Nature Tour Operators' Attitudes and Actions Concerning Travel Related Greenhouse Gas Emissions

Website analysis and survey of members of

The International Ecotourism Society
Sustainable Travel International
Adventure Travel Trade Association

Summary of results

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Stanford, May 11, 2007

ABSTRACT

In this paper, the results of a website analysis and online survey of tour operators who belong to The International Ecotourism Society (TIES), Sustainable Tourism International (STI) and/or the Adventure Travel Trade Association (ATTA) are being discussed. The focus of the project is tour operators' attitudes and actions around greenhouse gas emissions due to travel. It was found through the website analysis of 248 companies that despite of these companies' general adherence to sustainable tourism principles only 15% of them actually implement some sort of sustainable transportation principles in response to climate change or other impacts caused by tourism-related traffic. The following survey, to which 67 companies responded, showed that a large majority of them are well aware of climate change and see it as their responsibility to act upon it. Therefore, climate change mitigation strategies may soon become more widespread in the ecotourism industry.

Inbound tour operators, who were generally smaller and located in developing countries, are more likely to deal with this problem on the local level by using public transportation, low-emissions or alternative fuel vehicles, or by cutting down on transportation altogether. Outbound operators, who were larger and generally located in developed world, worked more in carbon offsetting programs and internal management. Both groups cite costs, uncertain consumer acceptance, lack of knowledge, limited access to alternatives or offsetting programs, and supplier reliability as barriers to implementation of carbon offsetting or other sustainable transportation strategies. This shows that, apart from technology transfer, capacity building among tour operators and consumer education are necessary to further disseminate feasible strategies to mitigate tourism's climate impact in the nature-based tourism segment.

I. GENERAL INTRODUCTION

With the issue of global climate change now increasingly in the public eye, finding ways to reduce carbon emissions has become a growing area of interest for both consumers and corporations. Many daily activities contribute to climate change, among them carbon emissions from business and leisure-related travel. Transportation from travel accounts for an important percentage of global carbon emissions. To what extent do tour operators around the world who operate under the sustainable or ecotourism label recognize the need to mitigate carbon emissions from travel? What particular barriers may prevent them from becoming involved?

In response to these concerns, as part of a broader research project entitled "Global Warming, Ecotourism and Sustainable Transportation", a two-pronged analysis of climate change and transportation emissions awareness among nature-based tour operators was undertaken. In the first part of the study, information presented on the websites of 248 tour operators, drawn from the member databases of TIES, STI and the ATTA was reviewed. In the second part of the study, all of the above companies were invited to participate in a web-based survey about climate change and transport-related mitigation strategies in the nature-based travel industry. This dual approach was used for the following reasons. While the website analysis allowed for an estimation of the extent to which sustainable transportation is actually being practiced among nature-based tour operators (many of them dedicated to sustainable development) and communicated to their customers, the in-depth survey provided more insight into perceptions and concrete implementation. Since the survey is based on self-selected respondents it is not representative.

II. WEBSITE ANALYSIS

Introduction

In order to understand the nature of information made available to the public by eco-conscious tour operators, a systematic website analysis using the member databases of TIES, STI, and ATTA was undertaken. Websites were navigated in order to determine which companies were addressing through their business practices the issue of carbon emissions due to travel, and how many were communicating their consciousness of the issue to potential clients. Where available, the research team read through any online materials describing each tour operator's measures to fight global warming, and checked to see if carbon offsetting was mentioned along with other possible mitigation strategies, including information about the design of trips.

The companies that are recorded in this portion of the analysis are those who described some sort of effort to mitigate the emissions created by tourist travel to and from destinations, as well as during their stay at a given location. Since TIES, STI, and ATTA list a number of members who are not strictly tour operators (e.g. national tourist boards, independent consultants, lifestyle discussion forums, and non-government organizations), only the websites of those members were examined who explicitly presented themselves as tour operators offering travel packages. This distinction will be discussed further below.

First of all, it is interesting to note where the companies analyzed are based (see Figures 1.1 and 1.2).

