

# **The Impacts of Climate Change on Small Hotels in Granada, Spain**

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## **ABSTRACT**

This paper investigates how small hotels in Granada, Spain are responding to climate change. Few hospitality and tourism studies, and those that focus on climate change, consider small firms' perspectives and thus provides a voice to this sector. It explores whether small hotels are aware of climate change issues on their day to day operations, and how they are strategically responding to the change. The findings are framed by Lewin's (1951) three step theory, a cornerstone for understanding organisational change. The research findings, based on interviews with 11 small hotel owners and managers, indicate most of the hotels showed concern and some awareness about the impacts of climate change on tourism in Granada but did not think the impacts would significantly affect their establishments. Some of the hotels were already employing environmental management strategies but felt that the local City Council should act as a catalyst for further and co-ordinated action on climate change and provide support to the local small hotel sector. Local political inaction was seen as a major barrier to responding to climate change. The majority of hotels had difficulty relating to Lewin's model. Instead the results show managing change should be considered as a continuous process more than a set of distinct and discrete steps.

## INTRODUCTION

The aim of this paper is to explore how small hotels in Granada, Spain are responding to the challenges of the impacts of climate change. More specifically it explores whether small hotels from Granada are aware of how important the implications of climate change are for them and how they are strategically responding to climate change, and what barriers may exist to address any changes. The findings are framed by using Lewin's (1951) three step theory, a cornerstone for understanding organisational change that still holds true, that may be inherent in any change process.

The vulnerability of recreation activities and tourism regions to global climate change has not been adequately assessed (Scott *et al.*, 2007). Dwyer *et al.* (2009) state research has shifted toward the part tourism can play in reducing environmental pollution and demands on resource use; however, further work is required on industry strategic responses to climate change. Relative to other economic sectors (e.g., agriculture, forestry), tourism has largely been neglected by the climate change impact research community (Scott *et al.*, 2004; Hoffmann *et al.*, 2009). Similarly, until recently climate change has not garnered substantive attention from the tourism research community or the tourism industry (Dwyer *et al.*, 2009; Scott *et al.*, 2005). Despite an inherent interest in 'protecting' the tourism industry, global bodies such as the UNWTO (2009a) realise the tourism and hospitality sectors are an important contributor to climate change. However, Frey and George (2010) identify only 2% of tourism businesses globally are participating in responsible tourism initiatives as a way to respond to the threat of climate change. This research thus focuses on this dilemma that on one hand states the tourism industry is responding to climate change and on the other that the sector appears to be slow to change.

The study is situated in Spain, a country strongly associated with tourism and at the forefront of climate change. The tourism and hospitality sector is of major economic importance in Spain as it is a great source of employment and revenue. According to the UNWTO (2009b) Spain attracted 57.3 million visitors in 2008, down from 58.7 million the previous year, making it the third most popular destination in the world. Further, it ranks second in international tourism receipts with \$61.6 billion (US) in 2008, up 6.9% from the year before. The WTTC (2010) identifies the travel and tourism economy was worth 16.4% of the Spanish GDP in 2008, and is projected to be 15.3% in 2010, and down to 14.6% in 2020. Tourism is also important to the city of Granada, which is located in the southeast of Spain, and attracted more than 2 million tourists in 2008 (Turismo de Granada, 2009). The data may show that tourism in Spain has peaked and may decline but obviously it is not clear whether climate change will contribute to these projections. Thus how the tourism and hospitality sectors are responding to the challenges of climate change in Spain, and specifically in Granada, has a sense of urgency for further research. Tourism and hospitality climate change research tends to focus on how destination managers, key stakeholders, the transport sector, multi-national accommodation providers and tour operators are responding on a global basis (Buzinde *et al.*, 2009; Dwyer *et al.*, 2009; Frey and George, 2010; Hoffmann *et al.*, 2009). According to Tzchentke *et al.* (2008), few hospitality and tourism studies consider small firms' perspectives and their distinctive features. Thus this study will focus on how climate change is affecting small local hotel businesses and their decision-making and environmental response.

## **STUDY CONTEXT AND BACKGROUND**

Tzchentke *et al.* (2008: 126) indicate “there has been a prevalence of normative literature prescribing how decisions should be made and why firms should respond to environmental pressure. If positive action is to be encouraged it is crucial to understand the process by which it occurs and the factors that influence it.” This research provides insights as to how small hotels in Granada are responding to the challenges posed by climate change, and this process has been considered within a change management framework. A framework can help people or a company

successfully manage change so that they can develop a capability to learn quickly to recognize the need for change and respond appropriately to it.

### *Theoretical Framework – Change Management*

Okumus and Hemmington (1998) stated the management of change has become an organisational necessity and it will continue to be a major factor in the management of companies in the future, especially in light of a global threat like climate change (Dwyer *et al.*, 2009; Frey and George, 2010; Tzchentke *et al.* (2008). Although it was argued by Carnall (1995) and Vandermerwe and Vandermerwe (1991) that there is no universal formula for managing change, authors such as Burnes (1992), Hill and Jones (1992) and Kotter (1995) recommended change programmes should be planned against a set of objectives and a clear process and that the use of frameworks or models helps managers to address issues from the external environment in a logical order.

