Designing robust tourism industry response to climate change impacts on the Great Ocean Road destination and tourism system

(Twelve Apostles – source http://www.visitvictoria.com)

Dr. Tulsi Charan Bisht, Dr. Emma Calgaro, Ryan Jopp & Prof. Terry de Lacy

Centre for Tourism and Services Research

Faculty of Business and Law

Victoria University, Melbourne

Acknowledgement

Executive Summary

Climate change's adverse impacts on tourism are well documented. Australia's coastal regions will be adversely impacted by climate change events such as storm surges, sea level rise, coastal erosion and fresh water salination. Australia is also to get hotter, drier and fire prone. All these climate events will contribute to the vulnerability of the tourism industry in Australia.

Great Ocean Road is one of the major tourist destinations in Australia. It contains both coastal and hinterland regions that are prone to climate change impacts. Tourism in the region is predominantly nature based. The tourism industry therefore needs to take up measures to deal with impending climate change crisis. Adaptation is one such strategy.

The overall objective of the study was to design and develop a robust tourism industry response to climate change impacts on the Great Ocean Road destination and tourism system. As effective adaptation is related to the tourism industry's self assessment of its vulnerability and resilience, an actor based, collaborative methodological approach was adopted for data collection and data analysis.

The key research findings show that the:

- The industry is aware of its strengths and weaknesses and is collaboratively working to deal with a number of weaknesses.
- The industry is aware of the challenges it faces from various natural events such as bush fire, flooding, landslides and makes efforts to deal with individual events.
- There exists a high level of climate scepticism within the tourism industry. Various natural events that could threaten the industry's well being are treated as part of the natural cycle and are not related to the phenomenon of climate change.
- Climate change therefore is not an issue for the tourism industry along the Great Ocean Road. It is not even discussed as a concern at the local industry level.
- This non-recognition of climate change phenomenon hampers development of effective adaptation strategies.
- There is a need to mainstream climate change phenomenon at the local industry level to make it part of the local discourse for the industry to be able to develop 'robust responses' to the impacts of climate change.

Table of Content

Chapter I: Introduction

Tourism has emerged as a major global industry. The World Tourism Organisation (WTO) estimates that by 2001 international tourist arrivals are of the tune of 700 million and it forecasts that by 2020 the number of such arrivals will rise to a mammoth one and half billion. The domestic tourism growth around the world is even more impressive as masses of people are travelling for various reasons such as leisure, holiday, religious purposes and even for medical treatment. Since the second half of the last century such movement of people is therefore rightly being termed as mass tourism as travel and tourism have become embedded in our lifestyle.

Despite this spectacular growth tourism is vulnerable to a number of externalities. As tourism is mainly dependent on the peoples' discretionary money, it is vulnerable to economic uncertainty and volatility. During such uncertain periods, people instead of spending their money on travel might spend it on the necessities of everyday life such as food and shelter. Global financial crisis of year 2008 is one such example that impacted tourism activities and growth. Similarly, events like 9/11, terrorism related threats, political unrest, spread of epidemics such as swine flu, mad cow disease or various other viruses can also adversely impact global tourism. In recent years, climate change has emerged as another such phenomenon that has the potential to adversely impact tourism industry's functioning and growth. Impacts of climate change are both natural and socio-economic.

To be able to grow, tourism industry needs to take cognisance of these externalities. Within the context of climate change, adaptation is seen as an important strategy to deal with various challenges. Adaptation refers to "adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts" (Smit and Pilofosova, no year). Such adjustments require an acknowledgement of actual and potential threats of a climatic stimuli and making corresponding changes in "processes, practices and structures to moderate potential damages or to benefit from opportunities" (Ibid)

Adaptation is a localised strategy to deal with the impacts of climate change (Parry et al) hence the capacity to adapt varies considerably among regions, countries, and socioeconomic groups (Smit et al). Adaptation is both autonomous and planned (Smit et al). Autonomous adaptation is a process under which human systems make adjustments to the climatic changes that take place gradually. Such adaptation process however may not necessarily be a sufficient response to the rapid and unpredictable changes in the climate. A planned adaptation process therefore becomes necessary to deal with abrupt and unexpected changes in the climatic system.

This research analyses Great Ocean Road (GOR) tourism industry's adaptation to climate change with an objective to build robust industry response to the associated threats.

Aims and Objectives

The overall aim of the project is to design and develop a robust tourism industry response to climate change impacts on the Great Ocean Road destination and tourism system.

Main objectives of the study

i.   Apply a theoretical framework for assessing tourism vulnerability and resilience to the GOR tourism destination.

ii.   Develop an adaptation strategy framework to climate change risks for GOR destination and tourism system.

Research Methodology

The underlying focus of this study is to develop a robust tourism industry response to climate change by enhancing the adaptive capacity of the tourism industry to issues related to climate change. Adaptation is a process whereby the tourism industry can make various adjustments in its functioning to deal with the changed and altered climatic conditions and such adjustments could result in minimising the adverse impacts and capitalising on opportunities. The focus is the local tourism industry along the Great Ocean Road, its perception of climate change and its response to the impending impacts of climate change. The research methodology therefore is 'actor centric' and 'collaborative' where by perceptions and responses of local tourism industry guide the process of data collection and analysis.

Data collection method

Following the methodological framework the data collection was based on an actor centric, interactive process with the tourism industry representatives and operators that allowed

comprehension of climate change understanding and response of the tourism industry. Following methods of data collection were employed.

Individual consultations with tourism industry representatives and operators
Twenty two individual consultations were held with tourism industry operators. These consultations were in form of in-depth interviews. Interview questions were loosely structured focusing on the specific requirements of the project. Respondents were given the freedom to express their views fully and freely that helped in understanding their point of view. Such consultations were held at three vantage points located at the eastern, centre and western components along the Great Ocean Road. A purposive sampling method was adopted at all the three locations that ensured engagement with key-informants to gather quality data to meet research objectives.

Focus group discussion
One focus group discussion was held at the Geelong Otway Tourism and eleven prominent representatives of tourism industry participated. The discussion resulted in data that represents the view of various tourism organisations responsible for development and promotion of tourism in the region.

This data collection method resulted in a substantial body of qualitative data that was analysed using qualitative data analysis methods and NVivo research analysis tool.

Research data analysis process
The data analysis process for this research was an ongoing, iterative process. The actor centric methodological framework also informed the data analysis process. Based on inductive reasoning, the data analysis resulted in various themes. This thematic analysis was supported by a data coding process that adopted a 'constant comparative method' (Glaser and Strauss 1967; Lincoln and Guba 1985) to categorise the similar units of meaning under the same thematic category. These themes became the tool to interpret the data and to arrive at research conclusions.

An important aspect of the research was to comprehend the tourism industry's perceptions and responses to climate change to develop effective adaptation strategies. Such understanding is derived by analysing respondents' narratives that constituted the tourism industry discourse of climate change. A discourse analysis therefore has added to the analytical rigour of the study.

Scope and Limitations

Only three points of data collection

The Great Ocean Road tourist destination is a vast geographical terrain that covers coastal as well as the hinterland areas. Similarly the tourism industry and industry stakeholders consist of varied interests. Research fieldwork for such a vast and diverse region was undertaken at only three points hence certain sections of the region might not have been represented in the study. However, this limitation is addressed by ensuring that the three points of study i.e. Torquay, Lorne and Port Campbell are vantage points and are well recognised tourist spots along the road. Moreover, representatives from various local tourism bodies were part of the focus group discussion. These representatives are well informed about the functioning of the tourism industry along the Great Ocean Road.

Resources limitation (time, money and human)

The research project was long conceived and for a large part, it progressed by fits and starts. The time component of the research was therefore important as it needed to be finished before it got outmoded. There were also a number of researchers involved at different stages of the research that has the potential to influence the research outcomes.

Influencing factors – carbon tax and high Australian dollar

The data collection process, especially industry stakeholder's responses may have been influenced by some specific events. Debate raging on introduction of 'carbon tax' was one such phenomenon that was constantly mentioned by the industry stakeholders. They envisaged that it could threaten the tourism industry's economic viability; that would have influenced industry stakeholders' responses.

High Australian dollar that is impacting the industry is other important factor. Industry seems to be more concerned about its economic survival and climate change is not necessarily being given a due thought.

...Along the whole route the scenery is magnificent and extremely varied. The climate in winter is exceedingly mild, as those who have frequented Lorne and Apollo Bay at that time of the year can vouch for, while in summer, being the most southerly coast line of the Continent, it is, apart from the higher mountainous areas, the coolest the country possesses. For a continent such as Australia, where the summer temperatures are relatively high, it is rather a reflection on our reputation as an enterprising and progressive people that this southern coastal district has been so long neglected and undeveloped. If such a road as that suggested were constructed, the Board feels certain that it would become a fine asset to this State, by attracting tourists from all parts of Australia. Apart from its scenic attractions as a tourist proposition, there is considerable settlement along the coast with practically no road communication at present, while additional settlement would be encouraged if such a road were constructed. (William Calder, Chairman Country Roads Board, December 5, 1916, quoted in Alsop, P., 1982)

Introduction

The Great Ocean Road (GOR) is one of Australia's most famous touring destinations and covers 243 kilometres of spectacular coastal scenery. Hugging tightly to the dramatic south-west coastline of Victoria, the GOR offers striking views of Bass Strait and the Southern Ocean, and is "a-must-see" Australian attraction. GOR officially begins at Torquay (96 kilometres south-west of Melbourne) and finishes at Allansford where it joins the Princes Highway 10 kilometres from Warrnambool (Great Ocean Road Australia, 2009b).

(Source: http://www.greatoceanrd.org.au/)

But the GOR as a destination is much more than that road itself; it takes the visitor on a journey through diverse coastal landscapes, charming coastal towns, beautiful sections of

rainforest and hinterland, and features the striking 12 Apostles, a collection of limestone stacks that run along the 70 metre-high cliffs of Port Campbell National Park (Great Ocean Road Australia, 2009a). The Great Ocean Road also forms part of the Great Southern Touring Route that includes the vineyards of the Bellarine Peninsula, the old fishing village of Port Fairy, the Grampians National Park to Halls Gap and the historic Goldfields region of Ballarat (DIIRD, 2006). Whilst the GOR is most famous for its natural splendour, it also has cultural and historical significance; it is the world's biggest war memorial. The road was built after World War I by returned servicemen as a permanent memorial to honour those that died during the Great War of 1914 – 1918 (Tourism Victoria, 2009a).

(GOT Map - Source Tourism Victoria)

Objectives of the road

Construction of the Great Ocean Road was seen as development of a fine asset for the state of Victoria and its advantages were visualised in form of increased land values, opening up of farm land, establishment of seaside tourist resorts, and access by motorists to beautiful ocean, mountain and river scenery. Construction of the road was seen to meet the following broad objectives.

i.   It was to be a memorial to fallen soldiers and soldiers from Victoria who had fought in the war.

ii.   It would provide work for returned soldiers and returning soldiers.

iii. It would give assistance to settlers in getting produce to market.

iv. It would aid the development of timber resources.

The advantages of the road were therefore visualised in form of increased land values, opening up of some farm land, establishment of seaside tourist resorts, access by motorists to beautiful ocean, mountain and river scenery.

Tourism in Australia

In Australia, tourism has emerged as a major growth industry contributing to both the Gross Domestic Product (GDP) and employment generation. As per United Nations World Tourism Organisation (UNWTO) in the year 2010, tourism in Australia generated revenue to the tune of $30.1 billion (United Nations World Tourism Organization, World Tourism Barometer, April 2011). Australia ranks 41st by the number of tourist arrival, in year 2010, 5.9 million tourists arrived in Australia (Ibid).

Though there has been a slight decline in overnight tourism visitations over last few years, domestic tourism still remains substantial at 67 million overnight trips during the year 2010 and the total value of domestic tourism for the same year stands at $70.1 billion (Tourism Research Australia 2011). Tourism directly employs 500,500 people in Australia, a share of 4.5 per cent of total employment (Australian Bureau of Statistics).

## Tourism – Victoria and the Great Ocean Road

Tourism is also a major contributor to Victoria's GDP, larger than more traditional industries such as agriculture and mining. In 2003-2004, the combined direct and indirect contribution of tourism to Victoria's Gross State Product (GSP) was estimated to be 5.3% or $10.9 billion (a 49% increase from $7.3 billion in 1997-1998) (Tourism Victoria, 2009c). Sixty-four percent of overnight visitors to Victoria were sourced from the intrastate market, followed by 29% from the interstate market and 8% from overseas (Tourism Victoria 2009b). Victorians travelling within the State contributed $5.1 billion to the gross state product. Interstate visitors accounted for $2.8 billion, while international visitors generated $3.1 billion (Tourism Australia 2007; Tourism Victoria 2009b). Tourism in Victoria was directly responsible for 102,179 jobs in the Victorian economy, which equates to 4% of all jobs in the state (Ho et al. 2008). Indirectly tourism added another 77,069 jobs, equating to 179,247 jobs in total generated by tourism (Ho et al. 2008).

The Great Ocean Road region is the fastest growing tourism region in Victoria outside Metropolitan Melbourne (www.parkweb.vic.gov.au, 2009). The region receives over 8

million visitors per year including 5.3 million day trippers (EC3, 2008). For the year ending December 2008 the GOR received 2.4 million domestic overnight visitors, and 150,500 international overnight visitors (Tourism Victoria, 2009c). This represents a 15 percent share of total visitors to Victoria and 11 percent of total visitor nights (EC3, 2008). Tourism is a high economic importance industry for the region, its contribution to the economy is 4.07 percent, higher than its share of 3.4 percent of regional Victoria's economy (Tourism Victoria 2007-8)

Tourists: main markets for the GOR

Tourists attracted to the Great Ocean Road are considered 'socially aware' travellers that are mindful of both their use of the nature resources and their impact on the environments that they visit (EC3, 2008). The Great Ocean Road attracts intrastate, interstate and international visitors. A breakdown of the main source markets in the following figure shows that the domestic market dominates visitor levels for the GOR with 81 percent coming from Victoria and a further 13 percent from interstate. Six percent of GOR visitors are from overseas (Tourism Victoria, 2009c). Melbourne remained the GOR region's largest source market, representing 48% of domestic visitors (Great Ocean Road Australia, 2006). The largest source markets outside Victoria, were New South Wales (40%), South Australia (29%), and Queensland (19%) (EC3, 2008).
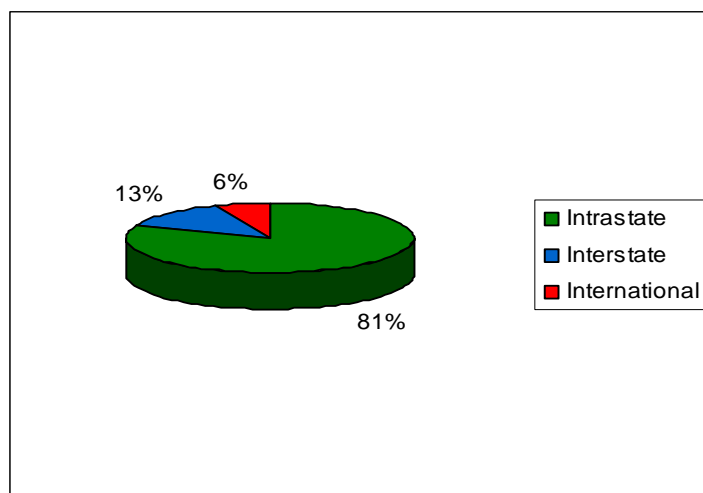
(Main market sources for the Great Ocean Road)

Most domestic visitors come to the GOR for short breaks for 1 to 3 nights. The summer months of December, January and February see a high concentration of visitation; 35 percent of annual visitors come during the summer holidays (Tourism Victoria, 2009c). Whilst this

seasonal concentration is significantly higher than the regional Victoria average of 29%, it is not surprising given that the beach is one of the top attractions for the domestic intrastate visitor (ibid). Short holidays to the GOR region revolve around eating out at restaurants (56%), going to the beach (50%), and visiting friends and relatives (41%) (ibid).