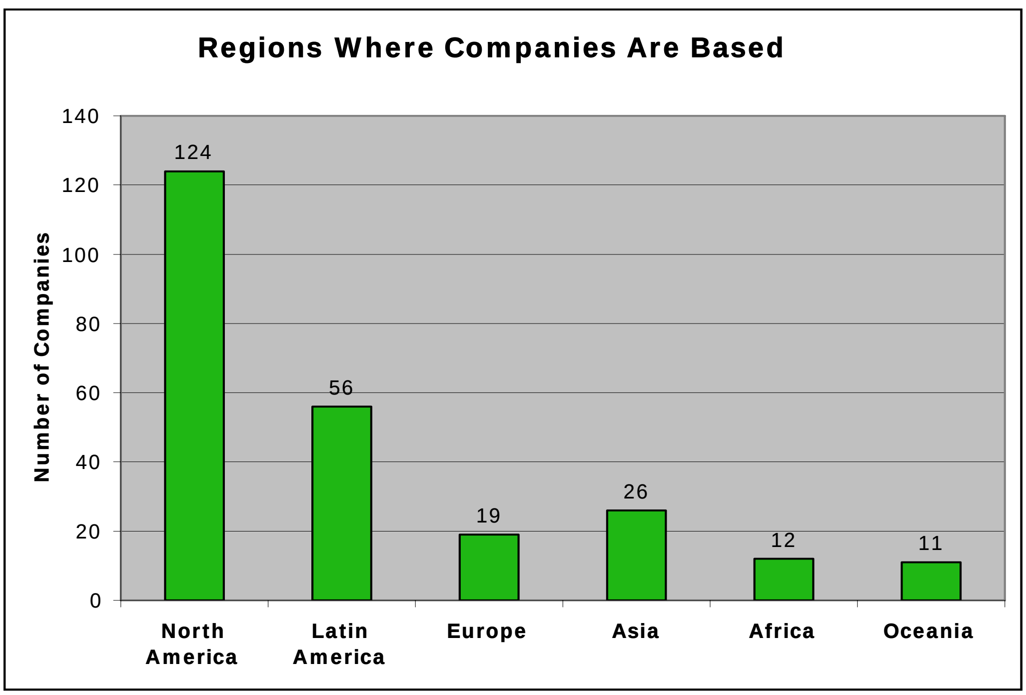

Figure 1.1: N = 248

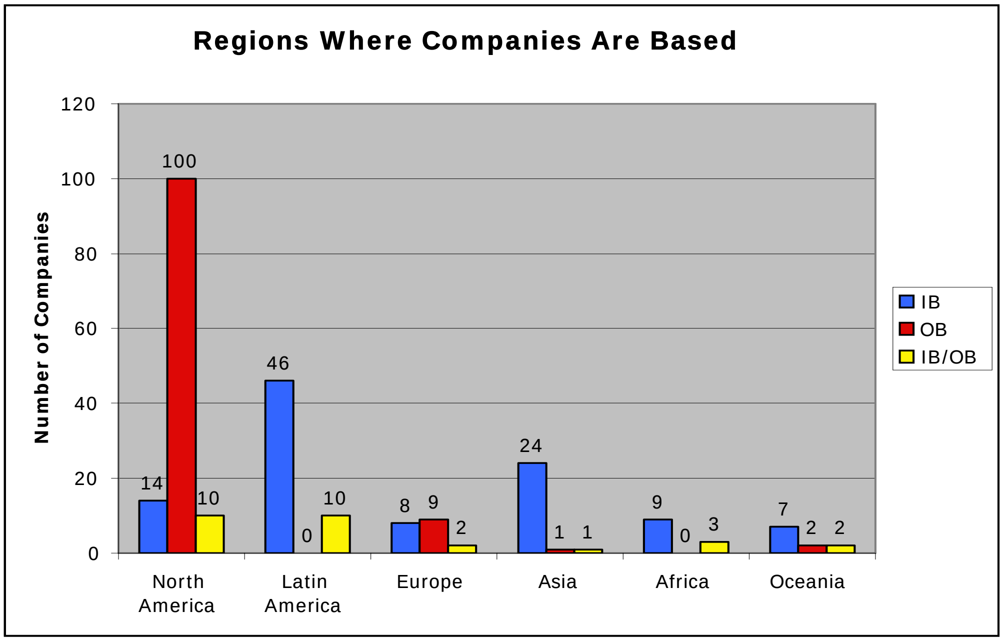

Figure 1.2: N = 248

Membership of all three organizations analyzed is strongly dominated by North American companies, who account for more than twice the number of companies in the next best represented area, Latin America. Also, the majority of inbound tour operators are based in Latin America and Asia, whereas the overwhelming majority of outbound operators are based in North America.

Results and Analysis

As a first step, it was noted how many tour operators out of each of the three databases mentioned in some way on their website the issue of carbon emissions due to their operations and transportation.

Table 1.1

Association	**Number of Members (Tour Operators Only)**	**Mention Sustainable Transportation**	**Portion of Total**
STI	147	27	18.4%
TIES	83	11	13.3%
ATTA	91	6	6.6%
Total	248*	39*	15.7%*

The relatively small percentage of operators whose websites mention carbon emissions due to travel leads to a first observation: It appears that, despite these companies' affiliation with "sustainable travel" associations, only a few of them openly acknowledge the negative environmental impacts inherent to international or even domestic travel. This finding corroborates to a certain degree the initial assumption of the sustainable transportation research project that transport

* It should be noted that there is considerable overlap between members of these organizations. STI members in particular are often also TIES or ATTA members. Thus the total number of operators is 248 rather than 321. The number of those implementing sustainable transportation is 39, rather than 44. Thus, the percentage of member companies who mention sustainable transportation is corrected to 14.2%.

is the "forgotten dimension" of ecotourism. However, given the high level of awareness of the problem in the following survey, it may be only half forgotten. It may well be that awareness has not translated into action yet, but may soon do so. The higher percentage among STI members may be due to the fact that they are being offered carbon-offset programs directly by their association. Another possible interpretation for the relatively low overall percentage is that some companies may have chosen not to communicate their awareness of the problem to their customers for fear to discourage them from traveling.