Change is typified by certain patterns that affect organisations (Lewin, 1958; Schein, 1987). Lewin's (1951) perspective describes three basic steps that are inherent in any change process. The first step involves unfreezing, i.e. realising that change is required and preparing the organisation for it. The second step is movement and involves taking action to alter the organisation's social system to allow change to occur. This is typically characterised by a period of transition and confusion. The third step is (re)freezing. This involves establishing a process that ensures the new behaviour will be relatively secure against reversion to prior modes of operation. Lewin's model, a cornerstone for understanding change that still holds true, has an attractive simplicity because it identifies the general stages to be considered and therefore the process to be followed. While there are a multitude of change management approaches within the business field (Chiang, 2010), Lewin's work is still used to underpin more up to date models. Lewin's work has been criticised because the third stage - the (re)freezing - implies stability is re-established and that simply does not occur in the modern world. However, Lewin's final step can be seen as flexible and continuous, which are also reflected in more recent models of change (Chiang, 2010; Huy, 2002). Lewin's (1947) concern was about reinforcing the change and ensuring that the desired change is accepted and maintained into the future. Without this people tend to go back to doing what they did before.

His work still has relevance today and has been used to underpin research in implementing continuous organisational change in the restaurant industry in Australia (Chew *et al.*, 2006). An organisation can move into the change phase with minor improvements and adjustments that occur naturally. This may typify the way small organisations, particularly those that are owner managed, respond to change, where change is much more incremental and developmental.

Most of the literature on managing change, however, has been related to manufacturing industries and fails to address the specific issues associated with service industries. As Kaiser (1989) and Wood (1994) point out, the hospitality industry has particular characteristics that have implications for the adaptation of generic management principles. Furthermore, there has been very little research into managing change, such as that in relation to climate change, in the hotel industry (Chiang, 2010).

There are two ways of responding to change by organisations. The individual organisation can wait for legislation to hit the statute book and react to the legislation, or it can anticipate and institute proactive change (Paton and McCalman, 2000). Pizam (2005) also stated one of the main issues in change management is anticipation and understanding stakeholder responses to change and consequently, overcoming resistance to change. In spite of the multiplicity and variety of change theories available, the practice of change management is problematic. Change management is usually seen as the planned organisational response to the external and internal environmental factors and the improvement on performance (Pizam, 2005). The key to change management is not only to be able to respond to the drivers of change but also to anticipate them.

Quinn (1980) and Johnson (1988) claimed the incremental approach to change is more common and this type of change is used to maximise short term performance. The logic behind the incremental view is that the environment is constantly changing and incremental change by a continuous process is the only way to secure the future of the company. In terms of the reactive/proactive nature of change, Nadler and Tushman (1990) characterised reactive change as that implemented in response to some external event and/or serious internal operational and managerial problems. They see proactive changes as those where the company is not currently experiencing any serious problems

but managers anticipate the need for change to put the company in a better position or avert potential future problems. Although this anticipatory approach to change is generally preferable, in practice most companies tend to take a reactive approach, usually as a consequence of the commonly held view that there is no need for change if current performance is satisfactory (Taucher, 1993). Additionally, the hotel and tourism industry has been heavily criticised for being reactive largely as a result of its strong operational orientation and a tendency to focus on short term results (Frey and George, 2010; Tzchentke *et al.*, 2008; Umbreit, 1986). Smart *et al.* (2004) noted small companies (SMEs) typically do not invest in planning, pursues change haphazardly, and adopts generic or packaged change initiatives. Companies taking a proactive response to environmental concerns should recognize environmental issues at all levels of the organisation, including the control system. The hotel sector generally has not taken a proactive or strategic approach to environmental concerns (Brown, 1996; Frey and George, 2010). With this in mind, the reactions of small hotels in Granada will be considered as they respond, or not, to climate change within a wider change management framework. Are the small hotels in the first phase of unfreezing, are they in the stage of transition, or have they responded to climate change and are in the final phase of (re)freezing (Lewin, 1951)?

### *Climate Change and the Tourism industry*

“The relationship between climate change and tourism is bidirectional, in that tourism activity is both impacted by, as well as being a major contributor to, this phenomenon” (Buhalis and Costa, 2005: 45). Climate plays an obvious role in tourist destination choice and among the factors taken into account by tourists when they decide upon their holidays, the destination’s climate characteristics rank very high (Berrittella *et al.*, 2004; Bigano *et al.*; 2005, Perry, 2002). Tourists are sensitive to climate and to climate change (Lise and Tol, 2002; Bigano *et al.*, 2005) and it will affect the relative attractiveness of destinations and hence the motive for international tourists to leave their country of origin (Dwyer *et al.*, 2009). It is unclear how climate change may affect some travel behaviour and whether they travel less to a country like Spain because they are

sensitive to the issue. Emissions from tourism, including transports, accommodation and activities (excluding the energy used for constructions and facilities) account for about 5% of global CO<sub>2</sub> emissions. In 2005, tourism's contribution to global warming was estimated between 5% and 14% to the overall warming caused by human emissions of greenhouse gasses (Simpson *et al.*, 2008). While not the largest contributor to emissions compared to sectors like agriculture or other industries, the projected growth of tourism will impact on future contribution levels. Tourism is forecasted to increase steadily over the next decades at a rate of 4-5% a year. International tourist arrivals are expected to double over the next fifteen years to 1.6 billion by 2020 (UNWTO, 2009b). Emissions from tourism are also predicted to grow rapidly, with an increase of 152% predicted between the years 2005 and 2035 without concrete action to reduce them (UNWTO, 2007: 4), thus contributing to climate change. By far the largest tourism-related contributor to climate change is the transportation sector according to research carried out by the UNWTO (2007: 3) as it accounts for 75% of all emissions, while the accommodation sector represents about 21%.