The types of domestic tourists that frequent the GOR fall largely into four categories: a) families (36%), b) single couples with no children (19%), c) older non-working couples (19%), and d) single travellers (16%) (ibid). The majority of these tourists spent their nights at friends or relatives properties (35%), whilst a further 22 percent stay in camp sites and caravan parks (ibid). Only 17 percent of the domestic market chooses to stay in hotels, motels, or serviced apartments (ibid). Day-trippers are also a prominent sub-group of the domestic market. There were 4.9 million domestic day trips to the GOR region, representing a 21 percent market share of all domestic day trips in regional Victoria (Tourism Victoria, 2009c).

The GOR's international market is much smaller than the domestic market but its importance to the region's earning potential cannot be overlooked. Attracting more international tourists is also important to Victoria's and Australia's economy and balance of trade. The largest international Tourist Generating Region (TGR) for the Great Ocean Road is mainland Europe, which accounted for 34 percent of all international visitors in 2008 (Tourism Victoria, 2009). Other significant international TGR's include the United Kingdom (24%), North America (14%), New Zealand (12%) and Other Asia excluding Japan and China (9%) (EC3, 2008, Tourism Victoria, 2009c). This differs to the rest of the state where the primary source of international visitors is New Zealand (EC3, 2008).

Main tourist places and attractions

The Great Ocean Road: A touring destination
The Great Ocean Road is first and foremost a touring route that blends dramatic natural landscapes with coastal town stopovers, and cultural events. However, the GOR is more than a major attraction: it doubles as a major component of the region's transportation infrastructure linking regions, towns, and supply routes. The GOR also forms part of the Great Southern Touring Route which is a circular route incorporating the Grampians, Warrnambool, and Ballarat.

Nature-based attractions

### The Twelve Apostles and Port Campbell National Park

The natural attractions of the GOR Region form the essence of its appeal, with the key drawcard being the iconic 12 Apostles. The striking 12 Apostles are a collection of limestone stacks that run along the 70 metre-high cliffs of Port Campbell National Park (Great Ocean Road Australia, 2009a). The effect of constant erosion of the limestone cliffs by violent southern storms has left isolated rock stacks up to 45 metres high. Other natural attractions in Port Campbell National Park include: Gibson Steps, Loch Ard Gorge, the Blowhole, the Grotto, and Thunder Cave.

The Great Otway National Park

The Great Otway National Park encompasses 100,000 hectares of forest and incorporates the former Otway National Park and Angahook-Lorne, Carlisle and Melba Gully State Parks. Bushwalkers, campers, cyclists and nature-enthusiasts are attracted to its diverse landscapes including coastal heathlands, secluded beaches (Johanna Beach) and beautiful bays (Blanket Bay), tall wet mountain ash forests, ancient rainforests with giant tree ferns, high waterfalls and deep moss-covered gullies.

The Otway Fly

The Otway Fly Tree Top Walk gives visitors the unique opportunity to experience the forest canopy. The Otway Fly is a 600 metre long and 25 metre high elevated tree top walk that gently ascends through cool temperate rainforest featuring Myrtle Beech, Blackwood and Mountain Ash.

(Otway Fly – source http://www.otwayfly.com)
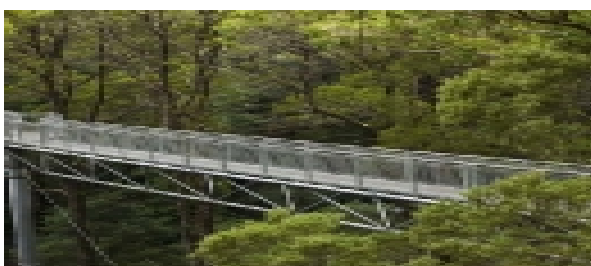
Great Ocean Walk

Another natural attraction is the Great Ocean Walk which stretches 104 kilometres along the coast between the resort town of Apollo Bay and Glenample Homestead near Port Campbell, and the Great Otway National Park. The Great Ocean Walk offers a choice of ten journeys

that tailor to a broad spectrum of walkers from casual walkers to hikers looking for more of a challenge.

Major Coastal Towns (East to West)

The attraction of all the GOR coastal towns revolves around the ocean, the surf and water activities but each have defining features to differentiate them.

Torquay

Located 96 kilometres from Melbourne, Torquay is the entrance to the Great Ocean Road. Widely recognised as the surfing capital of Australia, Torquay is home to the Surf World Museum, Surf City Plaza (surf merchandise) and is the headquarters of the surf brands of Rip Curl and Quicksilver. Torquay's Bells Beach also plays host to the longest ongoing surf competition – the annual Rip Curl Pro. This surfing event is one of the 10 surf annual events included in the Association of Surf Professionals (ASP) World Tour, running every Easter long weekend in conjunction with a surfing and music festival.

(Bells Beach – Source http://www.visitvictoria.com)

Anglesea

Ten minutes from Torquay, Anglesea and its natural surrounds is popular for outdoor pursuits including swimming, fishing and water sports on the Anglesea River, surfing and walks along the extensive boardwalks that link a network of islands and wetlands. Point Addis, 10 kilometres north-east of Angelsea, is a popular launching place for hang gliders, while the below beach offers great surfing.

Aireys Inlet

Aireys Inlet is defined by its historical sights define it. The Spit Point Lighthouse marks the entry to the town. A lighthouse historical trail leads down through heath-lands and the Great Otway National Park to Painkalac Creek. The Great Ocean Road Memorial Arch commemorates the work of the soldiers who built the GOR whilst the Bark Hut and surrounding replica dwellings portray the life of early Airleys Inlet settlers.

Lorne

Lorne is around 140 kilometres south west of Melbourne on the Great Ocean Road and situated on a protected bay overlooking Bass Strait. This seaside town with its mild weather and picturesque positioning between Loutit Bay and the Otways has attracted visitors for more than a century. The town itself is full of cafés, shops, boutiques and galleries. Lorne is also a base for those wishing to visit the Great Otway National Park with its fern gullies and Erskine Falls.

Apollo Bay

Apollo Bay and its surrounds have a mixture of attractions: deep-fishing, sea kayaking with seals, Cape Otway Light station (Australia's oldest surviving mainland lighthouse), forest, and beach activities. Apollo Bay is the start point of the Great Ocean Walk and is a base for Otway forest activities like mountain biking and bushwalking including the Otway Fly treetop walk.

Warrnambool

Warrnambool, the last major town on the GOR, is 350 kilometres from Melbourne. Part of the Shipwreck Coast (from Princetown to Port Fairy), the towns maritime and shipwreck history is displayed at Flagstaff Hill Maritime Museum and Village. Warrnambool also attracts whale-watchers who flock to see female southern right whales return to the waters of Logans Beach near Warrnambool to calve between June and September.

Major Inland Towns

Moving inland, Camperdown and Colac offer different experiences revolving around historical centres, inland lakes, forest activities and lakeside water sports.

Camperdown

Located 194 kilometres west of Melbourne, Camperdown is surrounded by a series of volcanic cones, lakes and craters that are great for fishing, boating and walking. The town itself lies at the foot of the volcanic cone of Mt Leura atop of which is a lookout with 360-

degree views. Camperdown is also one of Australia's most prestigious dairying regions offering gourmet chesses.

Colac

Forty kilometres closer to Melbourne, Colac is the historic centre of surrounding forest and agriculture industries. Lake Colac is a water sport hub host to a range of activities including boating, rowing, yachting, swimming, water-skiing, windsurfing and fishing. Lake Corangamite, Australia's largest permanent lake is another nearby attraction. The town is also the starting point of the Otways Gourmet Food and Wine Trail that continues on to Apollo Bay and a base for visiting the Otways National Park.

Introduction

Tourism is a complex system that is embedded within a wider socio-political, economic and environmental context that shapes every aspect of the system. Tourism activity does centre on the destination but it is interlinked with transit routes and the tourist generating regions (Leiper 2004) and together they come to form the wider context. Hence, tourism destinations are invariably impacted by the events taking place in this wider context and the strengths and weaknesses of a destination therefore need to be located within this wider context.

This chapter analyses strengths and vulnerabilities of the GOR tourism system within this wider context.

Great Ocean Road Tourism Destination Strengths

Well known tourism destination

The Great Ocean Road is one of Australia's most famous destinations. The natural grandeur and attraction of Twelve Apostles is iconic. There are a number of other major attractions along the Road such as the Bells Beach and the Otway Ranges. The Road is historically significant as a war memorial and tells the story of the toil, grit and determination of the young people returned from the war and is an illustration of the process of nation building during the nascent days of Australian federalism. The Aboriginal heritage is interspersed along the length and breadth of the Road. Combined together, these elements make the Great Ocean Road an enriching tourism experience and a well known tourism destination, evident in the fact that it is the second most visited region in Victoria after the city of Melbourne.

A number of life style experiences have further added to the attractiveness and renown of the Road. The region offers a variety of tourist products such as wineries, gourmet food farms and harvest trails, golf, cycling, national parks and forest walks, beaches and surfing. Bells Beach is a world renowned surfing spot both nationally and internationally.

Even people in West Texas know about the Bells Beach.

Natural beauty

Nature based tourism is seen as the major strength of the region by the industry stakeholders. The physical and natural aspects of the Great Ocean Road region are diverse. A significant portion of the geographical formation of the region has resulted from volcanic activities

(Country Victoria Tourism Council & Tourism Victoria 1996). The naturally occurring coastline that runs along the Road is spectacular and the limestone coast along Port Campbell is world renowned for the Twelve Apostles. The Otway forest range comprises of rainforests that contain native vegetation and new pine plantations. The area is also dotted with waterfalls and caves. The Otway Fly tree top walk presents breathtaking views. A number of national parks – marine and coastal as well as inland – along the Road further add to the natural beauty of the region. Beaches are a major strength of the tourism industry along the Road. These beaches allow tourist ample opportunities to paddle, swim or surf.

The region is also rich in a diverse variety of flora and fauna. While the Otway forest comprises of temperate rainforests, western lava plains are home to native grasslands. Agricultural development in the region though has resulted in a massive loss of natural flora and now its diverse nature is mostly "restricted to Crown Land such as national parks and state forests" (CVTC & TV 1996: 11).

As a result of the diverse topography the region has a number of enclaves such as native grassland, wetlands and heathlands. These natural enclaves along the Road are home to a number of species exclusive to Australia. Wildlife in the region comprises of kangaroos, emus, koalas and platypus. A large species of birds such as penguins and albatross are also native to the region. Off the coast dolphins, whales and seals are an important tourist attraction. This natural bounty makes the region a major tourist attraction that provides a

Jaw-dropping natural experience.

Well marketed
Great Ocean Road as a tourist destination is well marketed both domestically and internationally. Though natural attractions such as Great Ocean Road and the Twelve Apostles are the main brands, the marketing is now being diversified.

We are promoting and need to further promote our food and our wind and golf and significant events along the road which are generally around sport or music.

Along with a number of government agencies at the federal, state and local level, the industry promotes and markets itself with the help of new and emerging technologies. Internet has been a major source of marketing and the industry is gaining confidence in using more of social media such as Facebook, not only to market itself but also to directly communicate with prospective customers.

Positive image of the Great Ocean Road Tourism

The tourism industry is of the opinion that the Great Ocean Road region has a positive image. A number of factors are seen contributing to the building of this image. The natural beauty of the region is the main drawcard. The region also offers a number of life style and experiential opportunities to the visitors. The region is also home to such world renowned events such as Rip Curl Pro. The region's proximity to Melbourne is also an additional advantage as it allows an easy access to the region for international visitors. The region is also seen as having a cosmopolitan outlook. A combination of all these factors results in a positive image of Great Ocean Road as a destination capable of providing an enriching tourism experience.

Diverse tourism experience

Thought nature based tourism is seen as the main strength of the tourism industry, the region offers ample opportunities for diverse tourism experience. Beaches still remain the mainstay. However there are a number of other activities such as a variety of restaurants, wineries, food and harvest trails, golf courses, forest walks, bike tracks, art galleries etc. These various activities along with providing diversified tourism experiences have also facilitated geographical dispersal of tourism activities. The fact came out during individual consultations as well as during the focus groups discussion:

> *Over the last ten years, there has been a greater breadth of products that are not beach dependent. Now when there is a bad day on the beach, which inevitably happens over the summer months, the people don't feel they have had a compromised holiday.*

For example, in Lorne though tourism is still beach based, shopping and eating out are also big attractions.

Events are other major attractions providing additional experiential components to the tourism industry. Mostly focused around sports and music, events are seen as major strength of the tourism industry. Events result in getting multiple night stays by tourists and if the events are of sufficient stature such as Rip Curl Pro, they bring international tourism as well.

Driving the Great Ocean Road, History of the Road
Coastal Villages
Tower Hill
Interpretative walk, with a tour guide of the Volcanic Kanawinka Geopark
12 Apostles; Loch Ard Gorge
Bay of Islands

Cape Bridgewater Seal Colony
Whale watching -surfers interacting with the whales; helicopter rides over the whales
Princess Margaret Rose Cave
Glenelg River
Diving at The Rip; Ex-HMAS Canberra, Ship‟s Graveyard; Wreck Diving
Swim with seals, dolphins,
Lake Elizabeth Paddling with the Platypus
Waterfalls
Music Festivals
Bells Beach; Torquay; Rip Curl; Aussie Surf Culture; Surf Tours
Cape Otway Lighthouse
Great Ocean Walk
Accommodation at Cape Otway Lighthouse
Melba Gully Glow worms
Opera at Cape Otway Lighthouse
Wildlife
Otway Fly

(Source: Australian Government & Australia Unlimited, 2010)

Emerging new markets

The tourism markets for the Great Ocean Road region are seen as passing through a phase of transition. The traditional tourist markets from Northern and Western Europe and ``North America have either stabilised or are contracting. There are however new and emerging markets that the tourism industry is keen to tap into. China has emerged as a main tourist generating destination. This is an early phase and most of visitations from such markets are group visitation. However, the industry sees a real potential in the Chinese tourism market maturing quickly. As one industry stakeholder running boutique accommodation points out,

> *China is by far the largest growth non-domestic market. There is a real middle class forming in China and they are starting to get very net savvy with finding things to see and do. There are a number of Chinese language review websites similar to Trip Advisor and stuff that we have here. And people, they just follow a lot of that verbatim. They'll go like 'this is what somebody did, that sounded great, I'm going to do that. We feature on a number of those by guests that have stayed with us. So we are seeing Chinese honeymooners, things like that. And that's a market that I don't know if people are really prepared for how big that's going to be. I can easily see the Chinese market being – because historically they've stayed around the*

major towns. They may have taken a coach out to do the penguin parade and things. But now they're extending further. Because there's that real middle class. They've got a little bit more money, they're younger. Becoming younger, it's not a retirement thing. They've got a little bit more money, so they're prepared to do a little bit more travelling. So they're going to do Uluru, they're going to do the penguin parade and everything as well, but then they're also going to take a car and go along the coast. Mind you, they do it like in two days or something. But it's going to be a very large market. I mean there are so many of them quite simply that that market is going to become huge. So you can easily see it being in – even in the three years we've seen it grow a number of per cent. I can see it in another five years becoming almost like a quarter. And which would be – but that all just depends on how the Chinese situation goes. But that by far is a massive growth area.

Along with China other emerging Asian economies such as India, Malaysia, and Singapore are seen as other potential markets of future. Australia is strategically located in the region and its nearness to the emerging Asian markets is seen as an advantage.

Nearness to major urban centres
Nearness to major urban centres especially nearness to Melbourne is seen as a positive factor by the tourism industry. In year 2008, apart from more than five million day trippers, the region also attracted 2.4 million domestic overnight visitors (Tourism Victoria 2009c). People can easily drive from Melbourne to various locations along the Road within a couple of hours and a return journey does not require refuelling a full fuel tank. However, this is more so towards the eastern side of the road. This seems to have created a *'two speed economy'*. Those located closer to Melbourne seems to be doing a lot better and will continue to do so in comparison to those who are located farther from Melbourne.

Renowned for events
Great Ocean Road is known for organising events that are well known domestically and internationally. Such events not only bring in tourists to the region they also enhance the destination image of the region and are good marketing tools. Rip Curl Pro is one such event. Other sporting events such as swimming, cycling and road marathons are other important events. In addition, the region also organises a number of events, fairs and festivals. Food and wine festivals, musical events, art and sculpture events etc all add to the Great Ocean Road region's image as an event organising region that add to its repertoire of tourism products. Nearness to Melbourne has added to this advantage as a number of corporate events also get organised in the region.