Of those companies that did in fact address sustainable transportation, mitigation strategies roughly fall into two categories: a) reducing emissions of local transport, b) offsetting emissions (mostly of flights). Under these broader categories the following sub-categories were identified.

Table 1.2

Local Travel (largely emissions reduction)
1.1) using minimal transportation
1.2) public transit
1.3) using alternative fuels
Travel To and From Destination Region (largely emissions offsetting)
2.1) Optional emission offsetting
2.2) Partially integrated emission offsetting
2.3) Fully integrated emission offsetting

Companies falling under category 1.1 mentioned that they attempt to minimize local transportation emissions by actively encouraging biking, hiking, or other forms of sustainable transportation as alternatives to motorized vehicles[*]. Also included within group 1.1 were those tour operators who acknowledge the need to "lower emissions" but do not suggest a concrete manner in which they are currently trying to do so. Some of those operators were contacted to obtain more information, but responses were limited. Companies assigned to group 1.2 claim to reduce emissions by employing public transportation for their tourists, and those falling under category 1.3 use biodiesel or other alternative fuels in their vehicles.

Companies assigned to group 2.1 provide information on greenhouse gas emissions from plane travel, and most also offer a link to a carbon offsetting company through which travelers can contribute financially to compensate for the negative effects of their plane rides. Companies in group 2.2 have made the part of the trip conducted at the destination carbon neutral through offsetting or tree-planting initiatives. They offer links for travelers to voluntarily offset their flights in addition. Category 2.3 contains one company that has made all of their operations carbon neutral and builds the normally externalized environmental costs of carbon emissions at all levels into their standard costs.