### *Tourism and Climate Change in Spain*

The attractiveness of Spain as a tourism destination can be related to the country's cultural heritage, its varying landscapes, and, above all, its pleasant climate compared to Northern European conditions. Around 60% of the tourists coming to Spain identify enjoying the sun and beaches as a main motivation (Spanish Ministry of Industry Tourism & Commerce, 2007). This makes the tourism sector, and consequently the hospitality sector, in Spain potentially vulnerable to climate change. Current marketing campaigns aim to shift the image away from sun and sand promotion to a wider experience, developing new types of tourism: religion, golf, gastronomy, and wellness among others (Spanish Ministry of Industry Tourism & Commerce, 2010). The Spanish Government has recently launched a new campaign called "Privilege Spain" included in its "Horizon Plan 2020" a strategic plan for the next 15 years whose objective is to develop Spanish tourism based on competitive and environmental, social and economic sustainability.

Several studies on tourism and climate change, climate variability and vulnerability, and impact assessments have been undertaken globally (Buzinde *et al.*, 2009; Ehmer and Heymann 2007; Frey and George, 2010; Viner and Agnew, 2003; Viner and Amelung, 1999) and in Spain specifically (Gobierno de España, 2007; Hein, 2007). As Hein (2007) identifies the tourism sector in Spain will be particularly affected by climate change, as many tourism activities are dependent on weather conditions, and most tourists have a high flexibility to adjust their holiday destinations. Hein (2007:9) projects tourism inflows to Spain will undergo major changes in the coming decades. “Summer tourism will decrease substantially by 2080 compared to the current situation because of excessive temperatures in most of Spain. The impact of climate change will be much higher in mainland Spain, compared to the rest of the Mediterranean where the impact of the sea will moderate temperature increases to some extent. Under the assumptions specified above and all other factors being equal, tourism in Spain could be expected to decrease substantially as a consequence of climate change. In the case the total number of tourists in Europe would remain equal, the forecasted decrease in annual tourist flows to Spain is 20%.” Gobierno de España (2007) estimated changes in climate will result in parts of Spain becoming a suitable habitat for particular species of mosquito by the 2020s and may increase the spread of malaria. This could potentially affect the desirability of Spain as a tourist destination.

Other impacts of climate change in Spain according to Viner and Agnew (1999:23) are likely to include flash floods, heat stress and more forest fires. The southern and eastern mainland parts of Spain, which includes Granada, could lose the most from climate change although some city destinations may be less affected (Ehmer and Heymann, 2007). Therefore there is a need for Spanish tourism government agencies to work towards an effective diversification strategy to minimize the effects of severe climate change in the next decades.

#### *The Hotel Sector and Climate Change in Spain*

The hotel industry consumes valuable raw materials such as energy, water, food, wood and plastics. There are a number of undesirable emissions, including CO<sub>2</sub> where the accommodation represents about 21% of total tourism sector emissions (UNWTO, 2007), CFCs (Chlorofluorocarbons), noise,

smoke, and smells. The industry squanders energy, water, food and packaging and many of these waste materials require disposal. Because of location, the industry may encourage the use of the private car rather than public transport (Alvarez-Gil *et al.*, 2001; Brown, 1996; Kirk, 1995). Land and water resources are consumed by the industry and attempts to reduce the consumption of water and land must be investigated, through impact studies or new projects (Kirk, 1998). These issues are of greater significance when added together.

Within the tourism sector, the hotel segment is highly relevant from both an economic and strategic viewpoint. Spain offers the fourth largest hotel capacity in the European Union (following Italy, Germany, and France), with 16,157 establishments and 1.58 million beds in 2005 (Eurostat, 2007). A distinctive feature of Spain's hotel sector is the strong seasonal concentration of activity in summer months (Fernández and Mayorga, 2008). Hotels are the most common accommodation type chosen by tourists, around 64%. In a very competitive scenario, the Spanish hotel sector has shown a very dynamic evolution, especially in comparison with the rest of the countries in Europe and the sector contributes to 1% of the Spanish GDP with a turnover of 11.250 million Euros (Moral-Rincon, 2006:11). From the total Spanish occupied population, 209,673 people worked in hotels and guesthouses in August 2003 (Claver-Cortes *et al.*, 2006:1101). The sector is dominated by small and medium sized family-run type establishments (Gonzalez and Talon, 2001).

