviewees stated that this allows for conscious decisions to be made and:

"As the initiator of the project you have a lot more control over the development and you can more easily apply sustainable measures" – Informant 2.

4.4.4 Purpose of the project

The eco-bungalows do not only serve the greater goal of becoming a sustainable corporation, it also had the purpose to renovate the existing holiday park. Landal Aelderholt was built in the 1980s and the eco-bungalows were expected to give a new boost to the holiday park. The park had become somewhat outdated and according to one of the interviewees, the demands of the consumer have changed. For example the guests were demanding larger accommodations. By adding the eco-bungalows to the park, which are suitable for 8 persons, a greater public can be served.

In the interview with the visitor of the eco-bungalow, this presumption of Landal GreenParks was confirmed, because the reason why this interviewee had decided to visit Landal Aelderholt and the eco-bungalow in specific is because she was looking for a large bungalow which could lodge her entire family.

4.4.5 Incremental developments towards sustainability

In both interviews it became evident that according to Landal GreenParks, it takes small steps to become sustainable. The company already has many holiday houses on offer and they cannot renovate everything at once. Moreover, the costs of renovating are often relatively higher than the costs of building something new and making it sustainable immediately. Wherever they have the opportunity to take bigger steps, such as in the eco-bungalows project, they will seize it, but mainly small changes can be made. It was stated that basically the eco-bungalows at Landal Aelderholt are just one example of sustainable development and it is not of such great importance to the company. One of the interviewees said:

"This may sound a bit weird, but there are only about a dozen of these eco-bungalows and we have 11,000 holiday houses. My goal is to make all of these houses as sustainable as possible" – Informant 1.

Even though it takes incremental development, it is believed that one day the eco-bungalow will become the standard. For example the lighting in all of the holiday houses has been replaced with energy saving lamps and all of the equipment in the holiday houses includes water saving technology. Larger innovations present in the eco-bungalows are the green button, which switches off all the unnecessary electronic devices, and the solar panels. Due to organisational, financial and technical limitations, it will take time before this is implemented in all of the holiday houses. Landal GreenParks seeks structural changes towards sustainability, which can only be accomplished in a gradual fashion.

Another element that indicates incremental change is that Landal GreenParks is bound to building policies and regulations set by the government in the Building Act. Every year the requirements in the Building Act are sharpened, for example concerning energy use and building materials.

4.4.6 Implications of technological innovations in holiday houses

In one of the interviews the implications of technological innovations applied in holiday houses was discussed. Difficulties may arise with the technology itself. Landal GreenParks has been experimenting with different types of energy sources, such as geothermal energy, cogeneration, solar energy and recently also pallet stoves. From experience they have learned that geothermal energy and cogeneration, which require underfloor heating, are less suitable for application in a holiday house. This is due to the fact that this system gives a constant release of heat and it takes a long time for temperatures to change. In this way, the demand of the guest cannot be served fast enough, so the release of heat should be more flexible.

Landal GreenParks has a conservative attitude towards new technological innovations such as heating and insulation, because operational reliability and continuity of these systems are often not guaranteed yet. One of the interviewees stated:

"It is very important to consider the operational reliability of new systems and regularly there are still some issues, simply because the innovation is still in its infancy" – Informant 2.

The fact that holiday houses are used by different people also causes trouble for implementation of innovative technologies. It is recognised that the equipment should be easy to use, so developers of technology are specifically asked to keep operation simple, because otherwise this might cost a lot of time and effort. One of the interviewees foresaw a greater pressure on the technical maintenance department in the holiday parks if the equipment is difficult to use, because the guests would not understand it and maybe even cause failure, which would result in calls for service and complaints.

4.4.7 Responsibility for sustainability measures

According to one of the interviewees, the responsibility of taking sustainability measures lies with the tourism industry. Tourism accommodation companies should implement sustainable technologies mainly from an ideological perspective. It was stated by one of the interviewees that commercially, sustainability does not add much to a large corporation servicing the mainstream market, because first of all the tourists simply expect companies to care for the environment and to reduce their impacts and they take it for granted. Secondly, Landal GreenParks has found that their eco-bungalows are not doing substantially better than other holiday houses and guests are not willing to pay extra for the fact that these houses are more sustainable.

Moreover, the tourist is not even expected to choose responsibly. One of the interviewees stated that the guest's priorities are the location of their holiday, what type of accommodation they want, the facilities at the accommodation and in the last place they will decide on the level of sustainability.

The government is perceived to be indirectly responsible for sustainability measures in the accommodation sector, because through policy making and regulations they have a guiding character and they should stimulate the industry to work sustainably. The government is already doing so through the Building Act and even on a larger European scale companies and countries are encouraged to reduce the impacts on the environment, either through regulations or taxes.

4.4.8 Aim for profit

In both of the interviews and in many of the topics above the aim for profit was emphasized throughout the entire conversation. In the case of the eco-bungalows, Landal GreenParks was the initiator of the project, so through this development, it was attempted to give meaning to the overall vision and mission of the company. However, at the same time it was stressed that attention was also given to the commercial side of the development. The feeling of luxury that guests of Landal GreenParks are used to should still be provided and maybe even the luxury that people do not have at home. What they do not want is to build holiday houses in a 'back to basic' style, because most important is the commercial viability of the development and the ability to find groups of people who want to rent the house. The aim for profit can also be traced in the purpose of the development of the eco-bungalows. One interviewee stated:

"From the analysis that we have done on Landal Aelderholt it turned out that the park would benefit from a certain amount of new holiday houses with a higher volume per unit and eventually what we want is of course to improve the rental income" – Informant 2.

Another example from the interviews that indicates that profit is the most important goal is that the company implements technological innovations which do not require radical changes in the existing infrastructures for energy provision and waste treatment, for instance. They want to create a positive change, but the benefits need to offset the costs, so tremendous changes cannot be made, as stated by one of the interviewees.

4.4.9 Influence of the user

A consequence of the aim for profit is that the users or guests of Landal GreenParks' holiday houses have a large influence on the sustainable technological innovations that they implement. This was an important element that can be identified throughout both of the interviews. Basically every choice Landal GreenParks makes is based on the demands of the consumer. This is reflected for example in the fact that innovations are chosen based upon their ease of use, and that bigger holiday houses are built in order to cater for the increased demand.

5. Discussion

In the discussion section the results of this research project will first be summarised in a comparative analysis in order to create a better overview and an interpretation of the findings. Secondly the results of both case studies will be discussed in relation to the existing theory used in the literature review and the research questions will be answered. At the end of the discussion the limitations of this research project will be described and the contributions that it has made to existing literature. Furthermore, suggestions for future research will be done.

5.1 Comparative analysis of results

Because of the fact that the interviews were semi-structured, similar topics were discussed in the interviews for the Eternal Holiday House case and the Landal Aelderholt case. However, the focus of the interview results was different for both cases. In this paragraph, important topics identified in the interviews will be discussed and compared and the differences between the cases will be clarified.

5.1.1 Project ambition

The first difference that was found already in the results of the desk research is the level of ambition of the projects. In the Eternal Holiday House radical innovations have been applied and the most advanced technologies were used to demonstrate the possibilities for water saving and energy use reduction in holiday houses. The project of the eco-bungalows from Landal Aelderholt on the other hand, was less ambitious, because rather stable technologies were implemented in the holiday house. However, the technological applications taken together as a whole, implemented inside an accommodation can be called quite a radical development, because this is a new phenomenon which is not seen in other holiday parks. This makes both projects ambitious and radical, but in their own sense and at their own level of operation.

5.1.2 Vision and mission

The different degrees of ambition of both projects have also to do with their visions and missions. The underlying mission in the Eternal Holiday House project was formulated by the municipalities of the Dutch islands to become self-sufficient by the year 2020. The issues of water scarcity in the high season of tourism and the fact that not enough energy can be produced on the islands were the direct motives for this mission. It was embraced by the other actors in the C2C Islands project and the Eternal Holiday House became a demonstration of the possibilities. The project was funded by the EU, so this has influenced their ambition to be radical. The mission of Landal GreenParks is formulated by the parent company Wyndham, which claims to strive for sustainable business and tourism. However, this is not Landal GreenParks' main mission, but logically this is making profit. Therefore the Eternal Holiday House project was really driven by a sustainability mission, but for the eco-bungalows has not been the main driver behind the project. Therefore their operations have been less ambitious than the Eternal Holiday House project.

5.1.3 Stakeholders

Different stakeholder groups were involved with the two project cases. For the Eternal Holiday House, the stakeholders consisted of all the organisations within the C2C Islands project, such as municipalities, the province, the water supply company, the water technology company etc. and external market actors that were involved with the development and implementation of the specific technological applications in the holiday house. All of these actors were cooperating in an integrated approach to project management, which meant that they created greater insight and understanding of each other's interests. The interviewees identified this as a major improvement and this had really made the development of

the project easier. Such an integrated stakeholder approach has facilitated successful cooperation and made the implementation of innovative sociotechnical applications a lot easier. In the Landal Aelderholt case, the stakeholders directly involved with the project were mainly the company itself and a property developer, as Landal was the initiator of the project. In the interviews about the Landal eco-bungalows, the stakeholders were not discussed as extensively as in the Eternal Holiday House case. This is possibly because they are perceived to be less important in this case. A project carried out by a market party such as Landal GreenParks is obviously less dependent on other actors, because they possess the most important assets such as land ownership and financial resources themselves. All they had to acquire through a third party was knowledge on what to build and the skills to realise the project. In the Eternal Holiday House, financial resources were provided by the C2C Islands project, the location was offered by the water supply company and the knowledge came from external parties as well. This might be the reason why the stakeholders were a more important topic in the interviews about the Eternal Holiday House than in those about the eco-bungalows.

5.1.4 Purpose of the project

This difference is also reflected in the purposes of both projects. The Eternal Holiday House has been an experiment to find out what the possibilities are for reduction of water and energy consumption at the household level. The fact that this was done in a holiday house was merely out of convenience, because the house was owned by one of the stakeholders involved in the C2C Islands project. The Eternal Holiday House served as a demonstration for the municipalities to show what can be done to reduce water and energy consumption and it has been useful test. The eco-bungalows at Landal Aelderholt have also been an expression of the main vision of the company and it has partially also served as an experiment. However the purpose of this experiment was not to find out how far one can go in water and energy reduction and sustainability measures, but whether the customer would appreciate the eco-bungalows. The sales department of Landal GreenParks has been monitoring the rent of holiday houses and what they have found is that they are not doing substantially better than the other holiday houses for rent. According to the interviewees, customers are taking sustainable measures and applications for granted and this is not the main reason for choosing an eco-bungalow. These different purposes have resulted in different degrees of innovation.

5.1.5 Commercial purposes

The managers of the Eternal Holiday House are aware that this project is not a commercial venture. In fact, the project did not have any commercial purposes at all. This is proven by the fact that the project was not marketed to the wider public and only used for renting to the staff of the water supply company. In addition, no attention was paid to the economic efficiency of the equipment installed in the holiday house. These devices have been very expensive and it would have taken a lot of time for the benefits of energy and water reduction to offset the high costs of purchase, but this was not an issue, because making profit was not the goal of the project. The managers of the Eternal Holiday House also compared their project with for example industry players with the Green Key label, and stated that the degree of technical innovation and risk that they had taken was of course much higher than that of projects from companies aiming for profit. This observation turned out to be correct, because throughout the interviews with Landal GreenParks, the focus has been on the aim for profit. For example they have stated that the benefits need to offset the costs and that their primary goal is to satisfy the demand of the customers and make profit.

5.1.6 Difficulties

In both projects, difficulties were created by technology itself and the users. For the case of Landal Aelderholt this occurred to a much lesser extent than for the Eternal Holiday House, because they had

also been more cautious in selecting the innovative technologies they would implement. In advance of the project of the eco-bungalows, the equipment had been assessed on their efficiency and continuity as they do in every development. However, it has gone wrong before when they found that underfloor heating is not as suitable for application in a holiday house as anticipated. In every choice that Landal GreenParks makes, the convenience for the tourist is considered, because they want to avoid complaints and increased service and maintenance calls by guests who do not understand the equipment or because of failure. In the Eternal Holiday House project, the tourists were not considered to be the most important, so the latest and most radical innovations were implemented, resulting in failure of equipment and complaints by the guest. New technologies often need additional research and development to become fully operational, so the technology itself was causing difficulties, which had its effect on the guests as well. They experienced inconvenience, failure and sometimes did not know how to use the devices. To conclude, the difficulties experience in the Eternal Holiday House were much greater, because less caution was taken to satisfy the needs of the guests and the most radical technologies were chosen, contrary to the eco-bungalows project, were proven and established technologies were chosen in order to cater for the tourist.