Heritage listed

Australia's National Landscapes Program recognises Great Ocean Road as one of ten Australian regions for their world class natural and cultural tourism experiences. "The economic value of heritage assets is significant. In 2008, 23 million people visited Australia's cultural and heritage locations, comprising 70 per cent of all international visitors and 27 per cent of domestic visitors. Heritage and cultural tourism is a growth market, contributing 37 per cent of world travel and growing by 15 per cent per annum" (Australian Government & Australia Unlimited, 2010, p.4).

The Great Ocean Road region prior to western settlement had been home to the indigenous people. The region is closely associated with Koori cultural history (CVTC & TV) and houses a number of artefacts and archaeological sites of indigenous history. The Kerrup-jmara people who resided near the Lake Condah build some elaborate system of channels and weirs to trap fish. It has now been included in the National Heritage Listing.

The European settlement in the region adds to the historical significance. Shipwreck Coast, strewn with the wreckages of sailing ships' tells the tale of the vagaries of sea-voyage during the early days of settlement. The coast today is an excellent maritime heritage.

Construction of the Great Ocean Road itself has a great historical significance. The Road provided all weather connectivity to the dispersed settlement along the coast. It was built by the return soldiers from World War I and is dedicated to the memory of the fallen down during the war.

Inclusion of the Road in the heritage listing is seen as a positive attribute. Its heritage status will not only help attracting tourists to the region but will also ensure better funding opportunities to develop appropriate infrastructure in the region.

Place character

Tourism is about "visiting places (destinations) and it is the desire to go to a particular place which lies at the heart of tourist activity" (Davidson & Mitland 2002, p.3). It is not just the physicality of an area that comes to constitute a 'place', it is also a social construct produced by social processes. These physical and social aspects come together to constitute a place. The natural and the socio-cultural aspect of a geographical area therefore give that area its 'place character'.

A combination of natural and cultural aspects results in a strong 'place character' for the Great Ocean Road region. The Road itself provides a wonderful mix of natural and cultural experiences. A number of quaint villages and small towns add to the place character of the Road as evident in the following statement about the town of Lorne

> *Here in Lorne, we have the big blue wet thing out there and we're surrounded by bush. I mean, hello. There are not too many places like here and geographically facing the way we face because we're tucked around away from the weather. Our weather comes from over the hill and there are not so many places that are like here. And we have a number of things – events and attractions, good accommodation and restaurants where tourists can pamper them.*

Assured peak season

Though seasonality is a major concern for the tourism industry in the region, the industry feels assured about the peak tourist season. This response came at a time when the peak season in the region was marred by a number of climatic events such as floods and landslides. The businesses usually do well during the peak season. Accommodations are well booked and it mostly happens without any marketing. As the peak season is assured, industry could focus on the shoulder period and utilises resources to market this period. As one accommodation provider points,

> *During the peak season it is very easy to fill so we focus on the shoulder periods, the spring and autumn seasons where we do our marketing through our websites offering specials, discount rates and packages, now particularly through links with third party websites where people can look at various places for accommodation that link back to our won website.*

Organisational strength

There exists a strong organisational support to tourism promotion along the Great Ocean Road. Along with the national and state peak tourism bodies like Tourism Australia and Tourism Victoria there are a number of regional tourism bodies that promote tourism. Though existence of a large number of local level organisations has also resulted in lack of coordination, each organisation looking after its 'own patch'. However, the restructuring process under the Regional Tourism Action Plan 2009-2012 is seen as a positive step that will result in a more coordinated approach to tourism development in the region.

Positive policy and planning

The industry envisages that some positive policy and planning initiatives are being undertaken. The Regional Tourism Action Plan 2009-2012 is one such instance. Legislative review to make changes in the leasing process of Crown Land is seen as a positive step and will encourage investment in tourism development. The other important policy and planning

initiative is Victorian Efficiency and Competition Commission's Inquiry into Victoria's Tourism Industry. Commission's acknowledgement of the fact that the current ways of managing public and private lands hinder tourism development in regional Victoria is seen as a step in positive direction.

Great Ocean Road Tourism Destination Weaknesses

Lack of coordination of various tourism organisations

Though a number of organisations are working towards promotion of tourism along the Great Ocean Road, there seems to a general lack of coordination amongst these bodies. Often these organisations are seen as promoting the local industry interests rather than taking a holistic and integrated approach to tourism development along the Great Ocean Road region.

> *We need to act as a single interest group...not everybody expands their thinking to embrace other peoples thoughts, and probably within the tourism industry that is particularly so in the regional areas, and also local tourism associations because there is strength in what I am about to say that often they become very parochial about their own patch. You can be parochial about your patch but you also have to have an understanding of the complexities.*

Lack of tourism product integration

Though Great Ocean Road region has a wide variety of tourism products to offer there seems to be a lack of product integration. The beach front activities and the hinterland activities are not thoughtfully integrated and do not complement each other. Instead of being offered as a bundle of activities, these tourism products remain stand alone products. Lack of product integration narrows down the tourist expectations and fails to provide a broader experience that the region is capable to provide.

Day tripper

As second most visited destination in Victoria, Great Ocean Road attracts a large number of daily visitors. The region receives over 5.3 million day trippers per year (EC3). However, these visitations are not necessarily beneficial to the tourism industry. The general perception of the tourism industry is that the day trippers do not contribute to the tourism businesses within the region.

> *They jump on a bus from Melbourne, they do the Great Ocean Road in a day, they might stop at a couple of places to get a feed and a cup of coffee. They use the toilets, all that sort of stuff, but they are really not contributing at all to the local economy.*

These visitors are therefore seen as ones who contribute to the wear and tear of the local infrastructure and resources without contributing to the economy of the region.

The day-trippers also create a perception that the region is a "one day trip" that is eventually detrimental to growth of tourism industry in the region. It generates a negative image of the region as a one-day destination and fails to highlight the genuine experiences that the diversified tourism products of the region could offer.

> *The day tours, you've got, it's the highest selling day tour in Victoria, twelve hours up and back. Is that a good experience? It allows them to tick it off. It doesn't give them a good experience of the strengths of our nature based tourism. No.*

Lack of infrastructure

Lack of tourism infrastructure is a constant challenge that the tourism industry along the Road is facing. The Great Ocean Road itself is requires maintenance and upkeep.

> *No money is being spent on the Road...If we don't look at these things, well we're not going to have the Great Ocean Road experience because we're already seeing evidence of it crumbling.*

Lack of connectivity with the Great Ocean Road is another important infrastructure challenge. The Road is seen as cul-de-sac and not a 'great escape route' in case of natural events such as fire that could pose threat to the life and safety of the visitors. This could result in generating a negative image of the region.

Lack of accommodation, especially lack of high end accommodation is a major concern. Port Campbell is especially missing such infrastructure that could attract overnight tourists. As one industry stakeholder points out,

> *Down at the Port Campbell end, there are a lot of lovely B&Bs and apartments, but my understanding of the Chinese market is that they want minimum four stars and there are no such option there that could accommodate a bus load of people.*

Car parks are other infrastructural requirement. As a large number of tourist visitations to the area are by cars, lack of parking facilities is not good for attracting tourist visitations. Other infrastructural concerns range from water, electricity, telecommunication, and sewerage. Directional signage is other major concern. In Torquay, development of ring road and lack of proper signage is seen as affecting tourist visitation to the town.

> *The ring road changes the direction of a lot of traffic heading into Torquay and sends it straight past Torquay down to Anglesea.*

Lack of infrastructure fails to facilitate conversion of tourist visitation to the area into overnight stays and hinders the yield from the number of visitations.

> *The shire of Corangamite does not get the yield from the number of visitors because they don't have the infrastructure and accommodation to get that conversion. They have got a really nice small places but nothing that can take bigger numbers.*

Challenges of appropriate development

Ensuring appropriate tourism development along the Road is a major concern. The industry stakeholders' response is unanimous that though infrastructure development is required, it also emphasises that it needs to be done in an appropriate manner. Such development needs to be sustainable without compromising the 'place character' of the region.

> *We have to at all cost protect the beauty that we have, and as we know, there's always a challenge in having the appropriate development to ensure that this fits within a landscape and everything. We don't want development that does not add to our natural attractions. We don't want a Gold Coast.*

The industry also feels that its emphasis on developing sustainable tourism infrastructure is not properly understood within the planning and policy context as well as within the wider community context. Rather it is often misconstrued as a demand that would result in unmindful and unsustainable development with negative consequences for the region.

Tourism industry itself is critical of such unmindful and unsustainable development in the region that it feels would alter the image of the region. For example, the 'sea change phenomenon' in Torquay has resulted in rapid population growth and the rapid development of the town does not auger well with its image as a tourist destination.

> *Torquay, sadly, has changed adversely. It is starting to lose its identity as a coastal village. It is now being swallowed up by development. The challenge for us if we want to retain the tourism dollar and build on it, is to turn Torquay back to what it was in terms of its culture, i.e. the surf capital, which is why people come here.*

Media misrepresentation and negative imagery

The research data collection period was preceded by unusual natural events such as heavy unseasonal rains, floods and landslides in the region. This happened during the peak tourist season. These natural events were widely misrepresented in the media. Blanket statements like "Great Ocean Road is closed due to landslides" were not fact based as only a section of the Road was closed due to the landslides. This adversely affected the tourism during its peak season and resulted in cancellations. Tourists were concerned about the news.

> *I had people ringing me and saying 'sorry I can't come down because I won't be able to see the Twelve Apostles because the Great Ocean Road is closed' or people saying 'we can't come down, we have got children and it is too dangerous'.*

Such misrepresentation of facts by media not only had immediate implication for the businesses, it has potential to affect future visitations too, as the negative imagery it generates could prompt visitors to look for alternative destinations.

> *Tourism acts on peoples' will...the will to go somewhere. The more coverage and the more catastrophic coverage a destination or a venue gets, if there are viable options, means you lose your tourist.*

Government agencies response was not very helpful either in managing this media misrepresentation. Vic Roads role was especially of concern as it came be mentioned repeatedly regarding its signage at Lorne.

> *We have got these Vic Road signs. It is just down there near the supermarket, big electronic sign. It can get a bit funny from time to time. It is controlled from Vic Roads in Melbourne and if there is a major obstruction on the road, or a problem they can display it there. But the information they display is inaccurate again. Same as the media reporting and it will say Great Ocean Road is blocked.*

'Managing the message' is therefore a major challenge for the tourism industry along the Road. The region falls within the 'high fire hazard' zone. The peak tourism season coincides with the fire danger period and there are days when the Country Fire Authority imposes 'total fire bans'. Though these measures are seen as necessary for safety reasons, overplaying theses dangers could result in unwarranted safety concerns and a negative imagery not conducive for tourism development in the region.

> *About the summer bushfire in Victoria it occurs to me, in fact an observation made to me by a number of people in the industry is that the state government might have overplayed it a bit, and might have dampened peoples' enthusiasm to be in places like the Otway in various times of the year.*

Tourism market challenges

Markets for tourism industry along the Great Ocean Road are also passing through a period of rapid transformation. The traditional tourist markets from Northern and Western Europe and North America have either stabilised or are contracting. These markets are also long haul markets and the recent highs of Australian dollar are not very helpful in attracting tourists from these markets. High value of Australian dollar is also impacting the domestic markets as more and more Australians are choosing to travel overseas.

There are however new and emerging markets that the tourism industry is looking to tap into. These markets are mostly located in the neighbouring Asian region. Rapid economic growth in this region and the rising middle class are seen as future prospects by the tourism industry. However, the industry sees itself unequipped to meet the demand and expectations of these

markets, especially cultural and linguistic expectations. Neither has the industry taken any concrete measures to deal with the cultural and linguistic expectations of these new and emerging markets. English language is still seen as a main tool of communication.

> *Well I don't speak in another language. Mostly people who will come here will have a broad grasp of English. I think in China they teach it at schools now. I'm very surprised. We have noticed a big change in the last year or so with the Chinese in their grasp of English is excellent, their dress is changing. You can see that their wealth is increasing by just watching them come through the door.*

The industry, therefore, is not prepared for the new tourism arrivals. There also is an attitude that tourists from these markets will need to change their expectations to what the local tourism industry has to offer. However, the tourism industry realises that it could be a constraint for these emerging markets to grow into mature markets.

Economic challenges

Tourism industry along the Great Ocean Road was resilient enough to withstand the global financial crisis in 2009. However, the industry is facing a number of economic concerns. High value of Australian dollar is one concern that is impacting both domestic and international markets.

There is also a general concern that the discretionary dollar is drying up. Or if there is a discretionary dollar that is being spent on paying mortgage, buying investment properties or buying electronics and white goods rather than spending on travelling.

Seasonal nature of tourism along the Great Ocean Road is also adding to the economic woes of the industry. There are businesses that are open during the season but are not viable during the winter season. However, this business seasonality is not taken into account in rental contracts or the rate contracts of local governing bodies:

> *Torquay is still a seasonal town you know. The summer is bigger and better and the turnover generally drops off at least forty percent in winter but your rent doesn't go down by forty percent. Your rent stays the same and your rates stay the same but the business fluctuates and that's one of the difficult things that councils and landlords don't even want to know about.*

All these factors add to make businesses less viable and could potentially lead to business sale or shutdown. As a result of this uncertainty businesses often are focused on their own survival rather than addressing wider issues such as sustainability and climate change.

Seasonality

Tourism along the Great Ocean Road is season dependent and seasonality is seen as the biggest issue for the industry. The summer season is the intense tourism season and is supported by shoulder periods of autumn and spring. The winter season is particularly challenging for the industry to attract tourists. This seasonal nature of tourism often leads to business uncertainties especially, in case of natural events and weather fluctuations that could potentially jeopardise the peak season as it happened in this year.

Though there are a number of attractions and activities for tourists during the off peak winter season, the industry finds it almost impossible to lure tourists to the region. Promoting and packaging tourism during the winter season could result into intense competition.

> *This time of the year, being end of May, June, it's cut throat, you're doing rooms very, very cheap by comparison. You do all sort of different promotional deals, you know, packages to try and attract the people in the off-season, but it's near impossible. You can spend a lot of money and get nothing from it.*

A 'beach image' seems to have stuck with the Great Ocean Road tourism destination and during winter season when the weather conditions are not beach going, people tend to avoid the region.

The seasonality has also affected the way businesses operate during the off season period.

> *You don't have restaurants open, you don't have shops open, you don't have the amenities for the tourists to actually visit because the business structures are set up in a way that they know they are losing business keeping their doors open during the off season.*

Tourism industry apathy

There is also a sense that there exists a kind of apathy within the tourism industry. A lot of them are seen to be in business for lifestyle and unwilling to work through the year. Often the industry is also unwilling to change or adapt new things. There seems to be an attitude that 'we are long enough in the industry to learn new things'. As one local tourism body representative points out:

> *In terms of educating industry, part of our role is to arrange training, workshops and things like that. We have been involved in tourism lines, the Grow me the Money program and there has been different programs around business sustainability, business resilience and things like that, but typically there is not a strong take up. That's the thing, businesses aren't willing to engage or think they know it all already and don't need any more.*

Managing tourist expectations

Great Ocean Road region sees a wide array of tourists and catering to the needs of this diverse population is a challenge. The seasonal nature of tourism further adds to this challenge.

Tourism industry is cognisant of the fact that successful tourism requires providing 'total experience' demonstrating excellence of services to the guests. However, the tourism businesses feel constrained to meet these levels of excellence due to a number of reasons. Lack of professional staff is an important reason as the industry often has to rely on a transient workforce.

> *A number of places have varying staff requirements. So they'll go from one, from the peak season, needing a lot of staff, and then the main way that people get that increased number of staff is via transient workers. Who are young backpackers, something like that. Who are not necessarily as trained or they don't have the skills already to be doing a really professional job.*

Lack of staff professionalism could compromise the services and could be detrimental to the tourism business.

> *It only takes one ordinary experience for someone along their trip to really spoil someone's day or evening or even entire trip.*

Missing industry and community engagement

A constructive interface between tourism industry and the wider community seems to be missing. Though tourism is the mainstay of the region, the wider community looks at tourism development activities with suspicion. It assumes that tourism development will destroy the 'place character' of the region; it will destroy the tranquillity of the small coastal towns and villages and will result in environmental degradation including loss of forests and farm land.

