Paper 3: Carbon Mitigation by Environmentally Certified Tourism Operators

Heather Zeppel & Narelle Beaumont

[1] Mid Career Research Fellow, Australian Centre for Sustainable Business and Development, USQ Springfield
heather.zeppel@usq.edu.au
[2] Lecturer in Tourism, School of Management and Marketing, USQ Springfield. narelle.beaumont@usq.edu.au

ABSTRACT

This paper reports on carbon mitigation by environmentally certified Queensland tourism enterprises (n=83). The survey results profile attitudes to climate change, emissions auditing, carbon mitigation actions, and motives for emissions reduction. The main reasons

for carbon actions were marketing climate friendly tourism, attracting green tourists, and cost savings.

INTRODUCTION

Climate change and carbon mitigation initiatives are growing issues for the tourism industry. *Mitigation of climate change involves taking actions to reduce greenhouse gas emissions and to enhance carbon sinks* (STCRC, 2009: 5). Green tourism enterprises are implementing eco-efficiency measures in energy, water and waste management to reduce operating costs and carbon emissions. This paper reports on carbon mitigation actions adopted by environmentally certified Queensland tourism operators (n=83). It presents survey results profiling tourism SME attitudes to climate change, emissions auditing and carbon mitigation actions, and key motives for emissions reduction by tourism SMEs.

METHODOLOGY

A carbon mitigation survey was developed based on a website review of climate change, carbon abatement, green business and sustainability practices promoted by Tourism Queensland (EC3 Global, 2009; TQ, 2010), and other government tourism agencies in Australia (Zeppel and Beaumont, 2011). The websites of ecotourism certified operators were also reviewed for their carbon

mitigation actions, along with the green business practices recommended in eco-certification programs, and the eco-efficiency (i.e. energy, water, waste) measures listed in Tourism Queensland's environmental indicators benchmark survey in 2010 (TQ, 2010). These provided the basis for the types of carbon mitigation actions listed in the tourism survey, along with other questions about operator motives for emissions reduction actions.

The carbon mitigation survey of Queensland tourism operators (n=83) was conducted during January to October 2011. The target group for this survey was tourism operators with environmental credentials such as Eco Certification or Climate Action Certification (Ecotourism Australia); Eco Friendly Star accommodation (AAA Tourism); Earthcheck, Green Globe, or ecoBiz accreditation; or members of Savannah Guides and Planet Safe in North Queensland. The environmentally certified tourism operators were located on website databases listing certified members. The carbon mitigation survey was forwarded to 380 tourism operators by email or post, along with some phone interviews or face-to-face interviews. There was a response rate of 25% with 83 completed surveys.

RESULTS

Respondents to the carbon mitigation survey were: Accommodation (n=40), Tour Operators (n=31), Attractions (n=8), Convention Centres (n=3), and a Tourism Organisation (n=1). The businesses were located throughout Queensland. The size of the tourism

enterprises ranged from Small Business (1-4 staff) (n=33), Medium Business (5-20 staff) (n=24), and Large Business (over 21 staff) (n=26). The tourism role of respondents completing the survey were the business owner/operator (n=45), or manager (n=25), business/operational staff (n=9), and environmental staff (4).

Climate Change and Queensland Tourism Enterprises

The majority of surveyed tourism enterprises (n=73, 88%) agreed that climate change was an important issue for the tourism industry. A few operators (n=8, 10%) thought climate change may be an important tourism issue, while one operator each stated 'not sure' and no' on this. The 'no' respondent believed climate change was a natural process; while the 'not sure' respondent commented on *two extremes to the argument. No apparent middle ground.* Comments by those that responded 'maybe' indicated they wanted more research, were unsure about causes or the credibility of climate change information, or referred to customer perceptions, preferences or price as more important business factors. Operators that agreed climate change was an important tourism issue referred to impacts on the reef, weather, wildlife, and destinations; protecting the environment; customer and industry expectations of sustainable practices; the impact of rising energy costs; and businesses adopting eco-efficiency measures. A few respondents commented on the carbon footprint of travel and the impact of a carbon tax (from 1 July 2012) on

business operating costs. One reef tour operator stated *Climate change will affect us all but correct reporting is important to prevent hysteria, its being over marketed and de-sensitising pax* (passengers). These responses highlight operator awareness of climate change impacts on the natural environment, and eco-efficiency actions due to higher fuel and energy costs.

Most tourism enterprises (n=72, 87%) either strongly agreed (n=44, 53%) or agreed (n=28, 34%) that it was important to reduce the carbon footprint and emissions of their tourism business. Nine operators (11%) were neutral on this point, one noting their resort development was based on being ecologically sustainable. One accommodation manager strongly disagreed with this point, did not think climate change was important, and their only eco-efficiency measure was the installation of CFL bulbs at their property solely motivated by cost savings. The types of carbon reduction or green business training undertaken by tourism enterprises included TQ workshops on climate change/Climate Futures/Sustainable Regions (n=39), ecoBiz/Climate Smart Business/Low Carbon Diet workshops (n=25), Qantas Sustainable Tourism seminar (n=8), Acclimatise your business workshop (n=5), and Greenhouse Challenge Plus (n=4). One large rainforest attraction provided environmental awareness training for their staff and contractors. Two smaller operators were interested but lacked access to green training: *regrettably not in local area & unable to travel.*