While Alvarez-Gil *et al.* (2001) stated the Spanish hotel industry shows an increasingly higher environmental concern, it is recognised that the hotel industry in general has been slow to engage in green reporting (Chan, 2005). Still there are some positive initiatives as to how the Spanish hotel sector is responding to climate change. There are government programmes aimed at promoting environmental protection, the World Travel and Tourism Council grants environmental awards and tour operators scrutinize hotels' environmental practices (Alvarez-Gil *et al.*, 2001; Cespedes-Lorente *et al.*, 2003; Garcia-Rodriguez and Armas-Cruz, 2007).

It is argued that large firms and hotels have a greater impact on the environment. Further, large firms are exposed to considerable environmental pressures from stakeholders because their environmental impact is more visible, and it is easier to control centralized sources of pollution than

disperse ones (Alvarez-Gil *et al.*, 2001; Cespedes-Lorente *et al.*, 2003). Large firms are regarded as industry leaders and, thus, constitute models to imitate. Research contends that large firms develop more advanced environmental management because they have slack resources to be invested in environmental protection. They usually adopt a more formal management and this in turn implies a more formal environmental management, and they may have economies of scale for the re-use, recycling or valuation of waste. Therefore, large-size hotels deploy more extensive environmental management practices than their smaller size counterparts (Alvarez-Gil *et al.*, 2001:459). Still the reasons behind the adoption of sustainable practices remain largely unexplored, particularly in the context of small hospitality firms and hotels, especially those with less than 20 rooms (Tzschentke *et al.*, 2004).

Kirk (1998) generally recognised that global agreements, by themselves, will not induce change. Further, significant change will only result from local action taken by local government, business and pressure groups. There have been growing efforts to engage the greening of hospitality practice, with initiatives such as the International Hotels Environmental Initiatives (IHEI) acting as a catalyst for action. “These have largely worked to the exclusion of small independent concerns, which are limited by resources and tend to respond more to legislative requirements than to voluntary codes of practice” (Wallis and Woodward, 1997:96). There is the notion that environmentally active establishments act in comparative isolation, rather than as part of an industry wide coordinated initiative (Knowles *et al.*, 1999).

Low levels of ecoliteracy (Tilley, 2000) and awareness regarding their environmental footprint have also been noted to account for small firm owners’ failure to “identify a central role for themselves in the implementation of sustainable development” (Horobin and Long, 1996:19). Authors like Horobin and Long (1996) and Zurburg *et al.*, (1996) argued small businesses in the hospitality and tourism industries, although concerned about the environment, are less likely to know what practical steps to take in order to address this issue. This may be happening in Andalusia and Granada where there is no environmental accreditation or measures specifically for the hotel sector from the main institutions “Consejeria de Turismo, Comercio y Deporte” and “Patronato de

Turismo de Granada” nor any accreditation at the wider national level. The smaller hotels in Granada may not try to become proactive because of a lack of information regarding environmental issues and climate change.

As Paton and McCalman (2000) suggest successful exploitation of a change situation requires knowledge of the circumstances surrounding a situation, understanding of the interactions and awareness of the potential impact of associated variables which appears to be lacking in Granada and requires further exploration to see if this is true among small hotels. Small businesses in the hospitality and tourism industries, although concerned about the environment, are less likely to know what practical steps to take in order to address this issue (Horobin and Long, 1996; Zurburg *et al.*, 1996). Therefore the next section identifies the method used to explore how small hotels in Granada are responding to the challenges posed by climate change.

## **METHODS**

A qualitative approach was determined to be the most appropriate way to research how small hotels in Granada are responding to climate change. Tzschentke *et al.* (2004; 2008) effectively utilised semi-structured interviews in order to gain an understanding into the motives and decision factors as to why tourism and small hospitality operations adopted environmental measures. Since there were only 24 hotels in Granada that had 20 rooms or less (a ‘small’ hotel for the purposes of this study), it seemed logical to pursue a qualitative approach and target the owners and/or managers of the hotels directly. The knowledge and management experience of the hoteliers and how they were responding to the challenges of climate change were best suited to semi-structured interviews, as they allow both the researcher and the participants to gain insights and understanding of particular social situations during the research process (Finn *et al.*, 2008; Goodson and Phillimore, 2004). With the purpose of ensuring consistency and validity of results, the initial request for an interview was addressed to the manager of 19 hotels via telephone (some of the 24 hotels were closed during the time of the research). A total of 11 hotels agreed to participate in the study and interviews in Spanish were conducted with them in November and December 2008. A total of four of the

respondents were the owners/managers of the hotel, six were the managers, while one was an assistant manager.

The research questions were structured towards four key areas: 1) the impacts that climate change has on small hotels in Granada, 2) the awareness of small hotels managers in Granada about the issues and challenges related to climate change, 3) the strategies that small hotels are taking regarding the issues and challenges of climate change, and 4) possible barriers to an environmental response and implementing change. After these initial four areas were discussed, respondents were shown and explained Lewin's (1951) three step change model and were asked where they considered themselves to be with the change process. This was attempted so that the owners and managers could reflect on the way they possibly implemented a strategic response to change.

The majority of respondents indicated they did not want their names or hotels attributed to the results so thus all respondents are identified as 'Interviewee 1' and so on in the findings and discussion. While the results from a small sample of respondents may not be able to be fully related to a wider population of hotels in Granada it was deemed that they would provide valuable insights on the range of issues to be explored, especially if the cases are information rich (Quinn Patton, 2002).