> *The perception is putting in a resort will destroy the environment. A lot of people think that way. And I think that that's a fairly limited view on it. That's not to say that it doesn't have to be done carefully and within certain constraints and all that sort of stuff. But I think the other perception too is we don't want to lose any farmland, we don't want to give up any green space etc. I think that it needs to be seen in balance, but that comes with a public education thing too. I think perhaps they need to see good examples.*

The wider community members are therefore resistant to changes and tourism development activities. They have settled in the region for the life style and they do not want tourism development to alter or interfere with that life style. Their philosophy seems that tourism development is fine but 'not in my backyard'. And within the local policy and planning context they seem to wield considerable influence and persuasive capacity.

> *If these planning decisions are to remain within the local government, unfortunately, I can't see much changing. That's the practical reality, because these communities are very persuasive towards local councillors. And I don't know what the solution is, but if it remains decision making at local government, I suspect not much is going to change. We can window dress, but not a lot is going to change.*

Policy and Planning challenges

The tourism industry also is faced with a number of policy and planning challenges. Though tourism is a major service industry and employment provider in Australia, it seems to be lacking in that import within the policy context. As one industry representative puts it:

> *We've been too often disengaged from the broader economic frameworks, and don't have the same short of tools that other sectors have. Because it's almost been treated as a cottage industry. Even by the industry itself. So it's really got to lift its standing and thinking and presentation.*

This has resulted in a piecemeal approach to tourism development in the region. Tourism development policies are seen to revolving around other policies. For example, the leasing policy of Crown Land is not seen conducive to tourism development.

> *You've got these people that have paid good money for leases of places but the leases are not renewed within the time frame that allows them to continue to invest. So when they've got leases on things on Crown Land, if they are not guaranteed that they're going to get a renewal of their lease, or renewal to allow them to sell, they just potentially let the assets run down.*

Planning controls and restrictions are other concerns that the tourism industry needs to deal with. In Victoria, the land use planning is seen as an impediment to tourism development, particularly in the regional areas.

"Outside Melbourne, the regulatory frameworks and their administration are often geared to directing tourism investment to the towns and limiting its encroachment on land traditionally used for farming, along the coastline, in inland areas, and on or adjacent to state and national parks. This approach assumes investment in tourism is incompatible with using rural land for agriculture, and with maintaining the environment, heritage, residential amenity and rural lifestyles" (Victorian Competition & Efficiency Commission, 2011, p.). This attitude has resulted in land-use zoning provision that restricts development of tourism infrastructure and facilities in regional areas. One industry stakeholder explains:

> *These zones are not just specific to this area. It is the whole of the state, whether it be coastal or inland. These zones were put in place and they've had unforeseen consequences for the tourism industry. It was basically to try to protect high quality agricultural land, right? But much of land around here is not high quality*

agricultural land, and it's being developed for tourism purposes, and what they did by restricting this development was say, sorry, you can't develop nay more tourism. And it's just like you hit a brick wall. And you can't do that. Any business needs to change and keep refreshing itself with what the market needs, and that's the whole problem as I see it. The market dictates what it wants, and if you can't be able to change, because of regulations, it has consequences for your business.

A contradiction is also apparent within the policy context that favours urban and industrial development over tourism development. This lopsided policy framework is seen resulting in inappropriate development that is detrimental to the tourism destination image of the region. For example, in case of Torquay one tourism industry stakeholder put it:

They have just put an industrial estate as the entrance to the town. So the first thing you see when you come to Torquay is this industrial setup. We had a big fight on with Bunnings. They want to put their big green shed right on the entrance to town and say, 'Welcome to Torquay, this is Bunnings'. And it's a disaster but it has been allowed to happen and we couldn't stop it. And you are trying to make a town more attractive, more beautiful and they go and put an industrial estate as the entrance to the town instead of hiding it away.

Sea change phenomenon
The Great Ocean Road region is also undergoing a rapid change under the impact of 'sea change phenomenon' that is defined as migration to non-metropolitan coastal areas by urbanites seeking a change of environment and lifestyle (Burnley and Murphy 2004; National Sea Change Taskforce 2006). Such migration is not driven by economic or socio-cultural reason but as a form of "amenity migration is motivated principally by the prospect of a more relaxed lifestyle in attractive and natural environments and the recreational opportunities that these places can offer. In many instances what people are searching for are places that contrast with the urban environment that they are trying to escape" (Green 2010, p.3)

As a result of this phenomenon a number of coastal towns and villages are changing their traditional character and identity.

Torquay, sadly, has changed adversely. It is starting to lose its identity as a coastal village, it is now being swallowed up with development. There is a lot of investment in people building and buying houses to rent out, not to live in them.

Such development also affects the governance aspect of the town as it affects the local council grants and tourism money. The apparent lure of lifestyle results in premium prices for these houses that results in a perception that

...there is a lot of money down here, which there isn't. There are people who are buying million dollar plus holiday home and just have them sit there.

Sea change phenomenon has also resulted in shortage of appropriate and affordable housing for the tourism industry employees. For example, in Lorne most of the houses have been converted into holiday houses and charge exorbitant rents making it impossible to rent for the tourism industry employees who are on rather modest wages. As one accommodation provider points out:

> *Not one of my staff lives in the town because they can't afford to live here. So to get staff is always a bit of an issue. Two of my staff live in Colac and the other one comes from Winchester. So they are doing a lot of travelling every day. So I have to find ways to employ them and roaster them in a proper way, I can't tell them ok I have just a few hours work for you...you see this is a big issue.*

Moreover the sea change phenomenon has also resulted in mushrooming of holiday homes that are not integrated with the local tourism industry and do not contribute to its growth and development.

> *The greatest providers of beds and accommodation etc is not the Peppers at Torquay, or the Cumberland's at Lorne, it's actually the holiday homes. And they're not engaged, they do not contribute, they are the biggest issue that we have. And in terms of actually linking in with whether it's strategies or environmental issues, or mitigation strategies, we've got to take them into account.*

Chapter III: Climate change vulnerability of Great Ocean Road tourism destination

Climate change has emerged as the key global environmental and economic challenge of the 21st century. It has significant implications for individuals, communities, governments and businesses, particularly within the tourism sector which is extremely reliant on the natural environment. Consumer awareness of climate change and environmental issues, especially the impacts of long-haul air travel, has increased substantially, creating greater pressure for the tourism industry to adopt more sustainable and environmentally friendly business practices and policies.

(Tourism Victoria - Regional Tourism Action Plan 2009-2012, p. 5)

Introduction

Tourism as a global industry has its impact on the environment. However, tourism as an activity is also influenced by physical and socio-economic changes. A combination of these various factors viz. natural, economic, socio-cultural and political comes to constitute the vulnerability context of a tourism destination. This chapter outlines the climate change vulnerability context of the tourism industry along the Great Ocean Road.

Vulnerability is multi-dimensional, containing economic, bio-physical, socio-cultural and institutional elements (Klein and Nicholls, 1998). Following this complex, multi-dimensional notion of vulnerability, this report, in the previous chapter has established a wider context for the tourism industry along the Great Ocean Road and the climate change vulnerability of the industry is located within this wider context.

Vulnerability is understood as the degree to which a system is likely to experience harm due to exposure to a hazard (Turner et al 2003). Within the climate change literature, vulnerability consists of three components – exposure, sensitivity and adaptive capacity. This chapter outlines the climate change vulnerability of the GOR tourism system as established by various scientific studies.

Climate change and its impact on Victoria and the Great Ocean Road destination region

Climate change has emerged as a major global issue. Much of it has resulted due to anthropogenic factors, especially the way modern, energy intensive societies have unleashed a huge quantity of Green House Gases (GHG) emissions into our atmospheric system. Emission of these pollutants, particularly the emission of carbon dioxide, has resulted in warming of the earth leading to significant changes in our climatic and bio-physical systems. Some of these changes are sea level rise, variations in rainfall, increased frequency of drought

and heat waves, increase in the number of severe storms and flow on impacts to vulnerable ecosystems and local, national and global livelihoods and economies (IPPC, 2007a). The spread and impact of various consequences of climate change are not homogenous and will be experienced differently within different geographical and socio-economic contexts. Those economies and livelihood systems that are most vulnerable are those dependent on climate-sensitive resources are located in areas prone to extreme weather events and have the least economic capacity to adapt to global warming induced changes (IPPC, 2007b).

Climate change and tourism in Victoria

Victoria is expected to become warmer, average annual increases of 0.8°C expected by 2030 with the range for 2070 rising to 1.4-2.7°C, with more hot days (those over 35°C) and less cold nights (below 2°C) whilst annual average rainfall is expected to decline, 4% by 2030 and as much as 6-11% by 2070 (Department of Sustainability and Environment, 2008b). These changes will result in increased evaporation rates, increased bush fire risk, less snowfall in Victoria's Alpine regions, more frequent and severe droughts (increases between 10-80% in the southern half of the state by 2070), and drops in fresh water reserves (Department of Climate Change, 2009, Department of Sustainability and Environment, 2008b).

Climate change presents various challenges to tourism across the state, with impacts likely to affect tourism infrastructure, the environment, and communities. Ski destinations in Victoria's Alpine Region will economically suffer from projected decreases in snow cover in the winter (Buultjens et al., 2007, Lynch et al., 2009). Mt Buller (with an elevation of 1740m) is expected to experience a decrease in the amount days with at least 1 cm of snow cover from 108 days at present to 70 – 102 days by 2020 and 7 – 89 days by 2050 (Hennessy et al., 2003). Peak snow depths at Mt Buller are also projected to decline from 95cm at present (1979 – 1998) to 35 – 85cm by 2020 and 2 – 62cm by 2050 (Hennessy et al., 2003). Projections of warmer and drier Alpine summers will also increase occurrences of large-scale bush fires and fire storms (Cioccio and Michael, 2007). The recent "Black Saturday" fires have again brought the increased risk of bushfires throughout tourism destinations in Victoria to the fore, with the likelihood of 'extreme' fire danger days predicted to increase by 12-38 percent by 2020 (Department of Climate Change, 2009). Coastal destinations are especially vulnerable to climate change - eight of Australia's ten most popular attractions for international visitors including the Great Ocean Road are within the coastal zone (Henrick and Johnson, 2000). Rises in sea-levels and more frequent severe storms will increase ocean

inundation and coastal erosion, causing damage to environmental assets and coastal infrastructure (Voice, 2006). Whether a net gain or loss results from such changes will, in part, depend on the ability of the tourism industry to manage and adapt to these changes.

Victoria's Great Ocean Road and the nature-based touring experience it offers includes both coastal and mountainous bushland components. Bushfires have long been a threat to tourism flows to Victoria's bushlands (De Lacy and Jago, 2007). Yet climate change predictions undertaken by the CSIRO suggest that the Corangamite region of which the Great Ocean Road is a part will become hotter and drier, creating perfect conditions for frequent and intense fire storms and placing greater demand on peak electricity for air conditioners (Department of Sustainability and Environment, 2008a). A summary of projected climatic changes for the Corangamite region and consequent impacts is presented in **Error! Reference source not found.**the following table.

Projected climatic changes for the Corangamite region and consequent impacts

CHANGE	DETAILS
Temperature rises	Annual temperatures are expected to rise by 0.8°C by 2030 with the range for 2070 rising to 1.3-2.4°C. This will result in more hot days over 30°C and less cold nights below 2°C
Rainfall:	Annual average rainfall is expected to decline by 4% by 2030 and as much as 6-12% by 2070
Evaporation rates	Evaporation rates forecast to increase by 2% by 2030 and up to 4-8% by 2070
Drought	Drops in rainfall and increased evaporation rates will result in more frequent and severe droughts. Drought periods are expected to increase between 10-80% in the southern half of the state by 2070
Runoff & fresh water reserves	Decreases in rainfall and higher evaporation rates will also negatively affect fresh water reserves. By 2030 catchment runoffs are projected to significantly decrease for the Barwon River (5-30%), Moorabool River (5-35%), and Lake Corangamite (5-40%). Decreases of 10-50% is expected across all 3 systems by 2070

Fire	Warmer and drier conditions are expected to increase the risk of fire; by 2020 the number of days with very high and extreme fire danger ratings are forecast to increase by 4-25% across the state
Sea-level rise	A global-average increase of 18-59 cm by 2100 is predicted and Australia's coastline is experiencing a rising trend
Storm surges & coastal erosion	Rises in average sea level will contribute to extreme storm surges and the probability of ocean inundation causing coastal flooding and erosion

Sources: Department of Climate Change (2009), Department of Sustainability and Environment (2008a, 2008b).

Lower rainfalls, higher temperatures and evaporation rates, and increased fire activity will also reduce water accessibility and quality. Water quality could be diminished by increased algal blooms and possible contamination from bushfire ash and sediment (Department of Sustainability and Environment, 2008a). This reduction in fresh water accessibility is expected to coincide with a greater demand for fresh water as temperatures rise and populations grow (Department of Sustainability and Environment, 2008a). Fresh water shortages are a particular concern in tourism destination regions, given that tourism's high per capita consumption of water far exceeds that of local residents (Buultjens et al., 2007, Emmanuel and Spence, 2009). Sea level rise poses different challenges for the coastal destination centres that are situated along the Great Ocean Road touring route. Sea levels are predicted to rise[1] (18-59cm globally by 2095), whilst the frequency and intensity of storms and storm surges are predicted to increase along Victoria's coastline (Department of Sustainability and Environment, 2008a). Increases in storms surges along with sea level rise will cause flooding and increase coastal inundation and erosion along low-lying sections of Victoria's coast. Direct impacts to human settlements include damage to roads, lifeline infrastructure and beachside buildings. Coastal and marine ecosystems and biodiversity within these systems are also at risk of degeneration and degradation due to altering water flows and higher water temperatures and acidity (Department of Sustainability and Environment, 2008a).

---

[1] More detailed estimations of sea-level rise, storms surge, and coastal erosion impacts on the GOR region are expected from the DSE's *Future Coasts* Project.

Chapter IV: Local Discourse – Tourism Industry's Perception of Climate Change

Introduction

As outlined in the previous chapter, there exists a strong scientific evidence base for climate change and its impact on the Great Ocean Road region including its impacts on the tourism industry. However, dealing with these impacts and adapting to climate change is tourism industry's prerogative. Hence, it is important to gauge the industry's response, by analysing the local discourse or tourism industry's perception of climate change. Such understanding is also necessary to reveal certain gaps that might exist between the planned adaptive measures being undertaken by various government and tourism bodies and the way local tourism industry responds to these measures. For example, the regional tourism action plan 2009-2012 for Victoria clearly foresees climate change as a major challenge for the regional tourism industry and a number of its policies and programs such as Tourism Excellence Program are guided by this understanding.

Discourse and discourse analysis are important tools to comprehend social cultural phenomena. A discourse is mainly a set of sentences that is used with a repeated occurrence within a social context. A discourse therefore is "not a disembodied collection of statements, but groupings of utterances or sentences, statements which are enacted within a social context, which are determined by the social context and which contribute to the way that social context continues its existence" (Mills, S 1997, p.11).

Within a particular social context, a discourse therefore results in identifying an issue, defining it in a particular way and eventually developing ways to deal with that issue. Here, the particular context is the tourism industry along the Great Ocean Road and this chapter outlines the way climate change is being perceived and defined by the industry and the way it is responding to it.

Tourism industry's assessment of its climate vulnerability

Components of a destination sustainability framework were applied to comprehend the way local industry visualises the threats of climate change to the Great Ocean Road region and the way it assesses its own vulnerability to these threats. Three components of the framework, exposure, sensitivity and adaptive capacity, were the main tools that were provided to the respondents to assess the vulnerability of the tourism industry.

Destination Sustainability Framework (Calgaro et al, 2009)

Exposure and Sensitivity

Exposure means the degree, duration and extent in which a system is subject to some perturbation (Adger 2006), while sensitivity is the degree to which a system is affected, either adversely or beneficially by climate related stimuli (IPCC, 2001).

The industry recognises itself as predominantly nature based and sees itself vulnerable to natural changes and hazards. Various components of the tourism industry such as tourism infrastructure that includes the Great Ocean Road, bushland and forests, beaches, water resources, built environment and other infrastructure are seen exposed to natural events.

Tourism in the area is also seen sensitive to various natural events and climatic perturbations. Seasonal nature of tourism, destination image, tourist markets, access to natural resources are seen sensitive to such changes.