5.1.7 Sustainable accommodations on a greater scale

The visions on how to achieve sustainable accommodations on a greater scale were similar, but had slight differences. The managers of the Eternal Holiday House believed that the development of sustainable holiday houses needs to start in a specific locality, for example the Waddeneilanden, where the issues with water and energy management are of importance. These developments will then become an example for tourism entrepreneurs in other areas as well, and once it is recognised how much money can be saved by water- and energy use reduction, efforts will be made to copy this success and the sustainable practices will automatically spread to fellow entrepreneurs in the Netherlands and even globally. This is a bottom-up vision on how sustainable practices in the accommodation sector may become more widely implemented, based on the benefits of working sustainably. Landal GreenParks also believes in a bottom-up approach, but they are more focused on the development of their own business operations instead of national or global development of sustainable accommodations. It is stated that it takes small steps to implement sustainable measures, and the company aims for structural changes, which can be accomplished in a gradual fashion, but eventually the eco-bungalow will become the standard. However, this is not based on the perceived profitability of these eco-bungalows, but on the ideological perspective that tourism businesses should work sustainably. What Landal might not realise is that implementation of innovative sustainable technologies may require investments, but it saves costs of energy and water in the long term, even though the eco-bungalows are equally popular as normal accommodations. Therefore the similarity between the perspectives of the two projects is that they both view broader implementation as an incremental bottom-up process, but the Eternal Holiday House recognises the benefits of working sustainably, whereas the industry player Landal GreenParks believes that the ideological perspective will form the basis for expansion of sustainable practices.

5.1.8 Responsibility for sustainability

According to the managers of the Eternal Holiday House project, the responsibility for working sustainably lies with the tourism entrepreneurs and large tourism corporations. The government can play a role through policy making, regulations and provision of information, but subsidies are often out of the question. The tourist is not held responsible for making sustainable decisions. Their power on the market is recognised, but a collective shift towards demand for sustainable accommodations is not anticipated. Landal GreenParks also stated that the responsibility for sustainable tourism lies with the

industry. The government is also perceived to have a guiding role by policy and regulations, such as the Building Act, and the tourist is not found to be responsible either. In this sense the two cases are similar.

5.1.9 Focus

The most striking difference between the two interviews is that in the interviews for the Eternal Holiday House, the focus was mostly on the things they had learned from the experiment, whereas in the interviews for the eco-bungalows at Landal Aelderholt, the focus was mostly on the need for their project to generate profit. These topics returned in many parts of the interviews, as was indicated in the results section. This difference in focus really emphasises the dissimilar nature of the two projects.

5.2 Relation to the literature

5.2.1 Visions and expectations

In this paragraph the second research question “What has been the role of expectations and visions in both niches?” will be answered using the results, the comparative analysis and the theory from the literature review.

According to Kemp et al. (1998), the value of new technologies and developments needs to be proven, because of the presence of many opposing forces. This can be done by raising expectations, making promises for the future and propagating a vision, which will be particularly powerful if they are shared and credible and if the technology aims to solve a societal problem which existing technologies cannot solve (Kemp et al., 1998; Schot & Geels, 2008). According to Schot & Geels (2008), expectations and visions attract attention to the niche, shape learning processes and they make sure that the niche is continually protected and nurtured.

In the case of the Eternal Holiday House the technologies inside the holiday house as well as the development as a whole still needed to be proven. It is really a new phenomenon which was not seen before in the accommodation sector and the opposing forces are mainly coming from the tourists. However, the project management has not put any effort in the articulation and propagation of expectations and visions and in fact, the project has been invisible to the greater public. This is an internal factor which has prevented the niche from turning into a market niche, until now. The Eternal Holiday House project also confirms the findings of Schot & Geels (2008) that visions and expectations of new technologies are hardly developed by learning processes. The holiday house has been operative for multiple years now and some of the technological applications have been removed from the house, but this has not triggered the management of the project to develop their visions and expectations, even if they were not there in the first place.

For the eco-bungalows at Landal Aelderholt, the innovative equipment inside the holiday houses are rather established technologies. However, the combination of these technologies in a holiday house is something new and its stability is not proven yet. For this case, expectations and visions were articulated in Landal GreenParks’ marketing activities. The eco-bungalows were visualised and made accessible to the greater public by publishing newspaper articles, messages on social media and they are offered on the website of Landal GreenParks. In this way attention was attracted to the niche, as Schot and Geels (2008) have identified as an important result of vision articulation. The creation of expectations and propagation to the public has also had an influence on learning processes, because it forced Landal GreenParks to forecast the responses. This means that they needed to think carefully about the demands of the potential users even before the plans were initiated. As was described in the results section, this occurs when the department of development consults the sales and marketing department of the corporation to find out whether the new idea is marketable. This can be considered to be part of the

learning process. According to Schot & Geels, these visions and expectations also contribute to the fact that the niche is continually nurtured and protected. In this case this cannot be confirmed. Once the development was finalised, it was introduced to the market and now it is no longer a protected niche.

In conclusion, creation of expectations and vision has played a substantive role in the Landal GreenParks case, but this was absent in the Eternal Holiday House project. It was found that a commercial attitude is needed for expectations and visions to be articulated and propagated to the greater public. This means that in niche developments consisting of collaboration between actors whose main targets are not to make profit, special attention needs to be paid to gaining publicity. This can be seen as a practical component of strategic niche management which should be added to the existing literature.

5.2.2 Social networks

This paragraph will answer the research question “What has been the role of social networks in the development of both niches?” An important component of this answer is made up of an analysis of how guests respond to the sociotechnical innovations and how this is affecting implementation. Furthermore, the role of the government is discussed in relation to the existing literature.

According to Schot & Geels, building social networks is needed for acquiring representatives of the niche, for interactions between stakeholders and to provide the resources required, such as money, people and expertise. Kemp et al. (1998) have stated that development of new technology should not be dominated by the industry, but by the users and third parties, such as citizen groups and environmental groups, which should also get the opportunity to share their ideas. The social network should be broad, including many types of stakeholders, as well as deep, meaning that the people representative of organisations should have the ability to “mobilise commitment and resources within their own organisations and networks” (Schot & Geels, 2008, p. 541).

In the Eternal Holiday House project the social network has been very strong due to the cooperation of actors in the C2C Islands project. As was stated in the results section, the project is a good example of an integrated approach to tourism planning and water usage. All of the stakeholders such as the water supply company, the water technology company, the province and the municipality, were working together in the C2C Islands organisation, which increased the sense of interconnectedness between them. This corresponds with the literature on niche management which states that not only the number of actors is important for learning processes and experimentation, but also the nature and quality of the relationships between the actors (Caniëls & Romijn, 2008a). In this case, the quality of the relationships between the actors has been high. Even though the social network was broad, it could have been broader since third parties such as citizen groups and environmental groups were not included in the C2C Islands project. From the research findings it also became clear that the social network is not deep enough. For example the manager of the Eternal Holiday House project stated that when it comes down to taking active responsibility, for instance when a tourism entrepreneur is demanding assistance from the water supply company in realising his goal to reduce water use, then he would be unable to mobilise his employer to take on this challenge and help the entrepreneur. The reason for this is that the task of the water supply company is to supply water and helping tourism entrepreneurs reducing their water usage is not perceived to be their responsibility.

For the case of Landal GreenParks, the social network has been a lot smaller and less significant for the execution of the project. As was stated in the comparative analysis, a project carried out by a market party such as Landal GreenParks is obviously less dependent on other actors, because they possess the most important assets such as land ownership and financial resources themselves. All they had to

acquire through a third party was knowledge on what to build and the skills to realise the project. This means that this case does not follow the literature on successful niche management, because the social network was not broad as this was not required. The nature of the relationships between the actors involved in this project was simply that they were doing business together.

A central problem to technology development that was identified in the literature is that technology producers such as organisations, governments and firms have the tendency to exclude other actors. They focus on the technological development first and neglect the social aspects (Schot & Geels, 2008). This finding is confirmed in the case of the Eternal Holiday House. The focus of this project has been purely on the technological development and the users have not been considered, initially. Later on, learning processes have created a greater awareness of the social aspects of technological developments, because of difficulties experienced by the guests of the holiday house. What the management of the Eternal Holiday House then decided, was simply to remove the technological applications that were causing trouble. The guest responses have therefore drastically influenced the implementation of sociotechnical innovations in this case study and one might say that is has been a constraint to the radical technological innovations.

For Landal GreenParks the influence of the tourist might even be greater than in the Eternal Holiday House project. As was stated before, the development department and the marketing department of Landal GreenParks anticipate the demands of the users and base their decisions on the findings and assumptions of their market analysis. This means that they do not even give radical sociotechnical innovations a chance to be experienced by the tourists, because these may form a risk to their quality and image.

The government has also been part of the social network of the Eternal Holiday House in the form of the province and the municipalities. These governmental actors have expressed their concern about water and energy shortages on the islands and that they want to take measures to become self-sufficient by the year 2020, but it was found that in practice it is very difficult to implement changes. The advantage of this project was that funding came from the C2C Islands project, but it was expected by the project management that the municipalities would not have provided funding in case this was required and will not do so in future cases. It was identified as a great barrier to broader implementation of sustainable accommodations that tourism entrepreneurs will experience difficulties finding governmental support and funding. These findings partially confirm the theory of Lovell (2007) which indicates that the government does not have the capacity to manage long-term changes. The ambition to become self-sufficient by the year 2020 requires a long-term change, but if the municipalities are not willing to provide funding to actors who have the intention of working towards this goal, change will be minimal. This also depends on whether the government has created a coherent strategy to reach this goal, but this is outside of the scope of this research.

In the case of Landal Aelderholt, the government has only got a regulative role and the industry is taking responsibility for making long-term changes towards sustainability. The industry consists of many actors and they do not have one coherent strategy to become more sustainable, so it would be interesting to monitor the developments of the tourism industry and see whether they are capable of managing long-term changes.

What can be concluded from these findings is that the concept of the social network is too broad to use for analysis of cases. Stakeholders involved in the niche developments all play different roles which should be differentiated in the analysis and particularly the role of the user of the technology should be

considered separately from the rest of the social network, because the findings have shown that in these two cases in the accommodation sector, the guests have had a severe influence on the implementation of technological innovations in the holiday houses. The other stakeholders have had a less significant influence.

5.2.3 Learning processes

In this paragraph the fourth research question “In what ways have both niches resulted in learning processes?” will be answered.

According to Schot and Geels (2008), learning processes are necessary in the dimensions of technical aspects and design, user preferences, cultural meaning, infrastructure and maintenance networks, industry and production networks, regulations and government policy and societal and environmental effects. Not only first order learning, but also second order learning is of great importance (Hoogma et al., 2002). This means that the ideas about the technology design, user preferences and regulations should also be questioned and explored in order to enable co-evolutionary learning, in which producers, users and third parties such as governments are involved in making technological choices, demand and regulatory options (Hoogma et al., 2002).

In this comparative case study it was found that learning processes only occur in case difficulties are experienced. As was stated in the comparative analysis, both the Eternal Holiday House and the Landal GreenParks projects the technical aspects and the users/tourists have caused some difficulties. In the Eternal Holiday House case, the severity of technical issues such as failure and malfunction of the vacuum toilet, recycle shower, the grinder and the digester was reinforced by the fact that these applications were implemented in a holiday house meant for tourists. The tourists had even greater objections towards these issues than a single family would have had. What the Eternal Holiday House management has learned is that they would opt for better developed technologies in the future and they would not implement them in a holiday house, but in a regular household. The sociotechnical innovations applied were simply found to be too radical and ambitious for implementation in a holiday house. A cultural lesson that the management of the Eternal Holiday House has learned is that people who are on a holiday want their level of comfort to be as least as high as at home. Infrastructure and maintenance networks have also been taken into consideration. It was found that the initial issue with the infrastructure and maintenance of the water pipeline through the WaddenZee can be solved by becoming self-sufficient, but a new issue that arose is that the technical applications inside the holiday house also need maintenance and a team of employees should be available on the island of Ameland to make sure that service can be provided to the tourists. These learning processes have resulted in removal of most of the technical applications from the holiday house. The lesson about the maintenance has not resulted in changes of the niche, because still there is only one person available on the island. Now that the funding has stopped and the C2C Islands partners have to continue with the project themselves, hardly any progress is made.

Second order learning has not occurred in the Eternal Holiday House. It seems that after the plans for the project had been designed and implemented, the stakeholders such as governments, producers and users have not gone through the process of co-evolutionary learning and the technology design, user preferences and regulations were not questioned.

For Landal GreenParks the learning processes have been less extensive in this project. However, as stated in the comparative analysis, they have gone through learning process in previous projects, for example when different heating systems were applied and analysed and underfloor heating was found to

be unsuitable for application in a holiday house. The only learning process that was caused by the eco-bungalows project at Landal Aelderholt is that the tourist does not specifically choose for an eco-friendly accommodation and is not willing to pay extra for it. This is a case of first order learning and second order learning processes have not occurred. This may be due to the fact that not as many risks were taken and the technologies implemented were not as radical as in the Eternal Holiday House project.

What can be concluded from these findings is that the range of learning processes in the accommodation sector has not been as broad as the theory on strategic niche management states it should be. Second order learning does not occur at all and the first order learning processes that were seen, have not resulted in actual adaptations of the projects. For the Eternal Holiday House project there is still work to do concerning the maintenance and service team and for Landal GreenParks a good question for self-reflection would be how they can raise the tourist's interest for eco-bungalows. The learning processes have therefore hardly influenced the visions and expectations of the niches.