## **FINDINGS AND DISCUSSION**

The findings and discussion are organised around the four key research questions and themes that emerged from the data, namely the awareness of small hotel managers and owners in Granada about the issues and challenges related to climate change, impacts that climate change has on small hotels in Granada, the strategies that small hotels are undertaking regarding the issues and challenges associated with climate change, and any barriers to their responses.

### *Awareness among small hoteliers in Granada about climate change impacts*

Interviewees were asked about the effects of climate change on tourism in Granada and if these could affect their hotels. Two respondents did not think these changes would affect Granada's

tourism in the short-medium term. However nine respondents showed concern about the impacts of climate change on tourism in Granada as they were aware about the rise in the temperature, the lack of snow during winter and the extremely low temperatures during some weeks of the winter. The respondents identified the tourism sector in Granada is very sensitive to the weather and is a key decisional factor for tourists when and where they decide to visit which coincides with the literature (Berrittella *et al.*, 2004; Bigano *et al.*, 2005; Perry, 2000). One statement from the interviews illustrates this perspective:

*“Yes, tourism is a very sensitive sector, in places like Granada, more than the cultural attractions, the weather plays a key factor for tourists when they have to choose a destination” (Interviewee 3).*

Some respondents were concerned about the lack of snow for the area’s ski resort.

*“...the region of Granada is relying very much on the ski tourism during the winter season; global warming will definitely affect this kind of tourism” (Interviewee 4).*

Generally the results showed that all hoteliers sampled were aware of the impacts of climate change on tourism in Granada to some degree, but 7 out of 11 respondents did not think that those impacts would affect their small hotels:

*“I do not really think it will affect my hotel, as my guests come to visit the city and are not influenced by the weather” (Interviewee 7).*

*“I do not think so as my hotel is focusing on cultural tourism which has not been influenced by climate change” (Interviewee 10).*

The interviewees did not identify the other implications of climate change that could affect tourism in Granada such as the spread of some diseases like malaria, the increase of flash floods, and the incidence of forest fires (Gobierno de España, 2007; Viner and Agnew, 1999), or the displacement of tourists to other parts of the country and fluctuations associated with seasonality (Ehmer and Heymann, 2007; Hein, 2007).

Interviewees agreed that large hotels have a greater impact on the environment (Alvarez-Gil *et al.*, 2001), however when prompted, they recognized that regardless of hotel size any impact was important:

*“Our impact to the environment is less than what a bigger hotel with more capacity could have but we are conscious that any activity does not matter how small affects the environment” (Interviewee 3).*

*“Obviously our impact is smaller than that of bigger hotels that use more electricity, more gas, dispose more waste and so on. But we are aware that we do have an impact and we try to minimise it as much as we can” (Interviewee 8).*

In order to confirm whether small businesses in the hospitality and tourism industries, although concerned about the environment, are less likely to know what practical steps to take in order to address this issue (Horobin and Long, 1996; Zurburg *et al.*, 1996) respondents were asked if they knew of any initiatives in the local area to combat climate change. Most of the interviewees (8 of 11) were not aware about any events related to the issues of climate change regarding the hotel sector from the local hotel associations or authorities and all of them agreed there is no eco-label initiatives or directives from any local authorities to promote greener policies. For one hotelier it was a source of frustration:

*“No, I have not really heard about this kind of action, but I think that is the main problem in Granada. Political and local institutions do not propose us a lot of things such as training courses for small hotel managers. They do not really communicate on the need to take environmental measures and they do not create tools to help us. I think they are going in this way but it is not really convincing at the moment...local institutions should do more things to encourage hotel managers in this way and for me training is essential. They should focus on that first of all” (Interviewee 11).*

The respondents did not feel supported by stakeholders, who were criticised by interviewees for being too distant, and the interviewees felt that decision makers should be more accessible at the local level.

*“They tend to pay more attention to the bigger hotels as they represent a bigger proportion of the industry, and therefore bring more economy to the region” (Interviewee 8).*

*“I have the feeling that local institutions and hotel associations are more concerned about occupation rates than this kind of issue” (Interviewee 4).*

#### *Strategies that small hoteliers are taking against the impacts of climate change*

The use of formal tools of environmental management amongst the interviewees was very low. A total of 9 of the hotels had not conducted an environmental review nor adopted any formal environmental standards. Further they had not implemented an environmental management system or produced an environmental policy. This mirrors Frey and George’s (2010) research where globally a very small percentage (2%) of tourism businesses are participating in responsible tourism

initiatives as a way to respond to climate change. One of the interviewees had an experience of an environmental audit regarding the implementation of ISO 14001 and the other one had a management plan which covered waste management and with which suppliers they were working. Despite the absence of formal environmental management tools, respondents felt that they could influence most of the environmental impacts attributable to hospitality businesses. The highest levels of awareness and activity were evidenced in the traditional areas of environmental management: the reduction of waste, energy conservation and water conservation. Some of the hotels had adopted some measures in these areas. One of the hotels had implemented a more appropriate measure, the installation of solar energy panels and solar-assisted heating. One striking observation was that the interviewees had differing views about the actions that they could take, depending on personal experience, knowledge base and individual businesses circumstances.