Issues of concern contributing to exposure and sensitivity

A number of issues of concerns contributing to exposure and sensitivity of the tourism industry became apparent during the course of this research. The peak tourist season of 2011, just prior to the period during which data collection was undertaken, was marred by unusual and extreme weather events and generated tourism industry's concerns about these events that were seen as potentially threatening the industry's viability. Following are some of the major issues of concern.

Bush fire

Bush fire threat is a major and recurring concern. The industry recognises that the region is bush fire prone even though it hasn't taken place for some time now. Moreover, the tourism peak season also coincides with the peak fire season.

> *Fire is the major threat for this area and it can cause disaster as demonstrated by Black Saturday fires recently. Ash Wednesday fires, they came to the top of the golf course up here in Lorne. Early in the 19th century too, Lorne was decimated by fire as well. Its history says that it happens. History says it's going to happen again. So it's just hopefully we're gone long before it does. But yeah, in so far fire is the major threat.*

Fires are not only a potential to disaster that could result in loss of human lives as well as that of property, it could also create logistical nightmare for the tourism industry and could generate a negative media response that could prove detrimental to the functioning and growth of tourism industry,

> *In our worst case scenario take a bus being caught in a bushfire. A bus full of Chinese tourists Imagine the media coverage, it would just be devastating... it would completely blow the tourism industry right out of its feet.*

Though the industry is not directly relating these threats of fire events to climate change there is concern about the rising temperature and hot weather conditions that could end up in more frequent bush fires.

> *If we end up with super hot weather, a lot of it, we will end up in more bushfires. I mean that's just the way it is because we are surrounded by bloody bush. That's really dry an crusty and if we've five months of hot weather because of climate change or whatever there is going to be more fires.*

It's not only the threat of bush fire that concerns the industry; it is also measures taken to reduce fire hazards are of concern. Fire policy measures including controlled fire burning are such instances that could adversely impact tourist visitations to the region.

> *It is not only the bushfires where I know in national parks, they'll be closed on code red days, right across the state. But it is also our planned burning programme now, the government has got a commitment within the next three years to have over 300,000 hectares a year burnt across the landscape, across the state. This will have a huge impact, not only on the look of the landscape, the burnt and charred landscape and a potentially changed value of park lands, but also the amount of smoke in the air, pretty much for three or four months a year, which could impact tourism.*

Weather Events (Fluctuating weather patterns)

The Great Ocean Road region is primarily seen as a nature based tourism destination, it is also more vulnerable to weather events and fluctuating weather patterns. The weather events of the peak summer period of the year 2011, preceding the data collection, came as a reference that has the potential to adversely impact the tourism businesses along the region.

> *Well you have to think about it this year we have had no summer and it hasn't stopped our figures. I think if it happened year after year after year it might be different but I have to admit I was a little bit surprised when I look at our turnover for each month and it has actually improved.*

The unusually wet season in 2011 came after long dry periods in the region. Prior to this wet, the region has been affected by a prolonged drought. Though these fluctuating weather events are seen as negative factors to the tourism industry, these are seen cyclical in nature rather than an outcome of climate change.

> *Mother Nature's cycles might be 100 year cycles for all we know. They say it's a 10 year cycle. We've had 10 years of drought. Now we're going into a wet cycle.*

Rains, floods

Rains and floods are also issues of concerns for the tourism industry. Floods affected tourism in the region, especially in low lying areas, flooding some caravan parks. These events again are not seen as manifestations of climate change.

> *It's fairly likely, with extreme rain events, the road being stopped with landslips or the likes of Wye River or Kennett River washing in an you get inundation at those points, you've got your very low points on the Great Ocean Road.*

These events however are seen as surprises and un-related to climate change that will have long lasting impacts.

> *We don't see, yeah, we don't see there being any sort of major trend or something that could actually make a big difference there. There's minor things that cause*

little seasonal interruptions. Such as road closures due to landslides, things like that.

Land slides

Landslides and erosion are other issues of concern that the industry foresees as factors that could adversely impact the tourism industry in the region.

The Great Ocean Road itself, with the erosion and landslips really needs some critical assessment and investment to keep it actually functional really.

These concerns were heightened by the events of the year 2011 that resulted in closure of the sections of the Road as a result of landslides. The Great Ocean Road is itself seen vulnerable to these events.

I have noticed degradation of the Great Ocean Road itself. The issues from the rain over the January period and how that has caused a lot of landslips and whether the Great Ocean Road has a future in 50, 80 years time, I suppose is a concern.

However, tourism industry does not see these landslides resulting from climate change. These are attributed to the fragile coastal topography of the region and the changes in weather cycles.

As far as the Great Ocean Road goes, and what we saw is a lot of rock falls over summer, again, I'm wondering whether that's to do with, I said, about the pre-seasonal droughts, a lot of drying and cracking in the rocks. I just think there are natural cycles as I see occasionally the cliffs fall down. It's soft rock and if it dries out and what I have noticed over the years, if we get a very dry summer, the drought, yes, seven years, the cliffs shrink and cracks. As soon as you get some rain, water runs in, crack, bang. So, I've seen cliffs go down and seen beaches change and retreat, and I think that is just part of the cycle.

Sea level rise, coastal inundation and erosion of beaches

Though coastal inundation and beach erosion are not seen as major concerns, the industry recognises changes in coastal landscape. For example, one stakeholder points that in his childhood days the Point Danger in Torquay was

a good half a kilometre further out than what it is today.

Loss of beaches if it occurs is seen as a concern for tourism.

It's certainly going to be of some importance. If we are talking about a rise in water, if you lose your beaches they end just being rocky shelves. That is going to take away a lot of people.

The topography of the region also is seen as a catalytic factor to the threats of sea level rise that could lead to coastal erosion.

> *We have got a lot of low lying areas where the Great Ocean Road is right actually down next to the ocean, so I can imagine a time in the future where if we have the king tides or storm surges and things like that, we can get the water over the road and have the road closed, which affects all those businesses that are reliant on tourism.*

Though industry is concerned about the threats of coastal inundation and beach erosion as a result of sea level rise, it does not necessarily relate it to the climate change phenomenon. Such occurrences are seen as natural ones

> *When you say changes, I see erosion taking place but that has been happening for a long time so it is hard to know what it is affected by. Every winter there are noticeable changes to the sand dunes and losses of sand and movement of sand. But then it seems to build up again in the summer so it is hard to know whether that is actually loosing sand or just moving it.*

Or sometime such changes to the beachfront are seen emerging from the bad developmental approach or as 'environmental vandalism' as one industry stakeholder puts it:

> *Having been associated with this coast from the age of about eight or nine years old, not that I can remember that much, except I can remember the sand dunes at Torquay – I'll find them while we're talking – that was Torquay beach in 1966, the surf club is down here. This is all grass and lawns. All these beautiful sand dunes have gone, not so much through climate change but through environmental vandalism. They built the surf club too close on the dunes, and as soon as you touch the dunes you have a problem, and then they had to build a sea wall to protect the surf club and then that increases the velocity and flow as the waves coming in and hitting it, so it causes more erosion, etcetera. So, most of what you see on the coast here, I don't think, is due to natural climate change, it's due to manmade stupidity, same as Jan Juc where they built the surf club next to the big old sand dune that was sitting there for as long as I can remember, probably been vegetated over, and as a result of that, the beach in front now is all rocks and cliffs, that used to be the same dune structure*

Climate change a non-issue – Local industry discourse

Though the industry recognises various nature related events as significant factors with a potential to impact the tourism industry along the Great Ocean Road region, these events are not necessarily seen as climate change related. Rather these events are seen as natural and cyclical processes. Climate change therefore is not seen as an immediate concern. It fails to become part of the local tourism industry's discourse for following reasons.

Climate change scepticism

There exists a level of climate scepticism in the tourism industry along the Great Ocean Road. It ranges from open denial of climate change phenomena to its lacking sufficient scientific data and political overtones.

> *The first thing I ask about climate change like anything is where is the data? How was it collected? And how accurate is it? Number two, once you put it in the computer, what assumptions have you made in the parameters of your modelling?*

Or

> *The wind is coming out of the sails of it a little bit I believe. Because there's just not enough data backing it up. I mean, in the 70s they were saying we were going to have another ice age for goodness sake...so, I don't see, unless, something were to turn around and visible change was to definitely start to be happening. I am not talking about climate events.*

 Or

> *Climate change, I'm a firm believer is a naturally occurring thing. I am not an advocate of the 5 percent of CO2 emissions that we put in is a tipping point over the 95 percent of naturally occurring CO2 form just matter degradation.*

Climate scepticism also results from the slow onset of climate change events. For example, predictions of sea level rise are not immediately noticable. Odd occurrence of higher than normal tides is seen as a cyclical phenomenon related to the moon.

> *Now we're talking about sea level rising two or three feet over a period of 30 or 40 years. But is hasn't risen two or three feet over the last hundred years, so why is it suddenly going to rise by those levels?*

Cyclical and naturally occurring phenomena

Within the tourism industry, there exists a strong belief that changes in weather events and topographical changes like shifting sand dunes are naturally occurring, cyclical phenomena. The industry sees these cyclical occurrences as natural phenomena rather than resulting from anthropogenic climate change.

> *As with the natural events or changes, what it can impact as the actual environmental impact, I am not concerned with, because it's naturally occurring. It has happened before, it will happen again. And it happened long before we had any influence on it. Mediaeval warm period, all that sort of stuff. So the environment itself will get by quite nicely, thank you very much.*

Or

> *Disasters happen all the time, so to say they are all due to climate change is not true. Glaciers have been receding for years, hundreds of years.*

Nature is also seen as capable of taking care of such events on its own. The ecosystem is seen as a system that can rally back to equilibrium by repairing itself.

> *The planet will do what it wants. It has nothing to do with me. You and I can't change it. I mean we can do our bit. We can't actually change it. We can't go out there and push the rain away or stop a bushfire. It is just not going to happen so there is no sens stressing over that because it's something you can't control.*

Politically motivated
Climate change is also strongly associated with political agendas rather than being a scientific fact. The debate about introduction of carbon tax in Australia at the time of data collection further cemented this belief.

> *Of course climate change is political. It is driven by political agendas and there is money involved with it. When there are politics and money involved, there will be one side fighting the other side and that's really what a lot of it is about. Yeah, definitely.*

Involvement of politics and money are also seen influencing the scientific community that is engaged in researching the issues of climate change.

> *I think everybody, I mean everybody watches the news and listens to shows and what's coming across at the moment is there are two camps. There is a whole group of scientists to say it's all baloney, there is nothing happening and there is a whole group of scientists saying, yes there is something happening and politicians will get on to which bandwagon services them the best you know.*

Ambiguity of climate change
The industry feels that there is an ambiguity about the climate change. Facts are muddled and the whole issue is highly politicised.

> *There is a big ambiguity there. I think in climate change we really don't actually get presented with straight facts and say this is what has happened.*

Industry stakeholders are also not clear about the fact that how various natural issues of concerns such as bush fire, coastal erosion are necessarily related to climate change. "Are all these natural disasters a result of climate change? I don't know'. The divided nature of scientific community adds to the ambiguity of climate change.

> *There is no clear evidence. Because every time someone says it's happening, another person says it doesn't.*

Global issue not a local concern
The tourism industry also sees climate change as a global issue rather than a local concern. Australia's contribution to global warming is seen as miniscule. Any attempts by Australia to deal with climate change issues or climate change mitigation are seen as insufficient and

insignificant in the context of global outcomes. Big countries, China and the US and the European countries are seen as major polluters.

> *A lot of people are saying well why should we do anything about it, we're only a country of 25 million or whatever it is. You look at countries like China who are building coal fire power stations nearly every day. What are they doing about it?*

The global dimension of climate change and the perception that Australia's contribution in general and local tourism industry's contribution in particular is seen negligible to this global phenomenon. The industry is more concerned about its own functioning and climate change is not seen as something that is contributing to the issues that the industry is currently facing.

> *It all comes down to global. Yep. Because, I mean, really you're talking from a business perspective. People really care about their business and how their business is getting affected and if it currently does not affect their business it is not a corner. And climate change is a global concern not a local tourism industry concern.*

Long time impact
Slow onset of climate events is another factor that adds to the tourism industry's non-concern about climate change issues. For example, sea level rise if it is happening at the current rate is seen as a long term effect.

> *Who knows if the sea level is really going to rise several meters? I don't think so. And if it does, well, that is for my great, great grandchildren to figure out. I am not going to worry about it.*

As a result of this long temporal aspect, tourism industry is not keen to take climate change as an issue of concern and is not ready to commit itself to make changes on the pretext of changes in climate.

> *People are not willing to implement changes to their life for something that is going to happen in 20, 30, 40, 50, 100 years time.*

The immediacy of everyday life and business is therefore given precedence over the climate change concerns.

> *People just don't expect that it is going to happen in their lifetime you know and so to ask people to talk about the sorts of adaptations that you are going to make now, I think that would scare the living daylights out of them. They would say 'what for, nothing is going to happen in the next five year, no, no, no...*

Small size of businesses
The tourism industry along the Great Ocean Road sees itself as small size industry. It is not resorts based industry. Most of the establishment are small in size and in operation. The small

size of the industry is therefore seen as an insignificant contributor to climate change issues. Any efforts made by the industry are also seen insignificant.

> *From a local level we look at it as being too big an issue, and we don't have control so we can't do...we can do our own individual things, but as a small tourism organisation in a town with 120 members, it is out of our hands.*

Another factor that seems to be contributing to denial of climate concerns is the short-term nature of tourism business. Businesses do not necessarily see themselves as a long time prospect and are only geared up for a venture of few years. Hence, the priority is to make economic gains out of that short time period.

> *Most of them when they start a business they think in 10 years I will be out. I will sell it to somebody else so they are not going to plan for something that's going to create a change for something that might happen in 20 years or 30 or 40 years or so forth.*

Sense of helplessness
The global nature of climate change phenomena, slow onset of climate related events and the small size of tourism industry along the Road generate a sense of helplessness and the industry sees that it has no control to deal with these issues. The perception is that we can't change these things from happening; these events are out of our control so why should we worry about these.

> *I suppose there is no sense worrying about something we have no control over and I personally don't have any control over what the weather is going to do. There is no sense stressing over it. There is nothing I can personally change to say to stop it raining like it did this year in January.*

No direct impact to the businesses
The industry does not see that climate change has in anyway directly affected tourism in the area so far. Though the peak tourism period of the year 2011 was marred by unusual weather events, these did not affect the industry in great measures. Moreover, such events are not seen related to climate change phenomenon. In absence of any visible direct impact of climate change on tourism business, it is not going to be recognised as a major concern.

> *Until you actually have something affect you personally, people perhaps don't think too deeply about it.*

Adversely impact tourism development
Industry also sees that too much of interest generated about climate change could be detrimental to the development of tourism in the region. It sees a number of already existing policy and planning measures, based on environmental conservation, are proving as barriers

to tourism development. Wider community is also seen exploiting such concerns to restrict tourism development in the region. Climate concerns could result in more of such policy and planning decisions. Talks about the introduction of carbon tax have exacerbated these concerns. Hence the industry feels that instead of spending bagful of dollars on climate change, the money could be well spent in developing tourism in the region.

> *Well, we just continue to monitor things, and have some money in the budget to do that monitoring on sea levels and things, because it's not going to happen overnight. So, we don't need to spend millions of dollars on raising sea level just because we think it might happen in a few hundred years; let the revenue come to us now, which is what tourism is all about. It's not about rewarding six generations down the track, it's about us. And I don't think that's selfish.*

As this chapter demonstrates, on part of the tourism industry there exists a clear reluctance to accept the climate change phenomenon. The industry sees itself exposed to a number of nature events and acknowledges its sensitivity to these events. However, these events are not related to climate change and are seen as cyclical and natural manifestations. Nature is also seen capable to taking care of itself. Such a discourse at the industry level results in an incoherent approach to adaptation as it is outlined in the following chapter.

Chapter V: Learning to Live with Climate Change: Tourism Industry's Adaptation

Introduction

Mitigation and adaptation are two important ways to deal with the climate change challenges. The Inter-governmental Panel on Climate Change, IPCC (2007a) defines mitigation as efforts aimed to control and reduce anthropogenic impacts on our climate system, particularly by reducing the emission of green house gases that lead to global warming. Adaptation refers to making adjustments to avoid or to minimise the adverse impacts of climate change.