5.2.4 External constraints

Now that the internal factors of niche development in these two cases have been examined and explained, the niches will be discussed in relation to the multi-level perspective and potential external constraints to broader implementation of the niche will be explored. This paragraph therefore answers part of research question 5.

As stated before, accommodation providers are increasingly taking sustainable measures, but still there is a high variation in awareness, understanding, interpretation, interest and implementation of environmental sustainability in the sector (Hobson & Essex, 2001). The application of sociotechnical innovations in the accommodation sector is mainly seen in niches. Single projects are carried out by separate organizations which are still taking very different approaches. Technology design and user demands have not stabilized, which means that sustainable technology implementation in accommodations has not yet become a market niche and that it is long from being implemented in broader society (Schot & Geels, 2008). According to Caniëls & Romijn (2008b), Schot & Geels (2008) and Lovell (2007), it requires not only the previously mentioned internal factors for niche developments to be successful, but also external factors in order for the niche to develop into a market niche and eventually cause a regime transition.

The multi-level perspective was employed to gain greater insight in the niche external processes influencing the regime shift. The micro-level is formed by the niche in which radical novelties emerge and contains the internal factors. The meso-level, also called the sociotechnical regime, offers several niche external factors such as technology itself, the users and their preferences, scientists, policy and policy makers, culture, the industry and markets. These external factors and their potential impacts were not discussed extensively and in existing literature the multi-level perspective has not been applied in practice, so whether and how exactly these factors can influence the regime has remained unclear. In these two cases, all of these external factors have already been touched upon in the discussion of the internal niche factors. Therefore there seems to be a large overlap of internal factors influencing the success of a niche and external factors in the sociotechnical regime. In the two cases examined, the niches have been directly exposed to the sociotechnical regime, so this has been a major determinant of the internal niche developments. In a way, the components of the sociotechnical regime have been internalised within the niche from the beginning and that is why the internal constraints are not different from the external constraints to broader implementation of the niche. It can also be stated that the co-evolution between the micro- and the meso- level of the multi-level perspective has been very strong and interrelated. According to Schot and Geels (2008), niches are sometimes adopted from the start in order

to solve specific problems and in other cases it takes a while for the niche to be adopted in the regime. Niches can develop very differently and may eventually replace the old regime or become a part of the existing regime (Schot & Geels, 2008). In the two cases studied in this paper, the niches were adopted from the start and have become part of the existing regime. The eco-bungalows from Landal GreenParks also have great potential to eventually replace the existing regime.

In the interviews the macro level, or the sociotechnical landscape, was not discussed in relation to constraints to broader implementation of the niches. However, it can be stated that the interviewees saw the broader perceptions of sustainable technologies in the accommodation sector as something which is not easy to change and it will take time for this to happen. The macro level is something they feel compelled to adapt to, rather than that they are trying to make changes to it, as stated in the literature about strategic niche management (Schot & Geels, 2008).

To conclude, the major constraints to broader implementation of sociotechnical innovation in these two cases lie in the micro- and the meso-level simultaneously. They were discussed in the paragraphs about the vision and expectations, the social network and the learning processes and it became clear that especially difficulties with the technologies itself, lack of marketing (or creation of expectations) and the preferences of the users of technology or the tourists are the major constraints to a regime shift. In the Landal GreenParks case, these constraints were managed best and even though their eco-bungalows are still only a single niche, it is a promising project for the future and the interviews have pointed out that Landal GreenParks is slowly taking steps towards expansion of this type of bungalows.

This indicates that the eco-bungalows from Landal GreenParks also resemble elements of transition management. Transition management is a multi-actor, forward-looking and adaptive governance approach aiming for long-term transformations that yield sustainability benefits (Kemp & Loorbach, 2006). The difference with strategic niche management is that it focuses on strategic envisioning and taking small steps towards this vision, while simultaneously doing and learning (Kemp & Loorbach, 2006; Schot & Geels, 2008). The eco-bungalows may not be multi-actor, because Landal GreenParks is the single main actor leading the sustainable technological developments, but they are indeed forward-looking, adaptive and they are taking small steps towards their vision. The case of Landal GreenParks rejects the findings of Gössling et al. (2012), which said that it is unlikely that tourism businesses will voluntarily take action towards greater sustainability, and they concluded that a self-regulative industry will not work. The case of Landal GreenParks gives a more optimistic insight.

5.2.5 External opportunities

In this paragraph the external opportunities for these niches to develop into a market niche and eventually induce a regime shift will be explained, answering the second part of research question 5.

Similar to the external constraints, the micro- and meso-level are overlapping. Again, the external factors which have the potential to influence the niche-regime interaction in a positive way have been internalised within the micro-level, because the niches have been adopted in the regime from the start, especially for the eco-bungalows from Landal GreenParks.

As stated in paragraph 5.2.1, a very relevant internal opportunity for broader implementation is marketing and making the niche visible for the public. External opportunities were not specifically uncovered in the findings of the interviews, but in general it can be concluded from the statements of the interviewees that it will take time before the meso- and the macro levels are ready for wider scale adoption of sustainable practices in the tourism accommodation sector. The global discussion about

sustainability is perceived to be a major stimulus for the increase of sustainability and the responsibility lies with the accommodation providers, according to the informants of this research.

The cases explored may also form global opportunities for a more sustainable accommodation sector. According to Schot and Geels (2008), niche developments cannot only be conceptualised at the local level, but at the global niche level simultaneously. If a certain niche development occurs in multiple local projects, it can become an emerging field or niche at the global level. This occurs when local networks of actors start with one or several projects for specific reasons at the local level (Schot & Geels, 2008). These projects, which are often explorative and ill-defined, form examples for the global niche level and this is how the technological niche can become more specific, articulated and stable (Schot & Geels, 2008). One of the interviewees stated:

"I can imagine that the niche does not only have exposure towards the Waddeneilanden or the Netherlands, but also to those areas where there is a scarcity of resources." – Informant 1

In conclusion, the internal opportunity of marketing, the global discussion on sustainability, the initiatives of accommodation providers and the course of time are the factors that are perceived to bear the responsibility for broader implementation of sustainable practices in the tourism accommodation sector and these will have to continue developing in a co-evolutionary way.

5.3 Sociotechnical innovations in the accommodation sector

Using the findings for research questions 2 to 5, the main research question on how sociotechnical innovations for sustainability occur in the tourism accommodation sector, can be answered. What was found in this research is that different approaches to sustainable innovations are being taken in the accommodation sector. A project can be very radical and ambitious in the application of sociotechnical innovations or it can be more modest and focused on the consumer. However, all the informants agree that the responsibility for implementation lies with the accommodation provider and that it is logical that attention is paid to the tourist. In the Eternal Holiday House case, it simply was not the goal to serve the mainstream market, so that is why the implementation has been so different from the Landal GreenParks case. The user of the technology was found to be one of the major determinants for the implementation options and therefore specific attention should be paid to the demands of the tourist.

5.4 A broader shift

The final research question is “What is the potential of sociotechnical niches in holiday houses to induce a broader shift towards sustainable development in the accommodation sector?” This question will be answered in a brief tentative discussion using the literature and the research findings.

This discussion was already partially started in paragraph 5.2.5. The findings in this paper indicate that sociotechnical niches in holiday houses such as the cases explored in this research may have the potential to induce a broader shift towards sustainable development in the global and wider tourism accommodation sector, especially in regions dealing with scarcities of water or energy. Whether this also applies to other forms of accommodation, such as hotels and resorts, cannot be determined using the findings of this research.

The potential of sociotechnical niches in holiday houses to induce a broader shift of sustainable practices in the accommodation sector is also supported by the existing literature. According to Schot & Geels (2008), niche developments which occur in multiple local projects can eventually form a broader field at the global level. Small-scale projects which are carried out for specific local reasons may form examples for the global niche level and in that way the niche can become more stable and articulated (Schot &

Geels, 2008). This also gives it a higher potential of becoming a market niche and maybe eventually cause a regime shift.

The research findings and the literature reviewed are supportive of the statement that the niches in the holiday houses are capable of inducing sustainability measures on a broader scale. The condition however is that the niche becomes visible to the global level, either through the articulation of the vision and expectations, through marketing for example, or through the network of actors.

5.5 Limitations

The limitations of this research should also be taken into consideration. A methodological limitation of this research lies in the research method of doing in-depth interviews, which offers complex insights in the topic. These interviews can be dynamic, which allows the researcher to be flexible in asking deeper questions when needed (Mitas, Barten & Kampen, 2012). However, the limitations are that in-depth quality interviews often take much time and expertise, so the samples are small, which makes the findings not generalizable.

Another limitation has been the sampling method, because purposive sampling was used. This sampling method specifically aims to obtain representative samples, but it avoids random sampling. This means that it is a subjective method and the researcher has a large influence on the outcomes. Additionally, the researcher's preconceptions can be incorporated in the questions of the interviews, which may also affect the outcomes (Mitas et al., 2012).

A limitation of the researcher has been that access to certain documents and people was denied. In one of the cases, information was gathered from the guests in the form of surveys, but the project manager could not find these documents, which constrained the researcher from getting a deeper insight in the perceptions of the tourist. Access to the contact information of the guests was also denied and the same goes for the other case. Because of privacy reasons, the organisations could not provide the researcher with the contact information of their guests.

5.6 Contributions

This paper has contributed to the literature by linking strategic niche management to the field of tourism. This had not been done before in existing literature and it was found that strategic niche management can be very useful for examination of sociotechnical developments in the tourism accommodation sector. It has also added new insights to the strategic niche management theory, such as the practical element of marketing that was added to the theory about visions and expectations and it was found that the multi-level perspective is not fully applicable when the niches are adopted as a part of the existing regime from the beginning onwards.

Suggestions for future research are to elaborate on tourism in relation to strategic niche management and to do quantitative research on tourists' perceptions of sociotechnical innovations in the accommodation. In addition, other types of accommodations could be examined in relation to niche management and the potential to become more sustainable by the implementation of sociotechnical innovations.

6. Conclusion

An important finding in this paper is that there seems to be a large overlap of internal factors influencing the success of a niche and external factors in the sociotechnical regime. In the two cases examined, the niches have been directly exposed to the sociotechnical regime, so this has been a major determinant of the internal niche developments. In a way, the components of the sociotechnical regime have been internalised within the niche from the beginning and it can be stated that the co-evolution between the micro- and the meso- level of the multi-level perspective has been very strong and interrelated.

Regarding the niche internal factors, a commercial attitude is needed for expectations and visions to be articulated and propagated to the greater public. This means that in niche developments need to pay specific attention to gaining publicity. This can be seen as a practical component of strategic niche management which should be added to the existing literature. Another important finding is that the concept of the social network is too broad to use for analysis of cases. Stakeholders involved in the niche developments all play different roles which should be differentiated in the analysis and particularly the role of the user of the technology should be considered separately from the rest of the social network, because the findings have shown that in these two cases in the accommodation sector, the guests have had a severe influence on the implementation of technological innovations in the holiday houses. The other stakeholders have had a less significant influence. Learning processes in the accommodation sector have not been as broad as the theory on strategic niche management states it should be. Second order learning does not occur at all and the first order learning processes that were seen have not resulted in actual adaptations of the projects. The learning processes have hardly influenced the visions and expectations of the niches and it seems that this prerequisite for successful strategic niche management is least important.

To conclude, the major constraints to broader implementation of sociotechnical innovation in these two cases lie in the micro- and the meso-level simultaneously. It became clear that especially difficulties with the technologies itself, lack of marketing (or creation of expectations) and the preferences of the users of technology or the tourists are the major constraints to a regime shift. In the Landal GreenParks case, these constraints were managed best and even though their eco-bungalows are still only a single niche, it is a promising project for the future. The most important opportunities for broader implementation of sociotechnical innovation in these two cases are the internal opportunity of marketing, the global discussion on sustainability, the initiatives of accommodation providers and the course of time, which will have to continue developing in a co-evolutionary way.

All of these findings have led to the conclusion that sociotechnical innovations in the accommodation sector are still occurring in divergent ways. The paper has shed light on the constraints and opportunities and might offer a better insight for tourism accommodation providers in how to cope with sociotechnical innovations in their corporations and what to pay attention to, because it was found that in the end, they are the ones to lead the way towards a more sustainable tourism sector.

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Appendices

Interview transcript Eternal Holiday House – Informant 1

Allereerst bedankt dat u speciaal voor mij hierheen bent gekomen en dat u wilt meewerken aan het beantwoorden van mijn vragen en aan mijn project. Ik heb natuurlijk iets over de context gelezen. Het is op de Waddeneilanden nogal lastig om aan water te komen en het moet van de wal komen, dus daarom is dit project gestart.

Ja, ja, je hebt ook al contact gehad met de projectmanager van Wetsus he?

Ja, ik heb een kort telefoongesprek met haar gehad, maar ze verwees me eigenlijk meteen door naar u.

Nou brand maar los. Als ik denk van dit is handig om te weten dan breek ik wel even in.