*“I think because we are small it is easier to adopt measures to protect the environment” (Interviewee 3).*

*“With issues such as recycling, electricity saving, etc., I think it’s easier for us to carry out and control because we are small, but to implement things like water systems and so on its something that I do not even think about because I consider that it will not be profitable for us” (Interviewee 5).*

*“The size of the hotel is an important issue. We have only 17 rooms and we are very busy already to implement environmental systems. Maybe if we were bigger with more staff we could start thinking about implementing these systems” (Interviewee 7).*

*“I do not think that our size is a question of matter, everything depends on the involvement of the management in this issue, I can tell you that we are going to implement the ISO 14001 in 2009 so this proves that small hotels can do it” (Interviewee 10).*

As Alvarez-Gil *et al.*, (2001) identified larger sized hotels deploy more extensive environmental management practices than smaller sized providers. This theme tends to emerge in the data among some respondents; however, others believed the smaller operation allowed easier implementation of some type of initiative. Here it appears the small hotel sector in Granada are not consistently investing in planning or are responding in a haphazard way consistent with Smart *et al.*'s. (2004) comments about SMEs.

Views about the benefits of the use of international standards or eco-labels were sobering. Only one hotel was a member of the ‘Green Hotel Association’. The main barriers to take-up this kind of environmental policy or eco-label were money, time and lack of information which is consistent

with the literature (Tilley, 2000; Wallis and Woodward, 1997). To those who do not have strong environmental values, the perceived added value of those tools was not great. Public sector led initiatives that attempt to educate businesses about sustainable development without relation to the practical reality of these operations, or without providing an opportunity for feedback, often fail to achieve results across the whole sector. Such a didactic and passive approach is only likely to engage hotels, a sector noted for its reactive nature (Brown, 1996; Frey and George, 2010; Tzchentke *et al.*, 2008; Umbreit, 1986), with an existing interest in sustainable development issues, and fails to interest those who have not previously considered the approach.

*“I think it would be beneficial for us and for the society in general to have an international standard or an eco-label or some kind of environmental plan for small hotels from the local authorities, the problem is the ignorance of how to implement it and how much benefit this would be, the profitability of those measurements” (Interviewee 5).*

*“At the moment the economy is so weak that unfortunately a low price tag attracts more customers than any kind of eco-label” (Interviewee 8).*

*“I think that if we have something like a code of practice from the hotel federation or an eco-label they have to be something really good and it is difficult to get to make some sense, to make differences among the rest of hotels and bring profits. Nowadays we have so many labels and many of them do not make any sense” (Interviewee 9).*

Kirk (1998) identified a number of pressures in the hospitality industry. To respond to the need to reduce negative environmental impacts, there are five main motivators: legislation and codes of practise; fiscal policies; public opinion; consumer pressure; and financial advantages resulting from saving resources. To those five motivators the authors also added in the interviews the ethical aspect as another motivator factor. Participants claimed a range of motives lay behind the actions that they had taken to reduce the environmental impact of their hotels. The most common motive was for financial gain, primarily through a reduction in costs. For most interviewees, efforts to minimize their use of resources and the volume of waste that they produced were motivated by savings in operating costs: the environmental benefits were seen as a bonus. As one interviewee stated:

*“I think we have moral obligations about it, but the main thing would be to see clearly that it is profitable in some way. Because at the end of the day, if you can show an improvement on your bottom line through sustainable green ways, you will get people to come on board...unless you can say it is going to save you so much per year off your Council Tax, or off something else, people today, certainly in Granada, are not going to do anything about it” (Interviewee 9).*

Only for a minority (3 of 11) was the motivation for action associated with ethics or personal concern for the environment more powerful than financial gain, a theme that also emerges in the literature (Frey and George, 2010; Tzchentke *et al.*, 2008). Expressed in its simplest form as a moral obligation or desire to contribute, social responsibility emerged as the other important dimension of environmental commitment. Articulations of this feeling were diverse and multi-faceted but most notably were indicative of the respondent's values and degree of responsibility felt towards the environment. Justifications for action evolved around three main themes: "*to do my bit*", "*it is the responsible thing to do*" and "*it is the right thing to do.*"

*"For me, because it's the right thing to do, I had an education that was very respectful towards the environment, my motivations are 'the good' motivations, that means: make customers aware of sustainable issues, offer them a better quality product and reduce the negative impact of my hotel. Because I believe it" (Interviewee 9).*

This may support the notion that environmentally active establishments act in comparative isolation rather than as part of an industry-wide coordinated initiative (Knowles *et al.*, 1999). However, financial and ethical motives were not necessarily mutually exclusive. So called 'win-win' actions, which satisfied both motives, created additional value for some hotel managers and had wide appeal.

Interest and willingness among small hoteliers in Granada to engage in sustainable practices and develop an environmental proactive response to climate change has been found, although the adoption of any strategy was still constrained by low awareness of the impacts of small hotels on the environment, confusion about the relevance of sustainability to business operations, the absence of active and coordinated support and the dominance of economic criteria in the decision making.