Perry defines adaptation as "actions taken by individuals, groups, and systems to avoid impacts from climate change, or to attain potential benefits arising from climate change (Perry, 2007, p. 869). Adaptation is a localised strategy to deal with the climate change challenges and the process of developing such strategy is informed by the way climate change threats are perceived and defined by a particular community or group of individuals. This understanding of the process of perceiving and defining an issue eventually guides the ways and procedures to address the issue.

Adaptation as an important part of societal response to global climate change can significantly reduce adverse impacts of climate change. Planned, anticipatory adaptation has the potential to reduce vulnerability and realize opportunities associated with climate change effects and hazards. In the absence of planned adaptation, communities will adapt autonomously to changing climatic conditions, but not without costs and residual damages (Sten, no date).

Strategies useful for adaptation processes

For the tourism industry along the GOR, climate change is not an immediate issue of concern and the industry does not see itself directly getting affected by it. Hence, at the moment, there are no specific thoughts about developing adaptation strategies to deal with climate change. However, industry is cognisant of various natural events and challenges and feels that a number of following steps could be helpful in dealing with such contingencies. These strategies, therefore, are not directly related to climate change but to the wider vulnerability context of the Great Ocean Road tourism system.

Undertaking Product Gap Analysis

The Great Ocean Road region has a variety of tourism products to offer that include nature based products as well as life style products. While it is seen important that the region remains a well known destination, there is an underlying need that the focus needs to be shifted to a greater degree to experiences.

> *Even the delivery of a lot of our infrastructure has to be looked within an experiential context. Not just in a functional context. So the things that are really going to I think provide the greatest opportunity within the major infrastructure that we require are not only the fact that it is major infrastructure, but it is experiential, catalytic infrastructure.*

The tourism industry along the Road therefore sees a need of actually delivering an experience that has a genuine competitive advantage. The Great Ocean Road Tourism Development Plan is seen as an important step in this direction. The plan aims to identify new tourism product and infrastructure development opportunities along the Road and to identify the actions and investment necessary to further develop tourism opportunities in the region. The plan will undertake a product gap audit to identify the genuine experiential aspects of tourism along the Road to inform the Australian Governments National Long-Term Tourism Strategy.

Product Diversification

Product diversification along the road is seen as an important strategy for the future of tourism industry along the Road. The region has a variety of tourist products to offer that needs to be better marketed. Though the experience of driving along the Great Ocean Road remains important, it needs to be coordinated and complement with a wide variety of other activities that the region offers. Wineries, food trails, golf, spa, boutique accommodations, forest walks, bike trails etc need to be integrated with the Great Ocean Road experience.

> *Particularly the Great Ocean Road has a natural beauty that is easy to manage. The areas it can improve are, for example, at Lorne there's a food trail where in the back areas of the Otway Ranges behind Lorne, there are a number of beef farms and gourmet produce farms and olive groves, so there's a food trail, for example. It's those sorts of opportunities that need really good support to build rather than just there's the Great Ocean Road and people come to it. Another example is the Otway Fly near Beech Forest. It's in the Surf Coast/Great Ocean Road area but it's a stand-alone tourist attraction that has heavily promoted itself.*

Such product diversification is seen necessary for two main reasons. First, it will help increase the length of visitors stay by providing them with a diversity of activities. Second,

such product diversification would also help in breaking the image of the region as a one day trip and will promote the region as a multi night destination.

Geographic Dispersal
Product diversification is seen closely linked with geographical dispersal of tourism activities along the region. The Great Ocean Road visit needs to be projected more than just a driving experience along the coast. The coastal and beach experiences need to be integrated with various other attractions in the hinterland. Such geographical dispersal will help provide tourists wider incentives. It is also seen necessary to deal with the issues of seasonality and fluctuating weather events.

Integrating various tourism products and experiences
Product diversification and geographical dispersal require integrating various products and tourism experiences along the Road. The integration is required at two levels – various tourism products need to be integrated as well as various areas within the region need to be integrated. Such integration will allow the visitors with wider options rather than just focusing on a drive along the Road.

> *Lorne, for example, has a team of traders who are looking at developing an event or festival every month in Lorne to try and get people into the habit of coming here once a month. We've got a sculpture exhibition. We are doing Love Lorne campaign to promote various activities that are on offer. We're looking at markets. All sorts of things. We need to establish Lorne as a place to come for festivals or markets or music events or bush walks or for life styles not just for the beach.*

Changing language
The industry believes that the natural events and fluctuating weather has a potential to adversely impact the tourism industry in the region. However, there exists a strong reluctance to relate these phenomena to climate change. The industry sees a need to deal with these events and to develop strategies and plans. A more conducive way to engage industry in these efforts would be making changes in the language. These natural and weather events would need to be separated from the issues of climate change at the local policy and planning level and would need to be projected simply as 'risks' or 'hazards' for the industry to take a cognisance of these events and to develop a discourse and strategies.

Dealing with seasonality
Seasonality is a major issue for the tourism industry in the region. The industry is constantly working to attract tourist during off season. Though packaging and discounted pricing are the most used strategies, the industry does not see these as effective strategies. These could lead to intense competition without much return and growth.

Organising events and other tourist activities are also seen as possible strategies to deal with the issues of seasonality.

> *Yeah, we do, and we try to work out ways of trying to attract people here in the off-season. We've tried to come up with activities for weekends so that they bring people down here, like kite flying and markets, but they haven't been successful yet.*

There is, therefore, an uncertainty about event organisation as these might not be very productive during off-peak season or in case of fluctuating weather events. Still organising such events and activities is seen as a useful strategy to deal with seasonality. The industry also feels that focusing on the shoulder period would be a better strategy rather than focusing on the off-peak season.

> *We would be better off trying to focus on the cusp shoulder periods, because that's when some of the bigger places in town still have a lot of rooms available. And it would be nice of them to be able to have more of the restaurants and things supported throughout that period and have them open more days throughout that period, rather than trying to throw money at the dead of winter, when you're not going to get that many people anyway. But if we get the cusp seasons, shoulder season working a bit better, a bit higher, then that's better for the town overall.*

Another viable way of dealing with seasonality is bringing about changes in the imagery of the region as a beach or coastal destination. This will require projecting and marketing the diversity of products that the region has to offer.

> *You go to Lorne to go to the beach, well that sort of perception it would be nice to change, because there's just so much here. Wildlife, the natural attractions, the waterfalls, all that sort of things, which actually make it a nice place. And then during that time of year, you've got the beach to yourself, you've got – I mean, the locals love this time. Because it's quiet. You don't have so many people around. And you've got your own space and as long as you're dressed appropriately, and keep yourself warm, because you're not going to go swimming*

Marketing tourism industry's sustainable practices

The tourism industry along the Road sees itself following sustainable business practices. Getting green rating or The Eco-Friendly STAR logo from AAA for energy efficiency, managing appropriate water usages, minimising waste and educating guests about industry's green credentials are seen as important ways of ensuring sustainable business practices.

> *There are all sorts of green ratings you can get from AAA for being green, you know how you have the right light bulbs. I guess that could help. You recycle and do things like that. But does it really make any difference? I don't know. Does it keep someone else, you know, money in their pocket? Everybody, you know, you can get instead of the normal star ratings, you can get green stars if you do this, this, and this. And we basically do it all now.*

Similarly, the tourism industry also emphasises appropriate and sustainable tourism development in the region without impacting the place character of the region. Promotion and marketing of these sustainable practices is seen as an effective strategy.

> *We'd like to position ourselves more about sustainability and it is part of our genuine push to say 'hey we've got a real competitive advantage here' by making sure that our major infrastructure and business practices have sustainable design.*

Promoting these sustainable business practices will not only reduce adverse environmental impacts, these promotions will also result in building a positive sustainable image of the industry.

Reducing the road dependence of tourism
Tourism along the region is very much a road dependent activity. It not only stretches the limited resources, it also poses challenges for the industry to deal with climate and weather related events that might result in road closure. The peak season of 2011 is seen as one such instance when a section of road was closed and resulted in a panic situation for the industry. Reducing tourism industry's dependence on the Great Ocean Road by encouraging product diversification, geographical dispersal and product coordination and integration is seen as an important strategy.

Developing alternative tourist routs
Another strategy towards product diversification and altering the image of the Great Ocean Road as a 'drive only' road would be to develop alternate routes that promote biking or walking along the road.

> *It would be a bit like some of the places in Italy where people walk from town to town rather than driving and would be nice to see this coast as more of a walking and cycling coast as opposed to a driving coast.*

Developing such alternative tourist routes on the one hand will lessen the dependence on the road; these will also integrate various products and tourist areas to help enhance tourist experiences.

> *There needs to be a push for options for non-vehicle based visitation to the national parks such as Port Campbell because you cannot have ever expanding car parks. At some point you need to introduce people to the better more holistic experience of exploring by foot and cycle.*

Putting check on inappropriate development and ecological vandalism
To enhance its sustainable image, the industry emphasises the need for putting a check on inappropriate development and ecological vandalism. These strategies not only help in dealing with overuse of the natural resources but will also be helpful in attracting the environmentally conscious travellers to the region.

> *We should minimise the coastal works, absolutely minimise. Let the coast take care of itself rather than building unnatural structures like sea walls or putting grass cover over sand dunes.*

Building knowledge of local terrain
Developing local knowledge of the terrain and the surrounding environment could be a helpful strategy to deal with natural risks and hazards. Such knowledge could supplement the scientific knowledge.

> *Dealing with hazards is a matter of lot of common sense, and having a local knowledge of the environment around you and what needs to be done.*

Learning from local experiences could also enhance preparedness for dealing with natural hazards and risks. For example, businesses feel that following such events as Ash Wednesday and Black Saturday, they have learned a lot more about how to prepare for fire events.

Building knowledge of local terrain is would also help in developing risk management plans such as in case of bush fire such knowledge will be helpful to locate escape routes.

Dealing with media misrepresentation
Effectively dealing with media and challenging media misrepresentation are seen as necessary strategies. The local tourism bodies such as Geelong Otway Tourism and Shipwreck Coast Tourism are seen as responsible to talking the media and at the state level Tourism Victoria needs to take such responsibility to avoid adverse affects of such misrepresentation.

Building industry's communication capabilities
Building tourism industry's own communication capabilities are also seen necessary. Such capabilities are not only useful to deal with media misrepresentation but also for an effective marketing and promotion of tourism in the region. Internet has emerged as a very effective mode of marking and promotion of Great Ocean Road both domestically and internationally. It has also created direct industry-client interface that allows the tourists to learn about various promotional schemes that the industry offers from time to time.

Social media such as Facebook has further improved such interface allowing the businesses and their clients to communicate directly.

> *We had concerned enquiries about the road closer in Lorne. I communicated with most of my clients on Facebook and it appeared very personal and assuring way of communication. We had a number of people that would call and say 'can I get to you?' and obviously as soon as they're informed properly, that no, the closures are actually beyond us here at Lorne. And even if there were a closure, there's two ways into Lorne.*

Building industry-community interface

Dealing effectively with the wider community apprehensions about tourism development in the region is seen important and engaging local community in the values of tourism is seen necessary. This would require changing the community perception that tourism development is about putting up resorts and destroying environment. Industry feels that the positive aspects need to be emphasised. For example, the usefulness of controlled burning is finally becoming evident to the wider community and the resistance to such burning is disappearing.

> *The public will was that the people weren't allowed to go in and actually do the burns. The forest was sacrosanct; it was the habitat of native fauna. And there is now a sense that the native fauna will be far more robust if it's cleared out and they're not burnt though.*

In a similar manner, the industry feels that there is a need to highlight the importance of tourism industry to the wider community for the economic wellbeing of the region.

Appropriate tourism development

Appropriate tourism development is seen essential and the industry is of the view that development should not adversely impact the natural environment and the place character of the region. Emphasis on appropriate development is also seen essential to allay the fears of the wider community about unwanted impacts of tourism development along the region.

Maintaining place character

The industry is cognisant of the fact that the 'place character' of the region needs to be maintained. Great Ocean Road region is known for its natural beauty and heritage status. These are the attractions that lure tourists to this region and preserving these is seen non-negotiable. The need for appropriate tourism is therefore even more urgent to preserve the place character of the region.

Altering tourism imagery

The imagery of the tourism industry along the Great Ocean Road is that of coastal and beach destination. Such tourism activity usually gets associated with warm summer periods with

plenty of sunshine. However, the region falls within the cool temperate climate zone. Designing tourism around the local, cool climate is seen as a useful strategy to deal with the issue of seasonality as well as with the fluctuating weather events during the peak season. Following and similar images need to be highlighted.

In Torquay our best surf comes all through the winter.

Or

Smell the bush on a rainy day because in Otway you are in a rainforest

Or

Windswept image of the Port Campbell region because that was how the iconic Twelve Apostles were created.

Promoting key industry strengths
Though various key industry strengths of the region such as natural beauty, heritage status and sporting activities like surfing are widely promoted, tourism activities need to focus more on these strengths to enforce the alternate imagery of the region.

Developing cooperation within the industry
Developing cooperation and coordination within the industry is seen as an important strategy. Various local business and tourism organisations are used to promote such coordination. Such strategy is seen essential to learn about one another, about the developments in the business and markets. It can also prove useful in case of an emergency situation as one business could come to help out the other.

> *We're just trying to get all the tradies together and meet each other and talk about things. All the accommodation people come along and say, how are you going, what's happening with you?*

Organising more events
Organising events is seen as an important strategy for the growth of tourism in the region. Though events impacted by fluctuating weather or natural events could be catastrophic for the organisers, these are still seen as safe bet by the industry. Events could be organised on a number of themes such as sports, music, art and sculpture, food and wine etc. The wide variety of themes ensures that the visitors could get a diverse tourism experiences and it also caters to the different needs of a wide variety of tourists. Other advantage of organising

events is that they are able to break the impasse of short stay of one night as visitor tends to spend more nights in the region.

Organising events is also seen as an off season strategy. For example, Torquay is organising Christmas in July while Lorne organises three week long Sculpture Exhibition during the moths of October and November and a Festival of Performing Art in September under its Love Lorne campaign.

> *Events are a recognised way of trying to attract people here in off season. This year, in Lorne, in September, we're having a performing arts festival. That's something that our local business association has organised. And we hope to get a thousand people down here over hat particular weekend. It's quite a big festival. And it is our inaugural one and we hope to make that a regular spot on the calendar.*

Targeting new and emerging markets
Developing strategy to target new and emerging markets is seen necessary for future tourism development in the region. Asian markets such as China, India, Indonesia, and Malaysia have emerged as important tourism markets for the Great Ocean Road region. Physical proximity to Australia and a rising urban middle class with a disposable income to spend on tourism are the main strengths of these new markets.

These markets are also seen as potential sources to offset the impacts of climate change. In case if the long-haul flights from the established markets of Europe and North America become expensive due to climate change levies or these travellers become conscious of their carbon footprints, the neighbouring emerging markets could act as a cushion.

Risk preparedness and developing emergency management plans
The industry is cognisant about various risks related to weather events and feels the need to keep itself prepared to deal with such eventualities.

> *The only way we can deal with the risks in our environment is to be prepared. For example in case of bush fire we need to equip ourselves with fire provisions, with water tanks, pumps, hoses, and I suppose common sense and knowledge of what should be done in the off season like now, burning off, reducing fuels, all that type of things.*

Bush fires are seen as a major threat for the region and especially for the businesses located in hinterlands. However, the unpredictable rains and flooding during the summer of 2011 has raised other challenges.

> *While we were focusing on code red days and dealing with bush fire and suddenly the floods came.*

As a result of such unpredictability of events, the industry feels that the emergency management plans need to be geared to deal with event specific threats.

Coordination between various agencies such as Department of Sustainability and Environment, Parks Victoria, and Country Fire Authority and the local tourism bodies is seen necessary.

Changing the existing policy environment
Advocacy and campaign to change the existing policy and planning environment is seen as an important strategy for the development and growth of tourism industry. Industry is hopeful that new initiatives taken in this direction and setting up of new regional boards would help improve the situation.

Chapter VI: Mainstreaming climate change in local industry discourse

Introduction

Despite a strong scientific evidence of climate change impact on the Great Ocean Road region, the tourism industry, as indicated above, does not see it as a real concern. There exists a clear gap between the wider scientific understanding on climate change and its manifestation at the level of local tourism industry. Though the industry sees various natural events as issues of concern, these are not related to climate change phenomenon. These are treated as cyclical, natural phenomena capable of taking care of themselves or the natural cycle falling back to a state of equilibrium.