Nou allereerst wil ik graag wat meer weten over uw rol in het project, want de projectmanager van Wetsus zei dat u momenteel de manager bent, maar ik ben benieuwd wat u daar allemaal gedaan heeft.

Ja, ik ben met een mooi woord omgevingsmanager bij waterleidingsbedrijf Vitens. Vitens is verantwoordelijk voor watervoorzieningen op de Waddeneilanden, onder andere Ameland waar dit project speelde. En dit project is onderdeel van een Europees project, Cradle to Cradle Islands om te proberen zeg maar. Het waren allemaal eilanden waar toerisme een belangrijke rol speelt ten aanzien van voorzieningen, energie en drinkwater voorzieningen en op dit moment is het zo dat op Ameland twee derde van het water vanaf de wal komt en een derde op het eiland zelf gewonnen wordt. De hoeveelheid water op de eilanden is niet eindeloos, met name in het hoogseizoen wanneer er heel veel toeristen op het eiland zijn zie je dat het waterverbruik heel hoog is. In Nederland is het natuurlijk nog steeds zo dat 80% van het drinkwater gebruikt wordt voor toiletspoeling en drinkwater in Nederland is natuurlijk relatief goedkoop, dus er zijn wel eens ideeën van zou je niet op een duurzamere manier met waterverbruik om kunnen gaan. Dat is best wel moeilijk, omdat de financiële prikkel bij de mensen om dat te doen is niet zo groot. Anders dan met energie bijvoorbeeld, want gas en elektriciteit is duur en daar willen de mensen best op bezuinigen omdat het financieel scheelt, maar of je nou 50% water bespaart, dat geeft wel 50% reductie in je nota, maar water is gewoon eigenlijk heel goedkoop in Nederland. Maar toch, die eilanden zijn wel een mooi voorbeeld om te kijken of toch ja omdat daar op een zeker manier schaarste is aan water met die vele toeristen in de zomer kun je daar niet op een betere manier mee omgaan. Daarom is dat project C2C islands gestart. En mijn rol, Vitens is verantwoordelijk voor de drinkwatervoorziening en is partner in het C2C project en samen met de gemeente maar ook met Wetsus en andere partijen hebben we een aantal projecten bedacht om te proberen zeg maar op een meer duurzamere manier met drinkwater maar ook energie om te gaan. En een van die projecten is inderdaad het Eternal Holiday House. Vitens heeft een aantal vakantiewoningen op de eilanden ten behoeve van de personeelsleden en een van die huisjes hebben we dus omgebouwd en met nieuwe technieken geprobeerd het energie en water verbruik te verminderen.

En heeft u daar dan zelf ook keuzes in gemaakt in dit project of heeft u het bedacht?

Ja ik heb zelf mee bedacht van wat voor technieken ga je dan toepassen om het te testen. Dat doe ik niet alleen, dat hebben we ook met Wetsus gedaan. Wetsus is natuurlijk een instituut waar op wetenschappelijke manier innovatieve technieken worden bedacht om in de toekomst op een duurzame manier met water en alles wat ermee samenhangt te vinden, met proeven en in laboratoria en noem maar op. Maar goed we wilden natuurlijk dat dat huisje bewoond zou worden door mensen die vakantiegingen boeken. Ja we wilden natuurlijk innovatief zijn, maar aan de andere kant moet het ook

praktisch en werkzaam zijn. Het moeten niet zulke innovatieve technieken zijn die tot gevolg hebben dat het niet werkt zeg maar. Dat was wel een spanningsveld hoor, welke technieken ga je nou toepassen en zijn ze al bewezen genoeg om dat te doen. Dat was wel een spannende... Daar hebben we ook wel van geleerd. Een aantal dingen hebben niet gewerkt, andere weer wel.

Ja dat is een heel sprogetje naar het einde van mijn puntenlijstje, maar daar gaan we dan meteen even op door. Ik was inderdaad heel benieuwd naar de technologieën die verwijderd zijn.

Ja er zijn alweer wat dingen ontmanteld. Ik zal eerst uitleggen wat we allemaal in dat huisje gedaan hebben. We hebben getracht het waterverbruik te reduceren door een toiletspoeling uit te rusten met een vacuumpomp systeem, een systeem wat eigenlijk heel gangbaar is en gewoon in vliegtuigen en in schepen en dat soort dingen gewoon standaard is. Vacuum spoeling verbruikt 30 a 40% minder water. Dat is een Noors merk vacuum systeem wat erin is gegaan en dat zit er nog steeds in, dat functioneert goed. En je ziet dan ook een behoorlijke reductie van drinkwater. Alleen die systemen zijn natuurlijk duurder dan een gewone stortbak, dus qua systeem werkt het goed en het heeft een behoorlijke reductie tot gevolg, maar de terugverdientijd is gewoon slecht. Maar goed daar ging het nu niet om. Het ging nu meer om de techniek bewezen is en of dat het gewenste effect had. Maar dat was dus gewoon goed. Er zijn wel wat storingen geweest bijvoorbeeld toen iemand een rode biet had geprobeerd door te spoelen en dat werkt natuurlijk niet. Er zijn wat ergernissen geweest en hij functioneert nu goed en eigenlijk is het gewoon een bewezen techniek die niet ter discussie staat en dat is wat we ingebouwd hadden. Wat we ook hadden gedaan is een recycle douche. Wat is een recycle douche. Normaal is het zo dat als je onder de douche staat gebruik je heel veel water, maar eigenlijk kent het douchen van de mensen twee stadia, een beginstadium van wassen en soppen en daarna een stadium van nagenieten om het maar zo te zeggen. En met name in die fase kun je denken aan water besparen en er is een douche fabrikant Sealskin die is aan het proberen recycledouches op de markt te krijgen. Het is een gewone douche, maar je staat op een reservoir en het gebruikte water komt daar in en zo lang je niks doet loopt het water daar gewoon door, maar op een gegeven moment als je klaar bent met soppen en zepen dan kun je op een knop drukken en dan gaat de douche het water uit het reservoir gebruiken als bron van water en niet meer uit de waterleiding en hij warmt het ook nog een beetje op. Je kunt je voorstellen dat het anders steeds kouder wordt, maar hij warmt het op zodat de temperatuur gelijk blijft en daarmee bespaar je natuurlijk ook water. Dat prototype van die douche was geen succes omdat het elektronische gedeelte was nog niet uit ontwikkeld, wat Sealskin later ook heeft toegegeven. Wat ook meespeelde is dat je hebt toch die opvang van dat water wat er dan tijdelijk in staat en dat vereiste wel een discipline van de mensen om dat goed schoon te houden. Dat was ook wel een probleem. Al met al hebben we vanwege die problemen toch besloten om, ja Sealskin gaf later ook toe dat dit product eigenlijk te vroeg op de markt is gekomen en dat hebben we eruit gehaald. Er zijn later wel nieuwe types van recycledouches gekomen, zou je even op de site van Sealskin kunnen kijken. Die douches hebben een iets ander procedé dat je dat schoonmaken niet meer hoeft te doen, maar dat is wel denk ik deels ook de toekomst, dat je middels waterhergebruik op verantwoorde manier wel aan waterbesparing kan doen.

Ja, zeker

Het probleem bij het huisje was eigenlijk dat het een vakantiehuisje is. Als het je eigen huis is en je bent er voor om dit soort dingen te doen, dan ben je als bewoner en eigenaar heel gemotiveerd en is het helemaal niet zo erg dat je met vallen en opstaan misschien je ultieme doel, je droom bereikt, maar in zo'n vakantiehuisje, ja er is wel een beheerder van ons op het eiland maar er is niet echt een eigenaar en sommige toeristen die er komen die kiezen niet bewust voor dat duurzame gedoe om het maar even zo te zeggen, dus die vinden het alleen maar lastig. En dat huisje heeft ook geen continue bezetting want in de

winter is het bijvoorbeeld weken achter elkaar niet verhuurd, dus al die dingen bij elkaar, het eigenaarschap, niet bewuste motivatie en keus van de mensen maar ook de wisselende bezetting maakt het toepassen van dit soort experimenten zeg maar in het vakantiehuis lastig. Achteraf hadden we eigenlijk moeten besluiten om het niet in een vakantiehuis te doen, maar gewoon in een huis wat dichter bij de wal dus als er calamiteiten of problemen zijn er gelijk ingegrepen kan worden maar ook een huis met echt gemotiveerde deelnemers en een huis wat eigenlijk iedere dag bezet is.

Nou voor mijn scriptie is het natuurlijk interessant dat het een vakantiehuis is, dus daar ben ik blij om.

Ja en wat er nog meer geïnstalleerd is, is een grinder. In Amerika is een grinder vaak standaard ingebouwd in het aanrecht. Een vermaler die voedselresten, schillen, koffieprut en allerlei organische materialen wat bij ons in de afvalbak verdwijnt, kun je daarin vermalen. Dat komt in een vergister terecht. Daar kun je zeg maar biogas uit halen en dat gas kun je gebruiken voor toepassingen zeg maar.

Ja elektrische toepassingen toch?

Ja, kijk dat huisje is natuurlijk heel kleinschalig en biogas vergisting... kijk in Sneek is er een woonwijkje waarin dat op grotere schaal wordt toegepast en dan is die biogas productie redelijk aanzienlijk, maar ook daar heb je weer gemotiveerde mensen die er bewust voor gekozen hebben om dit te doen en daar is die biogas productie levert een deel van de verwarming van de huizen. Dus dat is super duurzaam, maar in ons geval wisten we al van tevoren dat als het al goed zou gaan werken dat de biogas productie zou laag was dat we de verwarming erop laten lopen was niet aan de orde, hooguit een gaslamp die hadden bedacht, dat die dan kon branden. Dat was gewoon een test en symbolisch dan kijken of je met dit soort nieuwe technieken op den duur erop overgaan. Maar toch speelde ook weer het probleem... zo'n biogas systeem werkt op zich wel goed, mits de aanvoer van materiaal en de bezetting van het huisje constant zijn. Op het moment dat hij weer weken leeg staan dan werkt die biogas vergistingsinstallatie niet optimaal. Dat heeft veel problemen gegeven en mensen die vonden... in Nederland zijn we die grinders niet gewend en vinden we dat lastig en doordat het niet vaak gebruikt en doorgespoeld werd, gaf het soms ook stank problemen en dat vonden de bewoners dan weer lastig en die gingen klagen. Dus uiteindelijk hebben we toch besloten na veel gedoe om het toch eruit te halen.

Oké, dus die is eruit, en die douche?

Ja die douche ook.

En zit daar nu dan een waterbesparend systeem in?

Ja een gewone waterbesparende douchekop en dat vacuumtoilet zit er nog in en dat werkt prima.

Ja dus jullie zijn eigenlijk best wel tegen veel gebruikersproblemen aangelopen ook?

Ja gebruikersproblemen in die zin van je moet wel als gebruiker echt gemotiveerd zijn om dit te willen doen en dat je soms gewoon te maken hebt met technieken die natuurlijk nieuw zijn en het heeft ook veel met gedrag van mensen te maken. Het zijn technieken die misschien nog niet helemaal tot achter de komma zijn doorontwikkeld, er zitten nog kinderziektes in en als je gemotiveerd bent om energie en water te besparen kan ik me voorstellen dat je dat op de koop toe neemt, maar in zo'n vakantiehuis waar iemand geld betaalt om zijn vakantie door te brengen is dat dat lastiger. Heeft ook te maken met misschien dat we veel te weinig aan communicatie hebben gedaan. We hebben wel handleidingen neergelegd hoe dingen werken maar of mensen daar nou allemaal de rust voor nemen om dat goed tot zich te nemen nou... We hadden bijvoorbeeld een iPad liggen met alle achtergronden van het project,

maar of mensen daar nou in hun vakantie op zaten te wachten, achteraf gezien denk ik van nou ik weet niet of dat nou... Het had misschien nog intensiever gemoeten of ja...

U zegt dus dat er dus een bepaald soort mensen nodig is om in zo'n huis te verblijven.

Ja zeker met innovatieve technieken omdat ja je hebt ook vakantieparken met Green Key en die zich profileren als duurzaam, die zullen misschien technieken toepassen waarbij ze het risico niet lopen dat hun klanten er last van hebben, maar wel natuurlijke goede sier mee kunnen maken.

Ja precies. En ik vroeg me eigenlijk ook wel af hoe het Eternal Holiday House project is omgegaan met marketing enzo. Waar kun je dit huisje huren bijvoorbeeld buiten de website van Int Nije Wetter van de personeelsvereniging?

Ja, dat is inderdaad de eigenaar van de huisjes van de personeelsvereniging van het waterleidingbedrijf. Ons ging het eigenlijk als vakantiestichting ja... we zijn geen commerciële partij ofzo. Het wordt verhuisd aan personeelsleden van het waterleidingsbedrijf en derden mogen er ook in maar we hoeven daar niet van te leven om het maar zo te zeggen. Uit marketing oogpunt hebben we dus ook niet heel bewust in de markt gezegd van kom alsjeblieft naar ons huisje want zus en zo. Het is toevallig ontstaan want we zochten een vakantiehuisje op de eilanden waar een experiment konden doen en toen kwamen ze bij Vitens uit omdat die die huisjes in eigendom heeft daar, dus dat is een toevallige samenloop van omstandigheden en niet bewust voor marketing gedaan van goh we gaan nu een huisje heel duurzaam inrichting om daar commercieel gezien als ondernemer van te profiteren. Dus vandaar dat je het ook niet terugvindt. Ja als project van C2C Islands maar dat is het dan ook.