#### *Barriers to addressing the issues of climate change.*

The fourth issue or theme to emerge from the interviews were the main obstacles to addressing the challenges of climate change. Small hoteliers highlighted a range of barriers that made it difficult to address the problem or stopped them from taking action. Barriers fell into two different types (see Table 1). First, there were *direct barriers to action* which were immediate to individual hotels

and, on a day-to-day basis, made it difficult to take practical steps. Such barriers were often specific to the small hotel type, circumstances and location. As they were felt directly, many were potentially within the ability of hotel owner/manager to overcome, working either individually or collectively, although they would typically need some help to overcome them. Second, there were *indirect barriers* to action, which were felt by all the small hotels sampled in the city of Granada and constrained action through restrictions on choice or the financial capability of hotels to spend time considering environmental issues attached with climate change. Such barriers typically related to contextual circumstances, such as the area's infrastructure, and were considered to be largely outside the ability of small hotels to overcome.

Insert Table 1 here

These considerable barriers mirror those identified in the literature, namely if environmental initiatives exist they may work to the exclusion of smaller hotels (Wallis and Woodward, 1997) and that some important efforts that are being undertaken, no matter how big or small, occur in isolation away from wider coordinated efforts or responses (Knowles *et al.*, 1999). The lack of resources for hotels could be seen as a major hindrance that only larger businesses can afford (Alvarez-Gil *et al.*, 2001). While these small hotels in Granada sampled demonstrate some concerns for the environment, they are not aware of practical or wider initiatives to respond to environmental issues associated with climate change (Horobin and Long, 1996; Paton and McCalman, 2000; Zurburg *et al.*, 1996). These barriers help to shed light as to why the hotel sector has typically been characterised as slow to respond to environmental or responsible tourism concerns (Chan, 2005; Frey and George, 2010).

#### *Hoteliers response to change using Lewin's framework*

There has been very little research into managing change in the hotel industry (Chiang, 2010), and more specifically how it relates to the challenges posed by climate change. Climate change may

create an increasingly volatile environment for hotels and consequently they can only perform effectively by being proactive and responding to change. Brown (1996) and Frey and George (2010) note the hotel sector generally has not taken a proactive or strategic approach to environmental concerns, especially those associated with climate change. This can be exasperated when dealing with smaller size operations (Smart et al., 2004) Respondents were asked at what stage of Lewin's (1951) three basic step change model they considered themselves to be. This was attempted so the hotel owners and managers could reflect on the way they possibly implemented a strategic response to change.

One of the respondents identified its hotel within the first stage (unfreezing), another identified its hotel in the second stage (changing), *"I would say we are in the second stage as we are a young hotel and we have not changed much on these issues since the beginning, although we are always trying to improve the organisation"* (Interviewee 5). Two respondents identified their hotels in the third stage ((re)freezing), *"We are in the third stage as this is a progressive process which we will be culminating with the implementation of ISO 14001"* (Interviewee 10); and another respondent identified being in the first and second stages at the same time. The majority of managers did not choose any one of the stages or steps as they identified to have been through the three stages already and back to the beginning or even they felt to be in the three stages at the same time (*"Somehow we have been already through the three stages and we have to go back there, as the current state is not the best as you can always improve and we do not really know how climate change is going to finally knock on"* (Interviewee 6).

The identification of these new stages or phases are consistent with the literature that although common themes were mentioned it is important to note that the stages should not be seen as clearly distinct stages. This is a common misunderstanding of Lewin's model, that it is not continuous. In practice and in most situations, there is a fair degree of integration and therefore blurring between the stages (Burnes, 1992; Hill and Jones, 1992; Kotter, 1995; Vandermerwe and Vandermerwe, 1991). It appears that some of the small hotels are undertaking incremental steps in their

response to change associated with climate conditions, while others are more reactive, unsure of what the future may bring, or waiting for some wider government or industry initiatives.

## **CONCLUSIONS**

This research has focused on exploring how small hotels in Granada are responding to the challenges associated with climate change and tourism. The research findings indicate most of the hoteliers showed concern and some awareness about the impacts of climate change on tourism in Granada but were not necessarily knowledgeable about the wider range of issues. The interviews highlight although hoteliers were aware about the impacts of climate change on tourism in Granada most of them did not think that those impacts would affect their small hotels, a rather short sighted view.

The research indicates that the use of formal tools of environmental management amongst the interviewees was very low. Despite the absence of formal environmental management tools, respondents felt that they could influence most of the environmental impacts attributable to hospitality businesses. The highest levels of awareness and activity were evidenced in the traditional areas of environmental management: the reduction of waste, energy conservation and water conservation. Some of the hotels had adopted some measures in these areas. The interviewees had differing views about the actions that they could take, depending on personal experience, knowledge base and individual business circumstances.

Participants claimed a range of motives lay behind the actions they had taken to reduce the environmental impact of their hotels. The most common motive was for financial gain, primarily through a reduction in costs. For most interviewees, efforts to minimize their use of resources and the volume of waste that they produced were motivated by savings in operating costs: the environmental benefits were seen as an extra bonus. Ethical or personal concern for the environment was seen as a less important driver for change.

One of the main conclusions of this research is that interest and willingness among hoteliers to engage in sustainable practices and do something against climate change was found, although

adoption of any strategies regarding the issues of climate change was still constrained by low awareness of the impacts of small hotels on the environment, confusion about the relevance of sustainability to business operations, the absence of active and coordinated support and the dominance of economic criteria in the decision making. These are issues that small hotels in Granada must reconcile.