This understanding at the local level exposes the industry to various climate change threats as it remains unprepared to deal with these contingencies. This knowledge gap also has potential to undermine any planned adaptation strategy that might be undertaken at various levels of governance (local, state or federal) because such measures would not find conducive pathways at the industry level. Hence, there is the necessity to mainstream climate change within the local industry's discourse to develop and facilitate adaptation strategies.

Strategies useful for mainstreaming climate change in local industry's discourse

Change of language

The tourism industry along the Great Ocean Road sees the idea of climate change as politically impregnated. There exists a similar attitude towards scientific facts as these are seen influenced by politics and money. The attitude is further strengthened by the impending decision of a carbon tax. However, there are natural events taking place at a regular interval within the region and the industry is aware of these events though is reluctant to relate these to the climate change phenomenon. Hence, a more useful approach to encourage industry to adapt would be rewording of climate change as risks and hazards.

> *Risk is the best language to talk about, not climate change. There have always been landslides; there have always been bushfires down here. There has always been erosion. Climate change may accelerate these things. It may change the rate of the pattern and the frequency of the pattern and the intensity of them. But they always happened. And I think the better approach, the more balanced approach is that cuts through climate change and gets to the guts of it.*

Hence, emphasis on managing and adapting to such risks and using concepts like risk management or crisis management would be more practical to encourage industry to deal with these changes.

Relating to key events
Climate change is seen as a vast, amorphous concept based on wild conjectures. Its global context is seen weakening its impact at a local level. Various events that industry envisages as risks or hazards are seen as part of the natural cycle. For industry to adapt to it requires relating adaptation to the real events such as fluctuating weather patterns, bush fires, floods and landslides rather than to climate change.

> *Relate them to the key events and the key possible events that could impact on the natural values an visitation to this area, take it apart from climate change...outline clearly the possibilities, what the possible impacts of those possibilities are and how proactively preparing for the likelihood of those events can make things better for everyone in the long term.*

Area specific micro level studies
The global context of climate change makes it difficult to get translated at the local level and various events are seen as part of the natural cycle. More area specific studies at the micro level would be able to establish relationship between climate change and the events of concern.

> *We need something that tells us, this is our area and that is how it is going to be affected. We can't build anymore down on the flood plains because they're going to be all under water before long. The river is going to come back up again. The rivers that had gone they're going to come back. We need to know those things.*

Educating industry
The industry also feels that there is need for education and information that is correct and precise.

> *We need to be more aware of what is going to happen. We need to know, not maybe this will happen, and we need to know this is exactly what is going to happen.*

Such education and information dissemination could be organised through open forums and workshops where these issues could be impartially discussed.

Such education is also necessary to relate these events to the phenomenon of climate change as the industry at the moment is unable to put the impacts of climate change within a local perspective. The 'natural cycle' aspect of various events also needs to be clarified by putting it in perspective, for example:

The landslips that might have been one in fifty year event is now a one in ten year event. So, then that is something that you can plan for and do something about.

Local bodies such as councils need to make efforts to inform and educate the industry. The councils should develop projects in collaboration with the industry to understand the local impacts of climate change. These studies would not only be area specific, clearly outlining the climate change threats but will also address the industry's concerns about impartiality in climate science research.

Making it part of local bodies agenda
Though there is sufficient awareness about the climate change issues and there are individual voices within the industry that think that climate change is real, it is currently not a part of the local industry discourse. It is not discussed at various local level tourism, trade and business bodies. The issue needs to be part of the agenda of these local bodies so it gets discussed and those voices that are concerned about climate change could come to the fore.

Clear outlining of the usefulness of adaptation
There is a need to clearly outline the usefulness of developing adaptation strategies to climate change. This also requires clear outlining of the climate change threats – how it would impact the natural resources and how it would impact visitations to the region. Outlining the usefulness of adaptation will help mitigate industry's fears that such a strategy would prove detrimental to its economic survival.

Developing response to specific events
The industry sees the requirement to develop response to specific events rather than a wide ranging risk management scheme. This notion derives from industry's unwillingness to relate various   natural events and weather fluctuations to climate change. Hence a wide umbrella concept like 'climate change adaptation' is not seen as suitable. Hence, an array of event specific responses such as dealing with fires or floods or landslides is seen more useful way to ensure industry engagement.

Information about overseas developments
The industry also feels a need to learn about what is actually happening around the world to deal with climate change issues. At the moment there is a wide spread perception that Australia's contribution is too small and whatever efforts Australia puts in to deal with climate change will be irrelevant until other main polluters like China, United States and Europe also take effective measures. The industry seems to be unaware of the mitigation and adaptation measures being undertaken in the rest of the world. Such information is seen

useful for the industry to learn from these measures, it will also become aware about these developments.

> *A lot of people are saying well why we should do anything about it, we're only a country of 25 million or whatever it is. You look at countries like China who are building coal fire power stations nearly every day. What are they doing about it? So a lot of, I think though – and I heard a story on the radio last night where there's 25 countries in Europe already who have got carbon pricing. So that's the information that's not coming through. I didn't know that until last night. There's a lot of debate here on why we should have it, but I haven't heard it mentioned about these other places that have already got it and how it's affected them.*

Correlating with local knowledge

There is also a need to correlate the scientific knowledge on climate change with the local knowledge and observations that could complement the scientific knowledge.

> *I know in Port Fairy where I live and you listen to the locals, they're just saying about, particularly during winter the high tides and what it used to be and what it is now and you look at Warrnambool and see what the beach used to be so far as the amount of sand and now it's come right up. So I mean I don't know. Is that climate change? I mean in those cases, the sea's getting bigger.*

Or such local observations about changing weather patterns and extreme weather events

> *And as I said, I know we've had more extreme weather as in hot days, but we didn't last summer. Although we seem to get these one off days that are very extreme, which I'm not sure that we used to be. I'm not sure that we used to. We'd get a day in February where it was 38 or 39 but now we might get a day in February that's 42 and the winds got a lot more – it's a lot stronger, with it. That's the stuff that I think is a little bit more, that's probably climate change affected.*

Correlating these local observations with the scientific knowledge could be useful in mainstreaming climate change concerns. It could also be a useful way to develop the industry and local community interface as it would make appear the industry responsive to the local community's concern about environment and climate change issues.

Chapter VII: Conclusion

Planned adaptation is an effective strategy to deal with the impacts of climate change. However, planned adaptation requires an enabling environment where policy, planning and capacity building measures could be effectively used by the stakeholders to facilitate adaptation. Such enabling environment requires stakeholders' engagement and the degree and intensity of such engagement is determined by stakeholder's perception of climate change and acknowledgement of the necessity to adapt. The bulk of such engagement comes from stakeholders' acceptance and conviction that climate change is a reality and unchecked or unaddressed it could be detrimental to their wellbeing.

This study has highlighted this perspective by focusing on the Great Ocean Road tourism industry's perception of climate change and adaptation. Adaptation is treated as a localised response to the global impacts of climate change. Such response is seen actor oriented where the actor, either as an individual or as a system, responds to a stimuli and the response is based on the actor's own perception and understanding of the stimuli. As a result, this study has analysed the three components of climate vulnerability - exposure, sensitivity and adaptive capacity – from the perspective of the tourism industry along the Great Ocean Road region.

This research analysis clearly reveals that climate vulnerability is not an issue for the tourism industry. The industry however recognises certain degree of exposure and sensitivity to nature related events. However, these are not related to climate change and as a result adaptation is not seen as a necessary strategy.

The study indicates that the tourism industry along the Great Ocean Road is faced with a number of challenges and a number of factors such as natural, societal, economic and institutional come to form the vulnerability context. The industry, though aware of these various factors, sees them in isolation and is unwilling to treat these as integrated. Treating various components of vulnerability in isolation from one another has resulted in highlighting the 'concerns of urgency', while other concerns are relegated to the background. Climate change is one such concern that, at the moment, is relegated to the background.

The industry's major concern is economic viability. Various economic factors such as seasonality, tourist retention and increasing length of tourist stay, infrastructure development and retaining markets remain priority concerns. Though climate events and weather

fluctuations are acknowledged as potential threats to the viability of the industry, these are not related to climate change. These events are seen as outcome of cyclical processes of the nature. Climate change therefore has not emerged as a contributing factor that could undermine the economic viability of the tourism sector and for the tourism industry, climate change vulnerability remains ambiguous. There exists no discourse of climate change vulnerability at the level of local tourism industry. Climate change is treated as a non-issue. As a result there exists a clear gap between the local industry discourse and the wider discourse of climate change that recognises climate change as a major concern.

Local industry's perception has direct consequences for industry's adaptation to climate change. The wider discourse of climate change foresees real concerns for the tourism industry in the region. For developing planned adaptation strategies in forme of policy, planning and capacity building, wider climate change discourse would play a vital role. However, in absence of a similar understanding at the local level, the planned adaption strategies will find it difficult to evolve and if adaptation strategies are developed at policy and planning level, these may not be fully effective as the local industry does not recognise such a necessity. As a result the notion of climate change adaptation remains vague, incoherent and uncoordinated.

To address these issues, as this research demonstrates, requires mainstreaming climate change so it becomes part of the local industry discourse. A number of such strategies have been outlined. An important aspect of this process is the natural manifestations of climate change need to link clearly with non-climatic or socio-economic stresses. At the moment, tourism industry does not link its economic viability directly to the impacts of climate change; hence climate change remains a peripheral issue.

These research findings are the outcome of existing perspective and understanding of the local tourism industry. Adaptation to climate change is invariably dependent on the initiatives of the local tourism industry; these findings are helpful in understanding the way the local industry is positioning itself to challenges of climate change. The outcomes can also be useful for development of policies and plans for adaptation at various levels of governance.

Recommendations

❖ The tourism industry along the Great Ocean Road is aware of its strengths and weaknesses and seems to be willing to participate constructively in dealing with various challenges. Hence, it would be gainful to involve the local industry in developing future plans and policies at various levels of governance.

❖ There is a need to develop a constructive dialogue between the tourism industry and the wider community. Such a dialogue is required to ensure an appropriate mode of tourism development in the region. It will also clarify wider community's misconceptions about tourism development and its adverse impacts of local environment and life-style. Local tourism bodies and councils or shires could take a lead in developing this interface that would help facilitate a conducive environment for tourism development in the region.

❖ There is a need to have a certain degree of flexibility in various regulatory laws and policies and efforts need to be made to ensure that these regulatory laws and policies take into account tourism industry's contribution to economic viability and socio-cultural wellbeing of the region. Various tourism bodies would need to highlight these contributions at various levels of governance.

❖ Climate change impacts are very much evident for the region. Tourism industry takes cognisance of various natural events and treats these as possible threats. However, there is a strong reluctance to relate these to the phenomenon of climate change. Various reasons for this reluctance are outlined in this report. There is, therefore, a need to educate the industry about the relationship between these events, climate changes and its possible impacts on tourism businesses. There is also a need to allay the fears of the industry that recognising climate change would have adverse impacts on tourism industry's growth or it will result in more stringent environmental or climate regulations.

❖ Local tourism bodies, councils and shires also need to encourage the tourism industry to have a wider perspective on climate change and get involved in discussing its possible implications. Climate change needs to become a regular agenda at various local level meetings and deliberations where tourism industry is involved. There are individual industry stakeholders who do see climate change as a reasonable concern.

These individuals could be persuaded to be the initiators of such dialogue within the tourism industry.

❖ Importance of adaptation to climate change needs to be clearly outlined. Local tourism bodies can play a role here by organising interactive forums with the industry to discuss and develop planned adaptation strategies to effectively deal with the threats of climate change.

References

AGNEW, M. D. & VINER, D. (2001) Potential impacts of climate change on international tourism. *Tourism & Hospitality Research,* 3**,** 37-60.

AMELUNG, B., NICHOLLS, S. & VINER, D. (2005) Implications of Global Climate Change for Tourism Flows and Seasonality *Journal of Travel Research,* 45**,** 285-296.

ANDERECK, K. L. (2007) Tourist Perceptions of Environmentally Friendly Innovations. *BEST EN Think Tank VII*.

AUSTRALIAN BUREAU OF STATISTICS (2008) Australian National Accounts: Tourism Satellite Account, 2006-07. Cat. no. 5249.0 ed., Australian Bureau of Statistics.

BAKER, K. & COULTER, A. (2007) Terrorism and Tourism: The Vulnerability of Beach Vendors' Livelihoods in Bali. *Journal of Sustainable Tourism,* 15**,** 249-266.

BANKOFF, G. (2003) Vulnerability as a measure of change in society. *International Journal of Mass Emergencies and Disasters,* 21**,** 5-30.

BECKEN, S. (2007) Tourists' Perception of International Air Travel's Impact on the Global Climate and Potential Climate Change Policies. *Journal of Sustainable Tourism,* 15**,** 351-368.

BECKEN, S. & HAY, J. E. (2007) *Tourism and Climate Change: Risks and Opportunities*, Channel View Productions.

BERRITTELLA, M., BIGANO, A., ROSON, R. & TOL, R. S. J. (2005) A general equilibrium analysis of climate change impacts on tourism. *Tourism Management***,** 913-924.

BREILING, M., CHARAMZA, P. & SKAGE, O. (1997) Klimasensibilität Österreichischer Bezirke mit besonderer Berucksichtigung des Wintertourismus. Alnarp, Institute for Landscape Planning.

BUULTJENS, J., WHITE, N. & WILLACY, N. (2007) Climate Change and Australian Tourism: A Scoping Study. Southport, Sustainable Tourism Cooperative Research Centre (ST-CRC).

CAMPLING, L. & ROSALIE, M. (2006) Sustaining social development in a small island developing state? The case of the Seychelles. *Sustainable Development,* 14**,** 115-125.

CHRISTOPLOS, I., ANDERSON, S., ARNOLD, M., GALAZ, V., HEDGER, M., KLEIN, R. J. T. & LEGOULVEN, K. (2009) Human dimension of climate adaptation: The importance of local and institutional issues. Stockholm, Commission on Climate Change and Development.

CIOCCIO, L. & MICHAEL, E. J. (2007) Hazard or disaster: Tourism management for the inevitable in Northeast Victoria. *Tourism Management,* 28**,** 1-11.

CSIRO & AUSTRALIAN BUREAU OF METEOROLOGY (2007) Climate change in Australia: Observed changes and projections. Aspendale, VIC, CSIRO Marine and Atmospheric Research.

DE LACY, T. & JAGO, L. (2007) Tourism and Climate Change: Research Program for Australia. Gold Coast, Sustainable Tourism CRC.

DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT (2009) Future Coasts. Melbourne, Department of Sustainability and Environment, Victoria.

DEPARTMENT OF CLIMATE CHANGE (2009) Climate change - Potential Impacts and Costs: Victoria. IN CHANGE, D. O. C. (Ed.). Canberra.

DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT (2008a) Climate change in the Corangamite Region. Melbourne, Department of Sustainability and Environment, Victoria.

DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT (2008b) Climate change in Victoria: 2008 Summary. Melbourne, Department of Sustainability and Environment, Victoria.

DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT (2009) Introducing the Department of Sustainability and Environment. Melbourne, Department of Sustainability and Environment.

DICKSON, T., HAYLLAR, B., MERSON, J., CHAPPLE, R., UZABEAGA, S., HAMMILL, K., PEGARD, B., RIMINI, M. & LAWHON-ISLER, P. (2009) Blue Mountains Case Study. IN TURTON, S., HADWEN, W. & WILSON, R. (Eds.) *The impacts of climate change on Australian tourism destinations: Developing adaptation and response strategies - a scoping study.* Gold Coast, Sustainable Tourism Cooperateive Research Centre.

DIIRD (2006) Locals sell Great Ocean Road to international visitors. *Media Release: From the Minister of Tourism.* Melbourne, Department of Innovation, Industry and Regional Development, Victoria.

DSE (2004) Great Ocean Road Region: Towards a vision of the future.