Ja, precies, maar ik denk toch dat als dat wel gedaan was dat dan misschien de juiste doelgroep gevonden zou worden.

Ja, misschien wel meer.

Ja en die medewerkers van Vitens zijn altijd met water bezig, dus die moeten dan toch eigenlijk ook tot de doelgroep behoren?

Ja, dat zou je denken, maar mensen zijn toch wel ja... makkelijk in die zin van ja ik betaal voor een vakantie en dan wil je eigenlijk geen gedoe. En als je ervoor kiest om thuis een soort Grititula huis, ja die ken jij niet. Vroeger had je op tv een man, een Brabander, die allerlei innovatieve technieken en experimenten deed op televisie. Vandaar dat ik het een Grititula huis noem. Maar dat moet je maar eens opzoeken. Maar die mensen moeten wat bewuster... ja maar mensen zijn ook makkelijk zeg maar als jij naar een hotel gaat in Istanbul of ik noem maar wat en je hebt daar flink voor betaald dan wil je geen gedoe en denk je van hé en ja zo gaan die mensen die een huisje boeken bij ons ook ermee om.

Ja dan weet ik al heel veel over de gebruiker in ieder geval en dan wil ik graag nog wat dingen weten over de betrokken organisaties. Jullie hadden een bepaald netwerk dat C2C en Vitens en hebben jullie nog andere organisaties moeten raadplegen voor bijvoorbeeld expertise of andere hulpmiddelen?

Nou als waterleidingbedrijf zijn wij gericht op de drinkwaterlevering aan onze klanten, we hebben een leveringsplicht, maar we zijn ook gebonden aan vergunningen en afhankelijk van vergunningen en beleid wat de provincie heeft ten aanzien van water en wat de gemeente heeft ten aanzien van toerisme. En dat was het mooie van dit project dat al die instanties partner waren in het C2C project. Zowel de gemeentes als de provincie, maar ook Wetsus en dat was wel mooi om in die zin met elkaar te praten over ja... vroeger was het bv. zo dat een gemeente zei van ja we willen gerust een beleid ontwikkelen om meer

toeristen te trekken en bijvoorbeeld een groot hotel op het eiland en dan werd er eigenlijk helemaal niet bij nagedacht van nou wat heeft dat eigenlijk voor consequenties voor het drinkwater? En dan zagen wij een grote stijging van het drinkwaterverbruik en wij moesten het maar regelen. Daar werd dus niet integraal over nagedacht en dat is nu echt anders. Dat is ook het mooie van dit project omdat je veel meer inzicht hebt in elkaars belangen en het handelen van de een heeft effect op het reilen en zeilen van de ander. En dat heeft dit project wel duidelijk gemaakt ten aanzien van duurzaam water beheer maar ook energiebeheer maar ook gewoon behoud in de maatschappij dat daar nog veel meer kansen liggen om inniger met elkaar samen te werken om te proberen om het water- en energieverbruik te verminderen.

Ja, maar er heeft blijkbaar al wel een hele verandering plaatsgevonden en organisaties zien nu wel het belang van duurzaamheid.

Ja, qua gedachte wel. De provincie Friesland heeft ooit met de gemeenten van de Waddeneilanden een ambitiemaniest afgesloten om te proberen om in 2020 duurzaam en zelfstandig te zijn op het vlak van water en energievoorziening en dan zie je toch dat het best wel moeilijk is om het beleid, wat er wel is, te concretiseren. Zeker op het vlak van water omdat het te goedkoop is in Nederland om er fors in te investeren en de terugverdientijd is te hoog of die is er niet. Anders ligt dat met energie. Maar ja de slag van dat het anders kan en anders zou moeten dat zit iedereen wel in het hoofd en 10, 15 jaar geleden is dat begonnen, maar om nu de slag te maken naar uitvoering, vind ik soms wel eens lastig.

Ja, er zijn gewoon zo veel betrokkenen met verschillende belangen.

Ja en kijk wij zijn verantwoordelijk voor waterlevering en waterschap voor waterzuivering, dan heb je het elektriciteitsbedrijf en het gas bedrijf en dan heb je de gemeente die het beleid bepaald en eigenlijke degene die het meeste belang erbij heeft is de recreatieondernemer. Die moet aan zoveel loketten zijn om zijn idee gerealiseerd te krijgen. Het probleem van duurzaam omgaan met energie en water is daar is niet een probleem eigenaar van. De verantwoordelijkheid ligt in de maatschappij te versnipperd om het heel makkelijk met elkaar op te lossen.

Ja, snap ik.

We hadden bijvoorbeeld een gebiedsvisie van Terschelling waarbij we nadenken aan de toekomst en een van ruimtelijke ordening ideeën was om een camping te verplaatsen naar de duinen, en dan meteen te proberen om die camping zelfvoorzienend te maken wat betreft energie en water. Op zich een heel prachtig idee wat helemaal aansluit bij het beleid zeg maar en waar de gemeente wat voor voelde en Vitens en het waterschap ook. En als je dat zou kunnen realiseren dat die camping bijna geen water meer gebruikt, dan heeft dat toch heel veel effect op energieverbruik en effect op water wat niet meer opgepompt en gezuiverd hoeft te worden. Dat zou een heel mooi idee zijn, maar als ik dan naar mijn baas ga en ik zeg van mag ik twee jaar de tijd krijgen om een camping te verplaatsen, dan zegt hij ja je bent gek, je moet drinkwater leveren en dat is niet jouw probleem. En zo redeneert dan in wezen iedere instantie van ja het is niet mijn probleem en van wie is het probleem dan eigenlijk? De camping eigenaar wil misschien wel, die klopt aan bij de gemeente en die zegt ja we zijn ook afhankelijk van allerlei anderen en het is heel complex.

Ja, eigenlijk heeft iedereen goede bedoelingen, maar puntje bij paaltje voelt niemand zich echt verantwoordelijk.

Ja, tenzij de nood echt aan de man komt, maar dat is niet het geval. Dat je zeg maar situaties krijgt zoals in Griekenland dat er alleen maar gedurende bepaalde uren van de dag drinkwater ter beschikking is of dat

het er gewoon niet meer is of dat het zo duur wordt dat het niet meer te betalen valt, ja dan komen de mensen wel in beweging, maar zo lang water er nog voldoende is en zo goedkoop, is het gewoon heel moeilijk.

Ja de ernst wordt niet ingezien. Oké dit was ook wel een groot punt op mijn lijst en we hebben eigenlijk alles wel gehad, maar ik heb nog wel twee aparte vragen voor u. Hoe denkt u dat we dit op grotere schaal kunnen bereiken? Ja dat is natuurlijk nu nog wel heel moeilijk...

Ja ik denk dat je toch klein moet beginnen en dat Eternal Holiday House is natuurlijk ook heel klein en dat maakt een manier van denken los en ik denk dat je toch moet proberen om dat langzaam op te schalen dat je recreatieondernemers krijgt die toch doorbijten en een aantal dingen proberen te realiseren en op het moment dat je zegt van ik ben er wel van overtuigd dat we op den duur naar dit soort technieken toe gaan. Dus je moet dat denk ik toch opschalen en die eilanden zijn en dat blijf ik wel van mening, mooie ja letterlijk eilanden en afgebakend gebied met een specifieke problematiek en daar komen misschien ook wel mensen die daar juist op af willen en kunnen komen dus ik denk als je het opschaalt en voorbeeld projecten laat zien dat dat wel een soort van olievlek effect heeft op zo'n eiland en dat het verder wordt toegepast, ook op de vaste wal. En ik kan me ook voorstellen dat het niet alleen exposure heeft naar Nederland of de Waddeneilanden maar zeker ook naar die gebieden waar schaarste is zou je het kunnen inzetten.

Ja daar wordt het straks misschien zelfs als eerste uitgebreid toegepast. En wat ik me nog afvroeg. Zo'n recreatieondernemer. Waarvoor gaat zo iemand naar Wetsus en de gemeente. Wat wil die ondernemer van die organisaties? Hulp?

Ja die recreatieondernemers die kloppen natuurlijk eerst bij die gemeente aan om te zeggen ja hallo dat is leuk en aardig natuurlijk. Wat er gebeurt, is dat het ambitiemaniest van de provincie en de gemeentes heeft ervoor gezorgd dat iedere gemeente een duurzaam energieteam heeft ingesteld, waarin ook recreatieondernemers zaten van het betreffende eiland. Die zijn gaan brainstormen en hebben geprobeerd ideeën te genereren om te bedenken hoe ze dat nou kunnen bereiken, dus die hebben in die zin wel met elkaar aan tafel gezeten.

Ja, en dat verwachten ze natuurlijk wel van de gemeente dat ze hulp en subsidies krijgen?

Ja, en dan krijgen ze veelal te horen van ja we willen het wel maar we hebben geen geld en ja dan houdt het vaak op. Ja dat is lastig.

Oké. Nou u heeft me al super waardevolle informatie gegeven in ieder geval. Maar tot slot had ik u ook al eerder gemaild dat ik graag iets over de gebruikers zou willen weten...

Ja ik heb kort geprobeerd te schetsen wat voor problemen men al is tegengekomen en ja... we hebben wel een vragenlijst aan mensen destijsds toegestuurd, soms kwamen die niet binnen, soms wel en soms waren die positief en meestal soms ook negatief als dingen zeg maar in storing raakten, dus ja.

Oké, meestal negatief zegt u?

Nou, mensen zijn nieuw gauw heel positief, als er zeg maar niks aan de hand was en het werkt allemaal was het vaak van ja geen opmerkingen, prima. En op het moment dat zich natuurlijk storing voordeed en dingen niet werkten hoe ze hoorden te werken dan krijg je natuurlijk klachten. Ja, en eigenlijk hadden we dat vakantiehuisje niet moeten kiezen, maar gewoon een normaal huis waar iemand er gewoon helemaal voor ging om te proberen om vanuit zijn motivatie voor 100% erin te staan en dan weet ik zeker dat een

aantal dingen, kinderziektes die nu een probleem vormden, geen probleem waren geweest of eerder in de kiem gesmoord waren geweest.

Oké. Heel hartelijk bedankt voor de informatie.

Interview transcript Eternal Holiday House - Informant 2

Ik doe onderzoek naar de manier waarop sociaal technische ontwikkelingen plaatsvinden in de accommodatie sector en uw project is hier een heel goed en duidelijk voorbeeld van. Kunt u me misschien allereerst kort vertellen hoe het project is ontstaan en verlopen in het begin?

Nou het project is feitelijk ontstaan eigenlijk door de vraag die er is vanuit de Waddeneilanden om feitelijk zelfvoorzienend te willen worden op het gebied van water en energie. Ze hebben een ambitie voor uitgesproken dat ze in 2020 op de eilanden zelf de energie willen opwekken en de watervoorziening regelen, want nu is het zo dat volgens mij bij Ameland en Terschelling ligt er nog vanaf de vaste wal een leiding door de Waddenzee. Zo'n leiding kost geld, op een gegeven moment is zo'n leiding afgeschreven en kwalitatief verouderd en moet die mogelijk vervangen worden en dan zou je op de eilanden eigenlijk zelf voldoende water moeten kunnen winnen om aan de drinkwater behoefte te kunnen voldoen. Dat lukt niet op die eilanden Ameland en Terschelling omdat je er onvoldoende nu kunt winnen. Het heeft ermee te maken hoe meer grondwater je wint dan ga je de grondwater stand verlagen en gaan de duinen en de vegetatie verdrogen. En toen is er gedacht van ja hoe zouden we dan toch aan waterbesparing kunnen doen en toen kwam het idee van goh er zijn best mogelijkheden voor om in plaats van een normaal spoeltoilet met een vacuümtoilet te werken he zoals je in vliegtuigen en ferries ziet, zo'n toilet dat het allemaal wegzuigt met een heel klein beetje water, en met een recycle douche die veel minder water en energie verbruikt. En toen dachten we van ja dat is allemaal heel leuk, maar dat wilden we ook in de praktijk laten zien en daarom hebben we besloten van goh laten we dat vakantiehuisje daarvoor benutten, want dat was van een partij binnen het project om te demonstreren aan de mensen. Daarin hebben we ook een stukje energie meegegenomen en met duurzame materialen he zo veel mogelijk cradle to cradle dus ja eigenlijk dat ja zeg maar de aanleiding was feitelijk meer de wens om zelfvoorzienend te worden.

Oke en dat kwam echt van de gemeente van de Waddeneilanden?

Ja dat is iets wat de gemeenten hebben uitgesproken op de eiland om zelfvoorzienend te willen zijn. Dat is omarmd door het waterleidingbedrijf want ja zij regelen de watervoorziening, maar het streven kwam echt vanuit de Waddeneilanden, waarbij het waterleidingbedrijf ook wel zoiets had van ja om zo'n leiding te onderhouden kost ook geld, dus zij hadden ook zoiets van ja als we de watervoorziening op de eilanden zo kunnen regelen, dan staan zij daar ook wel achter. Maar het initiatief kwam van de Waddeneilanden zelf.