The research highlighted a range of direct and indirect barriers that made it difficult for the small hotels to take strategic action. Time, cost and effort were considered the main direct barriers. Customer demand for environmental improvements was felt to be variable and had not been experienced by the majority of hotel managers. Some hoteliers blamed customers as part of the problem combating climate change. As one hotelier commented *“the most difficult thing is fighting guest’s resistance, they do not admit that saving energy or doing other positive things toward the environment is not only the hotel response that it is a global problem. Their reaction (mostly Spanish guests) is: I pay for the service so it is not my problem.”* Another stated *“Guests are not convinced that it is a serious problem and although more measures are being implemented to address it there are still loads of people that do not get involved in it.”*

Political indirect barriers operated on a number of levels; the City Council was seen as an important catalyst to action for both environmental and economic sustainability through the development and implementation of strategy. However, the Council was also viewed as a significant barrier to action through deficiencies in the quality of its strategies and their day-to-day implementation. Thus there seemed to some power struggles and contestations between small hotels and local government, and that smaller hotels are not considered as important as compared to larger hotels in the area.

The research results were framed by Lewin’s (1951) model to explore at what step of the change process small hoteliers of Granada felt they were regarding the challenges of climate change. The majority of managers did not chose one of the three steps or that some identified to have been through the three stages already and back to the beginning or even they felt to be in the three stages at the same time. This shows some limitation to the applicability of the model in that managing change should be considered as a continuous process more than a set of distinct and discrete steps.

Still this was attempted so the hotel owners and managers could reflect on the way they possibly implemented a strategic response to change and to make them aware of wider organisational change models. The majority of the respondents considered managing change as it relates to climate issues as a learning process. They claimed to have gained experience and knowledge which would help them in the future to cope with the continuously dynamic nature of hotels making change a continuous process in small hotel firms in Granada. Overall, it appears that the hotels need to develop clear strategies to respond to climate change.

This research has some limitations. There was a lack of similar studies on the topic area of small hotels and climate change. Therefore, there was no possibility of comparing and contrasting the research findings with previous research results. In addition, this research is perhaps unable to provide a whole picture of how small hotels companies are responding to the challenges of the impacts of climate change on tourism in Granada and Andalusia. Further research would be useful in order to investigate how larger hotels, and hotel associations in the area are responding to climate change. Clearly, these hotels could provide significant information and complete the picture of the challenges of climate change on tourism and the hospitality sectors in Granada and Andalusia, and in Spain as a whole.

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Table 1 Direct and Indirect Barriers of Small Hotels in Granada  
Responding to Climate Change

<b>Direct barriers to action</b>	<b>Indirect barriers to action</b>
<ul style="list-style-type: none"> <li>→ <b>Time</b> <ul style="list-style-type: none"> <li>• The economic imperative</li> <li>• Competing priorities</li> </ul> </li> <li>→ <b>Effort</b> <ul style="list-style-type: none"> <li>• Practicalities</li> <li>• Lack of infrastructure</li> <li>• Shortage of facilities</li> <li>• Lack of support</li> <li>• Regulations</li> </ul> </li> <li>→ <b>Frustration</b></li> <li>→ <b>Money</b> <ul style="list-style-type: none"> <li>• Costs</li> <li>• Return on investment</li> </ul> </li> <li>→ <b>Lack of resources</b></li> <li>→ <b>Lack of customer demand</b></li> <li>→ <b>The business practices of suppliers</b></li> <li>→ <b>The availability of local produce &amp; labour</b></li> <li>→ <b>Lack of knowledge</b> <ul style="list-style-type: none"> <li>• Lack of information</li> <li>• Misinformation</li> <li>• Lack of time</li> <li>• Lack of expertise</li> </ul> </li> <li>→ <b>Image</b></li> <li>→ <b>'Distanced' responsibility</b></li> </ul>	<ul style="list-style-type: none"> <li>→ <b>Infrastructure barriers</b> <ul style="list-style-type: none"> <li>• The public transport system</li> <li>• The road system</li> <li>• Waste &amp; recycling facilities</li> <li>• Services &amp; amenities</li> <li>• Dissemination of information</li> </ul> </li> <li>→ <b>Economic barriers</b> <ul style="list-style-type: none"> <li>• Concentration of the season</li> <li>• Hotel rating system</li> <li>• Sophistication of the industry</li> <li>• The availability of finance</li> <li>• Area advertising</li> </ul> </li> <li>→ <b>Political barriers</b> <ul style="list-style-type: none"> <li>• Hospitality associations</li> <li>• Administrative boundaries</li> <li>• The Council</li> </ul> </li> <li>→ <b>Strategy formation</b></li> <li>→ <b>Public awareness of environmental issues</b></li> <li>→ <b>Public confusion about policies</b></li> <li>→ <b>Lack of enforcement of environmental regulations</b></li> <li>→ <b>Understanding of the hotel sector</b></li> <li>→ <b>Investment in the hotel sector</b></li> <li>→ <b>Control of the built environment</b></li> </ul>