DWYER, L. & FORSYTH, P. (2008) CLIMATE CHANGE POLICIES, LONG HAUL AIR TRAVEL AND TOURISM. *CAUTHE.*

EC3 (2008) The Road to Sustainability: Developing great Ocean Road Tourism Sustainability Framework, Context Analysis Report. *Great Ocean Road ATDP Project Steering Group.*

ELSASSER, H. & BÜRKI, R. (2002) Climate change as a threat to tourism in the Alps. *Climate Research,* 20**,** 253-257.

EMMANUEL, K. & SPENCE, B. (2009) Climate change implications for water resource management in Caribbean tourism. *Worldwide Hospitality and Tourism Themes,* 1**,** 252 - 268.

G21 (2007) The Geelong Regional Plan - a sustainable growth strategy (Summary). Geelong, G21 (Geelong Regional Alliance).

G21 (2009a) About G21: What we do. Geelong, G21 Alliance.

G21 (2009b) Achievements of G21. Geelong, G21 (Geelong Region Alliance).

G21 (2009c) The G21 Geelong Region Plan. Geelong, G21 Geelong Regional Alliance.

G21 (2009d) The G21 Geelong Region Plan 21 Geelong, Geelong Regional Alliance.

GALLOWAY, R. W. (1998) The potential impact of climate changes on Australian ski fields. IN PEARMAN, G. (Ed.) *Greenhouse: Planning for Climate Change.* Melbourne, CSIRO.

GARNAUT (2008) Garnaut Climate Change Review: Draft Report.

GBRMPA (2009) What is Coral Bleaching? Townsville, Great Barrier Reef Marine Park Authority.

GEELONG-OTWAY TOURISM (2008) Membership Information Guide 2008-2009. Geelong, Geelong-Otway Tourism.

GEELONG OTWAY TOURISM (2009) Geelong Otwat Tourism Industry Website. http://www.geelongotway.org/.

GEORGES, N. M. (2006) Solid Waste as an Indicator of Sustainable Development in Tortola, British Virgin Islands. *Sustainable Development,* 14**,** 126-138.

GITAY, H., CHAMBERS, W. B., BASTE, I., CARR, E. R., TEN HAVE, C., STABRAWA, A., SHARMA, N., DE OLIVEIRA, T., WILSON, C., BAYER, B., BRUCH, C., FINLAYSON, M., FABIL, J. N., GARCIA, K., GALARZA, E. P., KIM, J. A., EAMER, J., WATSON, R., BAUER, S., GOROBETS, A., CHAZHONG, G., PERELET, R. A., MANGUIAT, M. S. Z., GAREA MOREDA, B. I., MCCORMICK, S., NAMUTEBI, C., PATEL, N. & DE JONG, A. (2007) Interlinkages: Governance for Sustainability. IN UNEP (Ed.) *Global Environment Outlook 4: Environment for development.* Nairobi, UNEP.

GLENELG SHIRE (2005) Strategic Tourism Plan 2005-2008. GlenelgShire/Discovery Coast Tourism.

GOSSLING, S. & HALL, C. M. (2006) UNCERTAINTIES IN PREDICTING TOURIST FLOWS UNDER SCENARIOS OF CLIMATE CHANGE. *Climatic Change,* 79**,** 163-173.

GREAT OCEAN ROAD AUSTRALIA (2006) Travel to the Great Ocean Road: Quarterly tracking of selected measures. West Melbourne, Great Ocean Road Marketing Incorporated.

GREAT OCEAN ROAD AUSTRALIA (2009a) The 12 Apostles. West Melbourne, Great Ocean Road Marketing Incorporated.

GREAT OCEAN ROAD AUSTRALIA (2009b) The Great Ocean Road. West Melbourne, Great Ocean Road Marketing Incorporated.

GREAT OCEAN ROAD COASTAL COMMITTEE (2007) Fact Sheet: Looking after the coast - the role of the Great Ocean Road Coastal Committee. Torquay, Great Ocean Road Coastal Committee.

GURTNER, Y. (2004) After the Bali bombing - the long road to recovery. *The Australian Journal of Emergency of Management,* 19**,** 56-66.

HALL, C. M., JENKINS, J. & KEARSLEY, G. (1997) *Tourism Planning and Policy in Australia and New Zealand: Cases, Issues and Practice,* Sydney, McGraw-Hill Australia.

HAMILTON, J. M., MADDISON, D. J. & TOL, R. S. J. (2005) Climate change and international tourism: A simulation study. *Global Environmental Change,* 15**,** 253-266.

HENNESSY, K., WHEATTON, P., SMITH, I., BATHOLS, J., HUTCHINSON, M. & SHARPLES, J. (2003) The impact of climate change on snow conditions in mainland Australia Aspendale, CSIRO Atmospheric Research.

HENRICK, B. & JOHNSON, L. (2000) Visiting Australia's popular attractions - measuring international day and overnight visitor activities. *Tourism Research Report,* 2**,** 7-12.

HUGHES, L. (2003) Climate change and Australia: Trends, projections, and impacts. *Austral Ecology,* 28.

IPCC (2007a) Climate Change 2007: IPCC Fourth Assessment report. *Synthesis Report.* Geneva, International Panel on Climate Change.

IPCC (2007b) Summary for Policymakers. IN PARRY, M. L., CANZIANI, O. F., PALUTIKOF, J. P., VAN DER LINDEN, P. J. & HANSON, C. E. (Eds.) *Climate Change 2007: Impacts,*

Adaptation and Vulnerability: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK, Cambridge University Press.

IPCC (2007c) Summary for Policymakers of the Synthesis Report of the IPCC Fourth Assessment Report. IN METZ, B., DAVIDSON, O. R., BOSCH, P. R., DAVE, R. & MEYER, L. A. (Eds.) *Climate Change 2007.* Cambridge, UK and New York, NY USA, Cambridge University Press.

JÄGER, J., KOK, M. T. J., MOHAMED-KATERERE, J. C., KARLSSON, S. I., LÜDEKE, K. B., DABELKO, G. D., THOMALLA, F., DE SOYSA, I., CHENJE, M., FILCAK, R., KOSHY, L., MARTELLO, M. L., MATHUR, V., MARENO, A. R., NARARIN, V., SIETZ, D., AL-AJMI, D. N., CALLISTER, K., DE OLIVEIRA, T., FERNANDEZ, N., GASPER, D., GIADA, S., GOROBETS, A., HILDERINK, H., KRISHNAN, R., LOPEZ, A., NAKYEYUNE, A., PONCE, A., STRASSER, S. & WONINK, S. (2007) Vulnerability of People and the Environment: Challenges and Opportunities. IN UNEP (Ed.) *Global Environment Outlook 4: Environment for development.* Nairobi, UNEP.

JORGENSEN, B., ROGERS, M., HAYMAN, P., BROWN, G. & DAVIES, J. (2009) Barossa Valley Case Study. IN TURTON, S., HADWEN, W. & WILSON, R. (Eds.) *The impacts of climate change on Australian tourism destinations: Developing adaptation and response strategies - a scoping study.* Gold Coast, Sustainable Tourism Cooperateive Research Centre.

KEENAN, S. (2007) The Future Direction of Regional Marketing. Tourism Victoria.

KNOX, P. L. & MARSTON, S. A. (2004) *Places and Regions in Global Context: Human Geography,* New Jersey, Pearson Education.

LEIPER, N. (2004) *Tourism Management,* Frenchs Forest, Pearson Education Australia.

LYNCH, A., ROMAN, C. & TRYHORN, L. (2009) Tourism and climate change adaptation in the Victorian Alps. IN TURTON, S., HADWEN, W. & WILSON, R. (Eds.) *The impacts of climate change on Australian tourism destinations: Developing adaptation and response strategies - a scoping study.* Gold Coast, Sustainable Tourism Cooperateive Research Centre.

MCELROY, J. L. (2003) Tourism Development in Small Islands Across the World. *Geografiska Annaler,* 86**,** 231-242.

MUNICHRE (2006) Topics Geo Annual Review: Natural Catastrophes 2005. Munich, Munich Re Group.

NEWTON, G. (2007) Climate change impacts on Australia's coast and oceans. *Waves,* 13**,** 1-3.

OLIVER-SMITH, A. (1996) Anthropological research on hazards and disasters. *Annual Review of Anthropology,* 25**,** 303-328.

PARKS VICTORIA (2008) Annual Report 2007-2008. Melbourne, Parks Victoria.

PARKS VICTORIA (2009) Parks Victoria - About Us. Parks Victoria.

PELLING, M. & UITTO, J. I. (2001) Small Island Developing States: Natural Disaster Vulnerability and Global Change. *Environmental Hazards,* 3**,** 49-62.

RICHTER, L. K. (1999) After political turmoil: The lessons of rebuilding tourism in three Asian countries. *Journal of Travel Research,* 38**,** 41-45.

RICHTER, L. K. & WAUGH, W. L. (1986) Terrorism and tourism as logical companions. *Tourism Management,* 7**,** 230-238.

ROY MORGAN (2007) Values Segments.

SCOTT, D., AMELUNG, B., BECKEN, S., CERON, J., DUBIOUS, G., GOSSLING, S., PEETERS, P. & SIMPSON, M. (2007) Climate Change and tourism: Responding to Global Challenges. Paris, World Tourism Organisation: Madrid and United Nations Environment Programme.

SCOTT, D., MCBOYLE, G. & MINOGUE, A. (2006) Climate Change and the sustainability of ski-based tourism in eastern North America: A reassessment. *Journal of Sustainable Tourism,* 14**,** 376-398.

SHIPWRECK COAST MARKETING (2008) Annual Report 2007/2008. Warrnambool, Shipwreck Coast Marketing Incorporated.

SHIPWRECK COAST TOURISM (2008) Domestic Overnight Travel to the Shipwreck Coast - Year ended June 2008. Warrnambool, Shipwreck Coast Marketing Incorporated.

SHIPWRECK COAST TOURISM (2009) Shipwreck Coast Tourism Website. http://www.shipwreckcoast.com.au/.

SÖNMEZ, S. F., APOSTOPOULOS, Y. & TARLOW, P. (1999) Tourism in crisis: Managing the effects of terrorism. *Journal of Travel Research,* 38**,** 3-8.

SÖNMEZ, S. F. & GRAEFE, A. R. (1998) Influence of terrorism risk on foreign tourism decisions. *Annals of Tourism Research,* 25**,** 112-144.

STERN, N. H. & GREAT BRITAIN TREASURY (2007) *The economics of climate change : the Stern review,* Cambridge, Cambridge University Press.

STRAUGHN, R. D. & ROBERTS, J. A. (1999) Environmental segmentation alternatives: a look at green consumer behavior in the new millenium. *Journal of consumer marketing,* 16**,** 558-575.

SUDHAMAN, A. (2004) Tourism Australia lifts online marketing plan. *Media*.

SWARBROOKE, J. & HORNER, S. (1999) *Consumer Behaviour in Tourism,* Oxford, Butterworth & Heinrmann.

TOTALTRAVEL.COM (2009) Great Ocean Road Tours: Tour Bookings. Byron Bay, totaltravel.com.

TOURISM ALLIANCE VICTORIA (2009a) Tourism Alliance Victoria - About us. Melbourne, Tourism Alliance Victoria.

TOURISM ALLIANCE VICTORIA (2009b) Tourism Alliance website. http://www.tourismalliance.com.au.

TOURISM AUSTRALIA (2007) Tourism's contribution to the Australian economy 1997-98 to 2005-06. Belconnen, Tourism Research Australia.

TOURISM AUSTRALIA (2009a) Key Tourism Facts: Market Insights Tourism Facts 2007. Tourism Australia.

TOURISM AUSTRALIA (2009b) No leave, no life: Industry prospectus. Sydney, Tourism Australia.

TOURISM AUSTRALIA (2009c) Tourism Australia: About us.

TOURISM AUSTRALIA (2009d) Tourism Australia: Events. Sydney, Tourism Australia.

TOURISM AUSTRALIA (2009e) Visitor arrivals data: Table 1- Visitors by country of residence. Sydney, Tourism Australia.

TOURISM VICTORIA (2009a) Building the Great Ocean Road. Melbourne, Tourism Victoria.

TOURISM VICTORIA (2009b) Domestic Tourism Expenditure in Victoria - Year ending December 1999-2007

Melbourne, www.tourism.vic.gov.au.

TOURISM VICTORIA (2009c) Great Ocean Road - Market Profile Year Ending December 2008. Melbourne, Tourism Victoria.

TOURISM VICTORIA (2009d) Great Ocean Road Market Profile - Year Ending December 2008.

TOURISM VICTORIA (2009e) Industry Website- E-Marketing. www.tourism.vic.gov.au/.

TOURISM VICTORIA (2009f) International Tourism Expenditure in Victoria - Year ending December 1999-2007. Melbourne, www.tourism.vic.gov.au.

TOURISM VICTORIA (2009g) Regional Marketing and Development Plans. *Tourism Victoria Corporate Website.* Melbourne, Tourism Victoria.

TOURISM VICTORIA (2009h) Tourism Victoria Industry Website: Marketing. Melbourne, Tourism Victoria.

TOURISM VICTORIA (2009i) Understanding Visitor Needs and Expectations - Roy Morgan Values Segments.

TOURISM VICTORIA (2009j) Victorian Market Profile: Year ending December 2007. Tourism Victoria.

TREMBLAY, P. & BOUSTEAD, A. (2009) Kakadu National Park Case Study. IN TURTON, S., HADWEN, W. & WILSON, R. (Eds.) *The impacts of climate change on Australian tourism destinations: Developing adaptation and response strategies - a scoping study.* Gold Coast, Sustainable Tourism Cooperateive Research Centre.

TTF (2009a) Responding to Climate Change: TTF Climate Change Position Paper. Sydney, Tourism Travel Forum.

TTF (2009b) Tourism and Travel Forum: About us. Sydney, Tourism & Transport Forum.

TURTON, S., HADWEN, W. & WILSON, R. (Eds.) (2009) *The impacts of climate change on Australian tourism destinations: Developing adaptation and response strategies - a scoping study,* Gold Coast, Sustainable Tourism Cooperateive Research Centre.

UNWTO (2007) Trends and Prospects. *UNTWO World Tourism Barometer.*

VCC (2009) Victorian Coastal Council - About Us. Melbourne.

VECCI (2009) Victoria Tourism Industry Council (VTIC). Melbourne, Victorian Employers' Chamber of Commerce and Industry (VECCI)

VERON, J., HOEGH-GULDBERG, O., SPALDING, M., STAFFORD-SMITH, M., OBURA, D., ROGERS, A., PEARCE-KELLY, P., SHEPPARD, C. & LENTON, T. (2009) The Coral Reef Crisis: Scientific Background for Critical CO2 Threshold Levels of < 350ppm. *Technical Working Group Meeting, The Royal Society.* London, The Royal Society.

VICTORIAN COASTAL COUNCIL (2008) Victorian Coastal Strategy: Implementation and coordination. East Melbourne, Victorian Coastal Council.

VICTORIAN COASTAL COUNCIL (2009a) About us. East Melbourne, Victorian Coastal Council.

VICTORIAN COASTAL COUNCIL (2009b) Victorian Coastal Strategy 2008. East Melbourne, Victorian Coastal Council.

VICTORIAN GOVERNMENT (2005) Scoping Guidelines. Environment Effects Statement. Geelong Bypass (Section 3) Hamilton Hwy - Princes Hwy and A link to the Surf Coast Hwy. Melbourne, Victorian Government.

VICTORIAN GOVERNMENT (2007) How are we travelling? on the Great Ocean Road. Melbourne, Victorian Government.

VOICE, M., HARVEY, N. AND WALSH, K. (2006) Vulnerability to Climate Change of Australia's Coastal Zone: Analysis of gaps in methods, data and system thresholds. Report to the Australian Greenhouse Office. Canberra, Australian Greenhouse Office.

WESTERN COASTAL BOARD (2009) About the Western Coastal Board. Geelong, Western Coastal Board.

WILKINSON, P. F. (1989) Strategies for tourism in Island Microstates. *Annals of Tourism Research,* 16**,** 153-177.

WWW.PARKWEB.VIC.GOV.AU (2009) Otways eForum Information Sheet.

Raymond James Green (2008) Coastal towns in transition. Collingwood, Vic. : CSIRO Publishing,

Country Victoria Tourism Council, 1996, Great Ocean Road product region : tourism development strategy (Report)

 Peter Alsop (1982) A history of the Great Ocean Road, Geelong Historical Society

Sara Mills (1997), Discourse**,** London ; New York : Routledge, 1997