Oke, interessant. En het feit dat het om een vakantie huisje gaat is dus eigenlijk puur toeval omdat Vitens dit huis in bezit had?

Ja klopt inderdaad, anders hadden we natuurlijk naar een recreatieondernemer kunnen gaan om een huis of een hotel of iets anders te vinden, maar Vitens was partner in het project en had vakantiehuisjes op het eiland, dus op die manier was dat feitelijk ook heel makkelijk die link te leggen en te realiseren.

Ja zeker waar. En anders was u naar een andere recreatieondernemer gegaan. Maar denkt u dat de toerist het juiste middel vormt om met zo'n project te experimenteren en demonstreren?

Nou achteraf wat we wel gemerkt hebben is dat ja wat het nadeel is van een vakantiehuisje is dat je telkens verschillende mensen hebt, maar aan de andere kant een voordeel omdat je dan veel bewonders hebt en dan kun je laten zien wat er mogelijk is. Mensen komen daar voor vakantie, zien die dingen en denken misschien van goh interessant, wisten niet dat het bestaat en denken misschien later van nou als ik later wat nieuwe dingen moet aanschaffen heb ik leuke ideeën opgedaan. Dat was de positieve kant

eraan. Het nadeel was omdat je telkens andere mensen hebt en in het begin nog wel wat technische mankementen zijn geweest, ja dat vinden mensen natuurlijk niet fijn als ze op vakantie zijn. Dan spoelt het toilet niet meer vanwege een verstopping dus ja in die zin was dat wat minder ideaal om het in een vakantiehuisje te doen.

Ja ja. Positieve en negatieve kanten dus. Duidelijk. Dan heb ik nog een paar specifieker vragen over het project. Hebben jullie nog nieuwe contacten moeten leggen voor de uitvoering van het plan? Was er bijvoorbeeld geld of bepaalde expertise voor nodig die jullie niet in huis hadden?

Nou geld hadden we omdat het onderdeel was van een Europees project, Cradle to Cradle Islands, dat is een groot Europees project waar verschillende eilanden aan meededen en partijen en kennisinstellingen en daar kwam dus een stuk subsidie vandaan. Dus in die zin hebben we daar dus een stukje financiering voor kunnen krijgen om dus gewoon een aantal dingen aan te leggen. Dus daar kwam een deel van het geld vandaan. En ja we hebben wat expertise ingehuurd want we hadden dus dat toilet en die grinder in de keuken geïnstalleerd en een vergister om het toiletwater en de keukenafval te vergisten en daar hebben we ook wel een bedrijfje DESA heet dat uit Sneek voor ingehuurd die zeg maar de vergister ontworpen hebben en ook uiteindelijk geïnstalleerd hebben. En hetzelfde geldt voor die recycle shower dat was toen nog een prototype en die is door het bedrijf Sealskin daar gebouwd. Dus ja we hebben daar een aantal marktpartijen bij betrokken om de zaken geïnstalleerd te krijgen.

Ja, oké precies. Dat is duidelijk. U had het al over de nadelen met de toeristen. Zijn er nog meer dingen die u geleerd heeft en die u anders zou doen in het vervolg?

Ja klopt. Ja en als we een beheerder op locatie hadden gehad voor het huisje dan had je in geval van problemen meteen iemand erop af kunnen sturen. Ja er was wel iemand van het waterleiding bedrijf maar het was niet de bedoeling dat die bij problemen allerlei hand en stand diensten zou verzorgen dus ja als je die wel had gehad dan had je in ieder geval sneller kunnen anticiperen op het moment dat er een probleem ooptrad, maar goed. En kijk, wat we geleerd hebben is als je iets in je eigen huis doet en je accepteert van ja het werkt nog niet helemaal optimaal en we zorgen met de tijd dat het goed gaat werken... Ja voordat je zo iets in een vakantiehuisje doet, moet je wel gewoon zeker weten dat het werkt en we hebben nu een paar dingen erin gedaan die nog niet helemaal goed doordacht waren waardoor je gewoon dat soort probleempjes krijgt en dat moet je niet doen in een vakantiehuisje. Dat is gewoon niet handig.

Oké, dus het experiment ging eigenlijk gewoon iets te ver voor toepassing in de accommodatie. Nou dan heb ik nog wat vragen over uw visie op duurzame vakantiewoningen in het algemeen. Hoe moet het worden aangepakt om ervoor te zorgen dat duurzame vakantiewoningen een groter aandeel van de markt gaan uitmaken? Welke actoren of organisaties spelen daarin een rol? Moet de overheid daarbij helpen? Of ligt dat puur bij de vakantieondernemingen?

Nou in denk toch dat dat wel een beetje in samenspel zal moeten zijn. Ik denk zeker dat je daar als recreatieondernemer een heel grote rol in moet spelen, want het gaat wel om jouw accommodatie en ik denk ook dat je jezelf er ook een voordeel mee kunt doen, omdat er best recreanten zullen zijn die dat heel erg positief waarderen als ze ergens overnachten dat ze zien dat dat met aandacht voor het milieu gebeurt. De manier waarop huisjes geïsoleerd zijn en energie wordt opgewekt en dat kan hetzelfde zijn met water. En feitelijk zou je dat als gemeente gewoon moeten stimuleren door er enerzijds op te wijzen. Als je ook kijkt naar de Waddeneilanden daar wonen misschien een of tweeduizend mensen, maar er komen honderdduizend mensen voor kortere of lange tijd hun vakantie vieren, dus feitelijk die milieu belasting op dat eiland dat wordt niet door die bewoners veroorzaakt, maar door de recreanten die er

komen, dus die hebben daar een gigantische invloed op. Dus in die zin is het niet gek dat je als recreatieondernemer als wilt dat je eiland leefbaar blijft en zeker ook als gemeente, dat je daar maatregelen voor treft en stimuleert met bijvoorbeeld wat subsidiemogelijkheden of dat recreatieondernemingen advies in kunnen winnen want ja die weten ook nog niet altijd wat er allemaal te koop is en wat er mogelijk is, dus in die zin hebben het energie bedrijf en het waterbedrijf daar een informerende rol in om samen met de onderneming rond de tafel te gaan om te mogelijkheden aan te geven.

Ja is zeker een goed idee.

Ja en ik denk dat de branchevereniging van de horeca ondernemer die kan daarin ook heel duidelijk een voorbeeldrol vervullen of dit gewoonweg ook stimuleren en feitelijk je hebt natuurlijk heel veel certificaten die je als onderneming kunt krijgen wanneer je... de Green Key en al dat soort duurzaamheidslabels en ik denk dat als je als hotel dat hebt, dat je dat ook extra gasten kan opleveren.

Ja zeker, denk ik ook. Dus de verantwoordelijkheid ligt eigenlijk vooral bij de gemeente en de ondernemer.

Ja denk ik wel, en wat natuurlijk ook zo is is dat als je als gast op een gegeven moment.. maar goed dat zou je meer ja dat is ook wat je ziet gebeuren met al die reclames van Wakker Dier van koop geen pofkip meer. Kijk als je daar als consumenten daar massaal gehoor aan geeft, dan dwing je de producenten om diervriendelijker te produceren. En als toeristen massaal zouden kiezen voor dit soort duurzame accommodaties, maar goed dat zie ik zelf nog niet zo heel snel gebeuren.

Ja dat duurt nog wel even he?

Ja precies er zullen mensen zijn die er speciaal naar op zoek gaan, maar er zijn er zat die het niet zoveel boeit. Die denken ik ben nou op vakantie en ik wil vooral even niet met dat milieu zijn. Lekker genieten en een half uur onder de douche.

Denkt u dat als er landelijk gezien meer van dit soort "experimenten" worden uitgevoerd, dat het dan vanzelf in populariteit zal groeien?

Nou, ik denk wel dat het helpt. Hoe meer experimenten en voorbeelden je krijgt en mensen zien dat het werkt, dan denk ik dat op een gegeven moment de experimenteerfase voorbij is en dan kan het meer een soort van gemeengoed worden en dan denk ik wel dat, zeker als recreatieondernemingen dat bij collega's zien, dat dat dan een soort van vliegwiel effect krijgt. Dat geloof ik wel. Maar ik denk wel dat het heel erg afhankelijk is van wat de horecaondernemer zelf wil. Die moet er echt achter staan. Ik hoorde vandaag van een project op Terschelling dat een ondernemer met huisjes door heel simpele oplossingen zijn waterverbruik al 40% heeft kunnen reduceren, gewoon door kranen met sensoren en toiletten met zo'n knop voor kleine spoelbeurten. Hij heeft ook bakstenen in de waterbak bij het toilet gelegd, waardoor je dus ook minder water verbruikt. Nou ja en die werd gewoon vreselijk enthousiast toen die merkte hoe snel hij dat soort maatregelen had terugverdiend. Dan merk je wel van doe het maar gewoon en dan zie je wat de effecten zijn en wat je bespaart en dat maakt je dan vervolgens weer nieuwsgierig naar goh wat kan ik verder doen met dingen die misschien wat meer tijd nodig hebben om te implementeren of die nog wat nieuw zijn.

Ja precies. Dus het geeft een soort sneeuwbaleffect?

Ja dat denk ik wel.

Interessant. Dan heb ik nog een laatste vraag. Er is wereldwijd natuurlijk veel discussie over duurzaam ondernemen, duurzaam toerisme etc. Denkt u dat deze discussie samenhangt met het succes van kleinschalige projecten zoals deze?

O dat denk ik wel. Kijk als je kijkt naar waterbesparing ja in Nederland hebben we natuurlijk helemaal niet zo'n probleem met water. Behalve dan op bepaalde plekken zoals de Waddeneilanden, maar waterbesparing is natuurlijk wel een gigantisch probleem in Azië, in Saudi Arabië, in Afrika waar echt geen water meer voor handen is. Daar is water natuurlijk een heel groot probleem en ja ik ben wel van het idee van laat er maar een wereldwijde beweging zijn die dit soort maatregelen stimuleert van bovenaf heel globaal, maar laat vooral op lokaal niveau zien dat het werkt. Want anders blijft het een beetje een ver van je bed show, dus ja. Je hebt toch zo'n uitdrukken van think globally, act locally. Ik denk dat dat hier erg op van toepassing is, want heel concreet en praktisch, laat zien aan de mensen dit is er mogelijk en uiteindelijk draag je dan als individu of gezien feitelijk ook bij aan een veel grotere doelstelling op wereldniveau.

Helemaal mee eens. Nou dan ben ik door mijn vragen heen. Heel hartelijk bedankt voor uw waardevolle informatie.

Goed om te horen en fijn dat ik je kon helpen.

Interview transcript Landal GreenParks – Informant 1

Fijn dat u bereid bent om even te bellen en mijn vragen te beantwoorden. Ik heb dus wat vragen voor u.

Ik weet niet of ik alles kan beantwoorden maar goed ik heb uitgelegd he mijn rol is wat centraler en we kijken wel hoe ver we komen.

Ja dat zou in ieder geval heel fijn zijn. Nou ik doe dus onderzoek naar de manier waarop sociaal technische ontwikkelingen plaatsvinden in de accommodatiesector en de eco-bungalows op Landal Aelderholt wil ik in mijn scriptie als een soort van case study nemen en zijn daar een heel goed voorbeeld van, dus daar zullen veel van mijn vragen over gaan, maar ook meer in het algemeen. Daarover kunt u misschien ook wel wat zeggen.

Ja. We kijken hoe ver we komen. Ik ben niet specifiek betrokken geweest bij de eco bungalows dus waarschijnlijk zal ik de vragen daarover niet kunnen beantwoorden.

Oké ja precies.

Kunt u me misschien allereerst even iets vertellen over uw rol en functie bij Landal GreenParks?

Ik ben programma manager duurzaam ondernemen wat zo veel wil zeggen als dat ik me bezig houd om het beleid rondom duurzaamheid te ontwikkelen voor Landal Greenparks en dus kijken waar we in positieve zin het verschil kunnen maken. Dus waar kunnen we veranderen en daarmee probeer ik eigenlijk de hele organisatie te stimuleren om duurzame beslissingen en beleid te voeren en uit te dragen.

Oké, want ik heb gehoord van uw collega dat er ook een moeder organisatie is die ook visies en strategieën ontwikkelt voor Landal op het gebied van duurzaamheid.

Nou ja zij doen dat voor hen zelf, maar een moeder organisatie zegt het al, zij hebben dus invloed op dat wat wij doen en dat is niet specifiek alleen op het gebied van duurzaamheid, maar op alles, want zij zijn eigenaar van Landal GreenParks. Het programma van Wyndham kun je ook gewoon online vinden.

Ja daar ga ik nog even naar kijken inderdaad.