Some 34 tourism business (41%) had completed an audit of their carbon emissions/energy usage, either with an online emissions calculator (n=19) or they had employed a consultant to audit their emissions (n=15). One attraction had an energy company do an audit of their emissions. Another 28 tourism operators planned to do an emissions audit in the next 12 months, while 23 tourism enterprises did not think an emissions audit was necessary for their business, one stated they would *rather spend $ on action rather than audits* while another commented *not required-NGERS calculator reported that our emissions level was below the threshold.*

Queensland tourism operators have adopted a range of carbon mitigation practices. These include lower cost energy efficiency measures such as light bulbs, appliances, and reducing standby power (n=78, 69, & 61), plus recycling and reducing solid waste (n=75). Half of the tourism enterprises were training staff (n=48) or informing visitors about reducing carbon emissions (n=44). Less than half of all surveyed operators have roofing insulation (n=39), use room fans (n=38) or operate new fuel efficient transport (n=32); choose green suppliers (n=38), or market their emissions reduction actions (n=35). About a quarter of tourism operators (n=20/21) have installed solar power; use solar/heat pump hot water heaters; implement other energy initiatives like conserving water, minimising energy use, gas heating or renewable energy; or carbon offset. Only a few tourism enterprises are using biofuels (n=14) or driving electric/hybrid-electric vehicles (n=12). A few larger tourism businesses (n=10) are purchasing

GreenPower from renewable energy. One accommodation owner stated *Would invest in 'Green Electricity' but currently way too expensive cost should be at least on par with normal tariff rates.* Some tourism enterprises found it difficult to measure their carbon footprint or lacked staff, time, or resources to adopt carbon mitigation actions.

The main reasons for implementing carbon reduction initiatives at Queensland tourism businesses were: Attract environmentally aware tourists to the business (n=68); differentiate the business as a 'climate friendly' tourism product (n=67); cost savings (n=59); certification or permit requirement (n=52); environmental regulations (n=30); and other reasons (n=27). The other reasons related to their personal environmental ethic; corporate social responsibility; customer demand; being a role model; and no mains power. A few larger enterprises (n=4) mentioned a business reporting legal requirement, such as carbon emission thresholds in the National Greenhouse Energy Reporting System (NGERS). When responses were ranked by operators from one to four, the first ranked reasons were being a climate friendly tourism enterprise and cost savings along with environmental ethics. The second ranked reason was attracting environmentally aware tourists, with third level responses being a mix of the first three key reasons. The reasons ranked fourth were mainly related to certification requirements (e.g. ecotourism, climate action) and environmental regulations.

CONCLUSIONS: Organisational Behaviour for Low Carbon Tourism

This study of carbon mitigation by tourism enterprises highlights organisational behaviour and motives of both companies and individuals for reducing carbon emissions. The Queensland tourism operators have adopted a range of carbon mitigation measures, the most popular being energy-efficiency initiatives and waste reduction. The reasons for tourism SMEs adopting carbon actions related to business and marketing benefits, environmental best practice and social responsibility. Personal environmental ethics was a stronger motive for carbon action by smaller owner-operated enterprises such as boutique accommodation and nature tours. Management commitment to carbon action and cost savings was a stronger motivation for larger tourism enterprises. Other studies of greening companies and tourism SMEs have found similar motivations for ecological responsiveness (Bansal and Roth, 2000; Revell, Stokes and Chen, 2010; Vernon, Essex, Pinder and Curry, 2003). These studies also found a key driver for carbon actions was the environmental concern held by owner-managers of SMEs. Further research thus needs to consider the key role of personal environmental ethics in driving carbon reduction actions by business owner-operators. The subjective and objective constraints affecting the level of behavioural engagement in climate change reduction and mitigation actions by SMEs also requires further investigation (Sutton and Tobin, 2011). The impact of green practices on organisational behaviour and performance needs

addressing, along with environmental, social, business and marketing benefits from greening tourism SMEs.

REFERENCES

Bansal, P. and Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal, 43*(4), 717-736.

EC3 Global. (2009). Sustainable Regions Executive Summary. Retrieved from http://www.tq.com.au/ Revell, A., Stokes, D. and Chen, H. (2010). Small businesses and the environment: Turning over a new leaf? *Business Strategy and the Environment, 19,* 273-288.

Sustainable Tourism CRC (STCRC). (2009). *The impacts of climate change on Australian tourism destinations: Developing adaptation and response strategies.* Gold Coast: Sustainable Tourism CRC.

Sutton, S.G. and Tobin, R.C. (2011). Constraints on community engagement with Great Barrier Reef climate change reduction and mitigation. *Global Environmental Change, 21*(3)*,* 894-905.

Tourism Queensland (TQ). (2010). *Tourism Queensland Tourism Operators Environmental Indicators Benchmark 2010.* Colmar Brunton. Retrieved from http://www.tq.com.au/

Vernon, J., Essex, S., Pinder, D. and Curry, K. (2003). The 'greening' of tourism micro-businesses: Outcomes of focus group investigations in South East Cornwall. *Business Strategy and the Environment, 12,* 49-69.

Zeppel, H. and Beaumont, N. (2011). *Green tourism futures: Climate change responses by Australian government tourism agencies.* ACSBD Working Paper No. 2. Springfield, Qld: Australian Centre for Sustainable Business and Development, University of Southern Queensland.