Ja als je Google kom je gewoon op hun programma. Het is net anders als dat van ons, want wij hebben een specifieker programma. Dat heeft ermee te maken dat zij een wereldwijde organisatie zijn waar wij onderdeel van zijn. Zij hebben onder meer een grote hotelketen, campings en een breed scala aan bedrijven waarvoor zij overkoepelende doelstellingen neerzetten en uiteindelijk functioneren wij redelijk zelfstandig en maken er wel ons eigen ding van.

Ja dat is goed om te weten dat Landal zelf dus ook heel veel invloed heeft.

Nou dat is dus meer dan invloed he. Wyndham maakt een overall plan en Landal maakt een eigen programma en natuurlijk moeten we zorgen dat we met ons eigen programma een bijdrage leveren aan de doelstellingen die zij hebben, dus ja.

Oké. Nou dan ben ik eigenlijk wel benieuwd hoe Landal GreenParks op zo'n idee komt van die eco bungalows. Het past natuurlijk goed binnen de doelstellingen, maar waar komt dat idee dan vandaan?

Ja dat kan ik je dus niet vertellen. Daar ben ik niet bij betrokken geweest.

Oké. Dat ligt misschien meer in Groningen dan?

Ehm nee, die eco bungalows zijn alweer vijf of vier jaar oud. En dat ontstaat door een combinatie van de mogelijkheden die development, waar mijn collega in Groningen onderdeel van is, krijgt. Een gesprek wat ontwikkelaars heeft en de kansen die wij vanuit een marketing communicatie en commerciële hoek zien om dat te vermarkten, zo is dat meer ontstaan, denk ik. Maar nogmaals, ik durf dat niet te zeggen. Ik kan daar geen antwoord op geven. Ik ben daar niet bij betrokken geweest.

Ja ik denk dat ik dan toch bij uw collega moet zijn want mijn volgende vragen gaan allemaal over de ecobungalows.

Maar ik heb dat toch in mijn mail ook gezet?

Ja dat klopt maar ik vroeg het ook aan uw collega en die zei dat u de aangewezen persoon bent, maar goed. Even kijken welke vragen ik u nog kan stellen.

Ja stel nog maar een vraag.

Mijn volgende vraag is wat jullie verwachtingen waren van het project?

Ik denk dat niemand deze vragen kan beantwoorden. Dat is gebeurd in een tijd waarin er nog geen structureel programma was betreffende duurzaamheid, maar wat al wel in de missie en de visie van Landal GreenParks zat. Dus dit soort dingen ontstaan dan in een spanningsveld tussen waar Development mee bezig is, dus de afdeling die nieuwe parken en accommodaties ontwikkelt, een ontwikkelaar, een externe partij die een mooi product heeft wat hij zou kunnen aanbieden en in overleg met commercie, dus de commercieel directeur bv. en zijn afdeling. Die kijken van goh is dit een mogelijkheid. Het is een mooi product, het past binnen de uitstraling van Landal. Kunnen we het vermarkten, kunnen we het verkopen, en is het antwoord ja dan gaan ze dan van daaruit ontwikkelen. Wat zijn de verwachtingen van tevoren; ja ik ben er bijna van overtuigd dat het gewoon ging van ja weetje we hebben het gezien als kans, er was iemand die het voor ons wilde ontwikkelen, wij hebben het neergezet en we verhuren ze nu. Het is een mooi product, maar grappig genoeg is het ook niet iets waar ik me mee bezig zou houden. Dat klinkt een beetje raar, omdat het slechts een bungalow, of ja een bungalow vijf, tien, een aantal. We hebben 11000 woningen. Mijn doel is dat alle 11000 woningen die we hebben, zo duurzaam mogelijk zijn.

Ja oké. Ik vind het best interessant om te weten, want voor mijn scriptie gebruik ik natuurlijk allerlei theorieën en in de literatuur staat dat dit soort plannen aan bepaalde eisen moeten voldoen om succesvol te zijn, maar nu blijkt dat het eigenlijk heel spontaan ontstaan is en dat er een kans lag die jullie gegrepen hebben.

Ja, zo zou ik het omschrijven en je je toetst dan of het past binnen de visie, nou het past en los van dat je structurele dingen doet, waar ik me nu de laatste anderhalf jaar mee bezig houd, dus daarom is het ook heel lastig om dit in de tijd te plaatsen. Ik houd me bezig met de structurele verduurzaming van dit bedrijf. Daar heb je ook voorbeeld projecten voor nodig om dingen ook zichtbaar te maken. Je kunt niet alles in een keer doen. De eco bungalow moet je heel erg als voorbeeld zien. Het is een kans die zich aandoet om een stukje invulling te geven aan onze visie, we zien een kans vanuit een commercieel gedreven hoek dat we die dingen kunnen verhuren, dat gasten dat leuk en bijzonder vinden en daar zijn we mee aan de slag gegaan.

Ja en het is misschien ook een goede test om te kijken of het werkt in de markt.

Ja zeker. Zijn mensen bereid om er meer geld voor te betalen? Of vinden ze het interessant en verandert alleen hun beeld van Landal ermee en zijn ze niet bereid om meer geld ervoor te betalen? Dat soort dingen kun je inderdaad uitzoeken.

Ja, en bent u daar dan ook mee bezig met dat soort dingen te analyseren?

Nee dat is echt commercie.

Oké. Nou super interessant. Ik heb nog wel een paar dingetjes die ik wil vragen als het mag. Waar liggen volgens u de kansen voor ontwikkeling van meer van dit soort milieuvriendelijke accommodaties op bredere schaal?

Mmm... ik weet niet zo goed waar je naartoe wilt met je vraag. De kansen zijn legio.

Bijvoorbeeld nog meer van dit soort technologische toepassingen? Waar zoekt Landal naar verduurzaming?

Meer in de zin van duurzame accommodaties en ook renovaties, duurzame veranderingen neerzetten. En daar zoeken wij naar een kloppende balans tussen dat wat.. ja dit soort ontwikkelingen kosten veel geld. Dus we zoeken naar een goede balans tussen wat het kost en het rendement in de komende jaren.

Ja, oké. Ja want ik las bv. op de website dat het geen heel grote ingrijpen zijn in de woningen. Duurzame apparaten, licht, waterbesparende douchekoppen en zonne energie is aanwezig in de eco bungalows, maar er zijn geen ingrepen gedaan waar bv. de bestaande infrastructuur hoeft te worden aangepast, zoals energievoorzieningen of afvalverwerking. Want dat zou natuurlijk een te grote investering zijn.

Ja, dat klopt.

Ja dat bedoel ik, je gaat op zoek naar de dingen waarmee je een positieve verandering in gang zet, maar waarbij de kosten wel opwegen tegen de baten. Want we zijn toch een commercieel bedrijf met een winstoogmerk, dus we moeten winst maken. Als we geen winst meer maken, houden we op met bestaan en dat is nog minder duurzaam zal ik maar zeggen.

Oké duidelijk. En dan heb ik nog een laatste vraag. Wat denkt u, zal de eco bungalow de standaard worden?

Ja misschien met de tijd, maar zo'n eco bungalow is nieuw gebouwd en wij hebben veel meer accommodaties die niet nieuw zijn en wat al bestaat, en daarin hebben wij beperkte mogelijkheden, want alles wat je moet wijzigen kost over het algemeen veel meer geld, dus dat zijn soms kleine stapjes die je moet maken, maar ja zonder die kleine stapjes is er helemaal geen verandering. Dus ja, en daarbij constant kijken wanneer je de mogelijkheid hebt om grotere stappen te maken, zoals bv. het neerzetten van nieuwe bungalows en kijken van we gaan nu gasvrije bungalows maken en nieuw neerzetten en dat wordt dus ook een test. We gaan kijken wat vinden gasten daarvan en wat levert het ons op.

En dat is een nieuw plan?

Ja.

Oké, wat leuk.

En waarbij een heel aantal dingen die nu in eco bungalows zitten wel onze standaard worden. Er zit geen gloeilamp of halogeenlamp meer bij ons in de accommodatie, maar alles is LED of spaar, alles is met

waterbespaarders, de materialen die in onze accommodaties worden gebruikt, zorgen we voor dat dat duurzaam geproduceerde materialen zijn. Het verschil met de eco bungalow is dat er een groene knop in zit waarmee je de randapparatuur kunt uitschakelen, dus dan blijft alleen de noodzakelijke apparatuur in werking en voor de rest kun je alles uitschakelen en de zonnepanelen zitten dan in de eco bungalow en dat is niet een standaard bij alle bungalows, mede doordat dit vaak niet mogelijk is vanwege beboste gebieden.

Oh vandaar.

Ja dan is het rendement zo laag dat het helemaal geen zin heeft.

Ja snap ik ja.

Er is een aantal dingen in die eco bungalow die al de standaard zijn en dat is wel meer waar we het in zoeken. Structurele veranderingen en constant zoeken naar wat je aanraakt of verandert dat je dat op een duurzame manier verandert.

Dat zijn positieve geluiden voor de toekomst. Voor de rest heb ik geen vragen meer. Ik neem nog even contact op met het kantoor in Groningen.

Ja, maar het is dus geen onderdeel geweest van een structureel plan, dus je moet eigenlijk zijn bij degene die betrokken is geweest bij de ontwikkeling en zij waren in die tijd alleen betrokken bij makelaardij, dus het zou me verbazen als hij die vragen wel kan beantwoorden.

En diegene die erbij betrokken was, werkt niet meer bij Landal zei u eerder tegen mij?

Ja het kan zijn en ik moet dan zo diep gaan graven om daar achter te komen en ja het klinkt een beetje flauw, maar we worden veel gebeld door studenten en we zijn bereid om daar aan mee te werken, maar we kunnen daar niet heel veel uren in gaan stoppen.

Ja dat begrijp ik natuurlijk. Hartelijk dank voor de informatie.

Interview transcript Landal GreenParks – Informant 2

Ik doe onderzoek naar de manier waarop sociaal technische ontwikkelingen plaatsvinden in de accommodatie sector en daar zijn de eco-bungalows op Landal Aelderholt een heel goed en duidelijk voorbeeld van. Kunt u me misschien kort vertellen hoe jullie het vanaf het begin hebben aangepakt? Hoe kwamen jullie op het idee voor dit project en hoe is het toen verlopen?

Dat is wel een heel ruime vraag. Dit soort ideeën komen vaak uit de strategische pijlers van Landal GreenParks en vanuit onze moedermaatschappij, want we zijn onderdeel van Wyndham. Die draagt eigenlijk zijn missie en visie uit en daarom moeten wij invulling geven aan het duurzame karakter van de bedrijfsvoering. Dat kan natuurlijk op allerlei manieren, maar een van de manieren is zoals op Aelderholt dat er een eigen ontwikkeling, en dat is eigenlijk best bijzonder, plaatsvindt. Meestal is het eigenlijk een ontwikkeling van een derde die wij dan omarmen wanneer het klaarkomt voor de verhuur, maar dit is dus een eigen ontwikkeling en dan voer je vanuit die missie en strategie, probeer je daar invulling aan te geven, ook bij de bouw van de recreatiwoningen. En uiteraard, probeer je natuurlijk als je dat invoert en doorvoert om daarbij wat commerciële raakvlakken te creëren en dat je dat in je uitingen naar buiten ook benadrukt. En dat je ook gastgroepen ontvangt die daar gevoelig voor zijn en die daardoor onder andere een dergelijke woning boeken. Dus commercieel moet het natuurlijk ook interessant zijn en mensen moeten natuurlijk nog steeds de luxe en het gevoel hebben dat ze de luxe hebben die hen thuis misschien wel ontbreekt, in zo'n bungalow. Het is een beetje dubbel want het is geen autarkische accommodatie. Back to basic dat willen we dus ook weer niet hè. Het moet commercieel interessant zijn en het moet voldoen aan een bepaalde doelstelling die we als organisatie en moederorganisatie probeert en zo kom je tot een product.

Ja, u zei dat het een eigen project is. Wat houdt dat in en wat is het verschil met een project van een derde?

Nou op zich hoeft dat verschil er niet te zijn, maar op recreatiepark Aelderholt zijn wij als organisatie van oudsher, zelfs toen we nog een andere naam hadden, zijn we daar gewoon eigenaar van de grond. Het project is gebouwd op grond waar wij beschikking over hebben als eigenaar en dan vragen wij aan een ontwikkelende bouwer, in dit geval is dat Van Wijnen geweest in Deventer, om daar een plan op te maken. Vervolgens zijn de woningen wel weer verkocht aan particulieren. Maar het is een initiatief dat we samen met een ontwikkelende bouwer hebben gedaan vanaf het begin af aan. Wat we ook veel zien in het merendeel van Landal projecten, dan zijn wij zelf geen initiatiefnemer. Dan is de initiatiefnemer de grondeigenaar, dat kan iedereen zijn die grond heeft, en een ontwikkelmaatschappij en die vragen dan mij erbij, of Landal erbij, om te kijken of het voor Landal interessant is om het als het eenmaal klaar is om te verhuren en dan hebben we een iets andere rol. Als initiatiefnemer heb je toch veel meer sturing, zoals in het geval van Aelderholt om het ook toe te passen.

Oké, klinkt ingewikkeld. Ik had van uw collega gehoord dat het vaak een samenloop van omstandigheden is en een kans die jullie dan eigenlijk aangrijpen.

Ja, maar in dit geval zijn wij zelf meer aan de bal en maakten wij zelf die bewuste keuzes. Als je zelf geen initiatiefnemer bent dus ook geen vermogen of de grond of de optie hebt, dan probeer je natuurlijk wel in de beleidsdocumenten die wij hanteren ten behoeve van kwaliteitsnormen van bungalows een duurzaamheidsparagraaf op te nemen voor die ontwikkeling die nog gaat plaatsvinden. Dat komt natuurlijk ook voort uit onze strategische pijlers dat we daar aandacht aan besteden. Dat we geen initiatiefnemer zijn is tot daar aan toe, maar we vragen de initiatiefnemer wel om daar aandacht aan te besteden, omdat het een Landal park moet worden. Is dat afdwingbaar, minder natuurlijk. Het komt

gewoon op je pad en je probeert dat wat te sturen, maar dan wordt het minder een bewuste keuze. Ingewikkeld blijft het toch.

Ja zeker, maar heel interessant. Dan een wat specifieker vraag over het project. Wat was het doel van het project op de lange termijn visie van het project? Is het een test voor de toekomst of wat willen jullie ermee bereiken?

Nou het doel van het project Aelderholt is sowieso om het park... ja het is ontwikkeld in de jaren 80 van de vorige eeuw, een nieuwe impuls te geven met nieuwe woningen. Het bestaande park is wat ouder, noem het maar wat gedateerd en als je kijkt naar de behoefte van onze consument en van onze gasten, dan zijn de woningen qua bouwvolume gewoon aan de kleine kant geworden. Er komt dus een steeds verregaande vraag. Dat is nou eenmaal zo, de behoeftes van consumenten veranderen en bouwvolumes worden steeds groter, nou. Normaal gesproken bouw je natuurlijk niet voor 20 jaar maar voor 50 en wat er staat wil je natuurlijk graag blijven gebruiken, ook de centrale faciliteiten. Maar als je op een gegeven moment in je gast segmentatie, dan wordt het wat marketing achtig, tot de conclusie komt dat er op dat park meer behoefte is aan grotere woningen dan probeer je daar invulling aan te geven. Dan volg je de marktvraag en dan zoek je naar een locatie waar dat zou kunnen en dat werd Aelderholt. We zijn daar zelf initiatiefnemer geweest en dan zie je in de analyse die we daarop loslaten dat het park dus best gebaat zou zijn met een uitbreiding van een x aantal woningen om het park op een hoger plan te krijgen en uiteindelijk willen we natuurlijk gewoon de huurofzet verbeteren. Dat is gewoon het logische doel. En ook om de continuïteit te waarborgen. Voor hoelang is altijd de vraag natuurlijk, maar je moet wel 10, 15 jaar verder kunnen.

Duidelijk. In de eco-bungalows zitten natuurlijk flink wat technologische innovaties. Zijn er misschien dingen waar jullie tegenaan gelopen zijn en die jullie in het vervolg anders zouden doen?

Nou of dat nou specifiek voor de ecobungalows geldt, maar we gebruiken natuurlijk alternatieve energiebronnen bij nieuwe projecten, zoals krachtkoppeling, aardwarmte, zonne energie en dergelijke energiebronnen en de ene energiebron en dat merk je natuurlijk wel door de jaren heen is beter geschikt voor de exploitatie voor een vakantiewoning dan een andere energiebron. We weten bijvoorbeeld uit ervaring dat bronnen die er uiteindelijk toe leiden dat de woning met vloerverwarming wordt verwarmd, met name krachtkoppeling en aardwarmte, dat die vorm van energieafgifte minder geschikt is. Dat heeft ermee te maken dat de temperatuurverschillen aan de behoeften van de verschillende afnemers moeten voldoen. Sommige mensen willen warmte, andere niet, maar met dit soort systemen is de warmteafgifte geleidelijk. Als er dus net een paar dagen wat oudere mensen hebben gezeten, dan stoken die flink en die hebben het de laatste dag pas een beetje warm. De volgende, een jong stel, doen de ramen en deuren open en moeten weer wachten tot het koud is. Die warmteafgifte moet dus flexibeler zijn en we zouden dus eigenlijk ook nog een soort radiatoren moeten hebben daarbij. Dat soort dingen loop je toch wel tegenaan. En het inregelen van zo'n systeem blijkt voor een huishouden makkelijker te zijn dan op een park. Dat zit een deel in die behoefte van de verschillende doelgroepen die hem bedient. En ja heel veel van die duurzame middelen, zoals isolatie, verwarming etc. die zijn natuurlijk redelijk nieuw en als je zo iets toepast, moet je wel heel goed kijken naar de bedrijfszekerheid daarvan en daar schort het natuurlijk ook nog wel eens aan, omdat het soms gewoon nog in de kinderschoenen staat. Bedrijfszekerheid houdt dus in dat de continuïteit goed gewaarborgd is van bepaalde systemen en dat het niet kapot gaat. Iets nieuws kan heel hot en aantrekkelijk zijn, je hebt natuurlijk altijd voorlopers en mensen die daar meteen op inhaken, maar wij zijn in onze branche wat behoudener en kijken eerst hoe het in de praktijk werkt. We hebben nu bijvoorbeeld een project waar de ontwikkelaar kijkt naar verwarming met palletkachels. Dat is een manier om een CO2 neutrale woning te creëren, maar dat is in

Nederland nog niet heel erg ingevoerd. In relatie tot het gebruik van een recreatiewoning en de wijze waarop, moeten we kijken of dat goed valt in de praktijk. Een palletkachel is een soort houtkachel met een systeem dat zelf een bepaalde hoeveelheid houtbrokken aanvoert. Daarmee heb je een heel schone verbranding, maar daar zijn dus allerlei handelingen voor nodig bij zo'n apparaat en het is de vraag of de gast daar goed mee om zou kunnen gaan, met het bedienen van zoiets. Dus wij zeggen dan ook tegen de ontwikkelaar van ja zorg nou dat er een palletkachel komt waar je geen omkijken naar hebt, want als er iets gebeurt, gaan ze meteen aan de bel trekken en moet de technische dienst weer langs komen om het te repareren. In een huishouden is iemand die een keer die instructie heeft gehad, en die denkt oke dat is prima en dat loopt lekker door zo, maar hier komen steeds weer nieuwe mensen in.

Ja precies en in de praktijk zitten mensen misschien helemaal niet te wachten op extra handelingen tijdens hun vakantie.

Ja kan ook, en ze kunnen er ondeskundig in zijn en het kapot maken, terwijl een huiseigenaar bij wijze van spreken na een bepaalde proefperiode precies weet hoe zo'n ding werkt. Dat is net als je magnetron thuis. Daar zitten allerlei knopjes aan en kom je ergens anders en ziet dat ding er anders uit dan denk je hoe werkt dat allemaal en als je dan verkeerde handelingen verricht dan heb je storing en dat komt de continuïteit niet ten goede.

Ja dat zijn inderdaad dingen die je allemaal in overweging moet nemen. Dan heb ik nu wat vragen over uw visie op duurzame vakantiewoningen in het algemeen. Hoe moet het worden aangepakt om ervoor te zorgen dat dit soort duurzame vakantiewoningen een groter aandeel van de markt gaan uitmaken? Welke actoren of organisaties spelen daarin een rol?

Nou ik denk uiteindelijk dat duurzaamheid niet zo zeer marketing technisch iets is, maar het wordt eigenlijk door de gasten als normaal verondersteld. Terwijl men gaat er eigenlijk al vanuit. Dat komt ook in regelgeving naar voren zoals als je kijkt naar het bouwbesluit, duurzame materialen en voor vastgoed in zijn algemeenheid. Vervolgens ga je kijken hoeft het commercieel toegevoegde waarde en ja daar moet ik gewoon eerlijk in zijn, dat zien we nog niet terug in het boekingsgedrag van de gasten. Dus we hebben eco bungalows, maar het is niet zo dat deze woningen het substantieel beter doen qua omzet dan een soortgelijke woning waar niet dat stempel op rust. Dus dat is een momentopname, dat is nu en dat kan over een paar jaar anders zijn, maar dat betekent eigenlijk dat commercieel gezien is het niet een uiting die je in de opbrengstenkant van de verhuur meer gaat doen. Dan gaan commercieel ingestelde mensen beleggers en accountants denken van ja waarom zou ik het überhaupt doen als het toch niets oplevert. Dan doe je dat meer vanuit ideologisch oogpunt dan vanuit marketing oogpunt. En de consument gaat ervan dat je sowieso... en ik denk dat dat voor heel veel branches geldt, dat het gewoon een randvoorwaarde is. Dat je duurzaamheid en het milieu zo goed mogelijk in stand probeert te houden, door gebruik te maken van materialen en die normen enzovoorts.

Dus de verantwoordelijk ligt eigenlijk bij de organisaties zelf?

Ja en de gast... ja heel kort door de bocht gaat de gast eerst kijken waar wil ik vakantie vieren. Die gaat niet kijken wat is duurzaam, die kijkt waar wil ik naartoe. Dat is ook logisch, dat doe je zelf waarschijnlijk ook. Daarna ga je eens kijken van wat ga ik doen, neem ik een hotel of een camping of een recreatiewoning? En vervolgens ga je naar een recreatiewoning en dan kies je welk park je wilt. Veel voorzieningen, minder voorzieningen, wil ik rust en allerlei drijfveren die mensen hebben om iets te beleven en vervolgens ga je op dat park een keuze maken in de accommodatie. Nou dat hangt natuurlijk van je gezinssamenstelling af. In dit geval hebben we 8-persoons eco bungalows, dus voor 6 tot 8

personen en denk je dan van nou dat vind ik wel leuk, dan kies je daar uiteindelijk voor. Maar in die keuzes die ik net noem, staat dat niet op de hoogste plek.

Denkt u dat de overheid ook een rol moet spelen om organisaties te stimuleren om duurzaam te werk te gaan?

Ja denk het wel. Ik denk dat de overheid via wet- en regelgeving een prima sturend karakter heeft om ervoor te zorgen dat alles wat het produceert op zo'n duurzaam mogelijke manier zal moeten gebeuren. Wet- en regelgeving dat heb ik het over het bouwbesluit natuurlijk en er zijn best veel paragrafen opgenomen die dat stimuleren, RC waardes, coëfficiënten, elk jaar gaan die omhoog. Waardoor de isolatiewaarde van woningen moet worden verbeterd bij nieuwbouw. Op die manier proberen ze natuurlijk ja het bouwbesluit is een wet he, en daar staan allerlei normen in opgenomen die periodiek worden aangescherpt, ook in de stand der techniek. Wij moesten ook bouwen en op die manier is de overheid dus bezig met energieverbruik, materiaalgebruik, alhoewel dat wel minder is hoor. Welk materiaal je gebruikt doet niet zo ter zake, als het maar een bepaalde isolatie waarde norm heeft.

Oké dus de overheid houdt zich dus wel degelijk bezig met die wetten en regelgeving daarvan.

Ja ja en dat is zelfs ook Europees geregeld. Landen hebben uiteindelijk samen een potje van reductie van CO2, broeikaseffects enzovoorts. Ze doen dat op allerlei vlakken. Niet alleen in de bouw, maar kijk maar naar de regelingen ten aanzien van de bijtelling van leaseauto's. Dat zijn allemaal stimuleringsmaatregelen die ervoor moeten zorgen dat het milieu minder belast wordt. Of ze dat nou met belastingen doen of met wet- en regelgeving. Vanalles.

Oké nou dat waren mijn vragen. Hartelijk bedankt voor uw hulp.

Ja geen dank en heel veel succes.

Interview transcript Landal GreenParks – Guest informant 1

Inmiddels ben ik bij het gedeelte van mijn scriptie waarin ik schrijf over de gasten van eco bungalows en daarom zou ik graag meer willen weten over uw ervaring. Waarom heeft u in eerst instantie gekozen voor de eco bungalow? Hoe vond u het en zou u het nog eens doen?

Onze familie heeft daar voor op dat moment voor gekozen omdat we de eco woning mooi vonden en vooral ruim. Plus deze specifieke woning heeft 4 slaapkamers met ieder een eigen badkamer. Wat erg prettig is tijdens een familie weekend weg. Deze specifieke eco woning was erg prettig en fijn in gebruik en mooi ingericht. Dus dan zouden we het zeker doen. Wíj hebben dus niet specifiek voor een eco woning gekozen. Dit was meer toevallig omdat het handig was voor dit familie weekend.

Oké, interessant dat het u niet om de duurzame voorzieningen ging. Heeft u er veel van gemerkt dat het een eco bungalow was en geen 'normale' bungalow? En wat vond u ervan?

Nee eigenlijk weinig, behalve dat bepaalde lampen vanzelf aan en uit gingen op beweging. Het maakte geen verschil.

Oké. Dat dacht ik al te kunnen opmaken uit de omschrijving van het huis inderdaad. Heel erg bedankt voor uw reactie! ik ga dit anoniem in mijn scriptie meenemen.