The table below demonstrates the distribution of the different categories among the 39 operators that address sustainable transportation issues on their websites. This table also sorts companies by whether they are inbound operators, outbound operators or both.

[*] Companies offering human-powered activities without making the point that these activities are included partly to reduce emissions were not counted, since there are many reasons to offer such trips besides a desire to reduce carbon emissions.

Table 1.3

Cat.	Category	Total	Inbound	Outbound	Inbound & Outbound
1.1	Minimal Transportation	6	4	1	1
1.2	Public Transportation	4	3	1	0
1.3	Biodiesel/ Alternative Fuel	3	2	1	0
2.1	Voluntary Carbon Offset	11	3	4	4
2.2	Partially Integrated Offset	11	3	5	3
2.3	All-inclusive Offset	1	0	0	1
	Unclear	*3*	*3*	*0*	*0*
	Total	**39**	**18**	**12**	**9**

Concluding, it became apparent that local emissions tend to be dealt with through emissions reduction by inbound operators, whereas international emissions tend to be combated through offsetting by outbound operators. This may be because the flights to arrive at a destination are seen as necessary parts of the travel process, whereas the planning of local transportation needs are more in the hands of the individual tour operators. In any case, it is interesting to note that no companies suggested reducing emissions at the international level by taking direct flights rather than connecting flights, or by designing different packages altogether. Reducing emissions seems to be an issue only dealt with in relation to local transportation.

Nevertheless, outbound tour operators are addressing these issues on a larger scale than most inbound operators, by tackling the most important part of the trip (in terms of its greenhouse effect), the flight to and from the destination. This makes sense in that outbound companies tend to be larger scale businesses in the developed world, with more resources and better connections to new fields such as carbon offsetting. They may also be seen as responsible for those emissions. In addition, since many outbound operators send tour groups to a multitude of destinations, local transportation initiatives at individual sites might be more difficult for them to coordinate than a more general offsetting scheme. Inbound companies, conversely, are doing proportionally more in terms of local sustainable transportation initiatives and appear to be ore concerned about local rather than global impacts. This also makes sense, since inbound companies have a vested economic interest in preserving their local environment. The costs of protecting their local area would be relatively mitigated by the potential for future benefits from maintaining an attractive destination.

III. Survey Analysis

Introduction

The Survey Analysis[1] portion of this study allowed the researchers to examine in more depth what operators` perceptions and attitudes are and what they are actually doing, as information presented on their websites may be non-existant, incomplete or presented for the benefit of the consumer. The survey was e-mailed to all members of TIES, STI, the ATTA and to national ecotourism associations who are associated with TIES and were being asked to pass the request on to their individual members. It is therefore impossible to determine how many operators have received the request to participate in the survey and what the response rate was.

Overall, 67 companies responded. Twenty-three of these responded as outbound operators and forty-five as inbound operators. Both inbound and outbound contains the responses of seven companies who listed themselves as both inbound and outbound. Six responses had to be disregarded because they were not from tour operators but rather from hotels or tourism associations.

For the interpretation of the survey results, it is noteworthy that respondents – in contrast to the website analysis – have been self-selected. It can therefore be expected that there is substantial bias and that the survey results are not representative. It may be expected that respondents felt strong about climate change and their responsibility to act on it, mostly in the positive, but possibly also in a negative sense.

A. Background

As in the website analysis, the great majority of outbound tour operators are located in North America, mostly on the West Coast. The other outbound operators are located in Asia, Australia, and Europe, demonstrating that the majority of outbound tour operators are based in developed countries. The inbound operators are more evenly distributed throughout the world, with the highest percentage in Asia, with North America and Latin America also well-represented. Again, it is important to take into account that five of the inbound operators located in North America are also outbound tour operators. This demonstrates that almost all of the exclusively inbound tour operators are located in developing countries (see Figure 2.1.)

Latin America is the most popular destination of outbound operators followed by Asia and Africa. This geographic distribution is readily attributable to North America being the dominant outbound market among those surveyed.

[1] See questionnaire in the Appendix

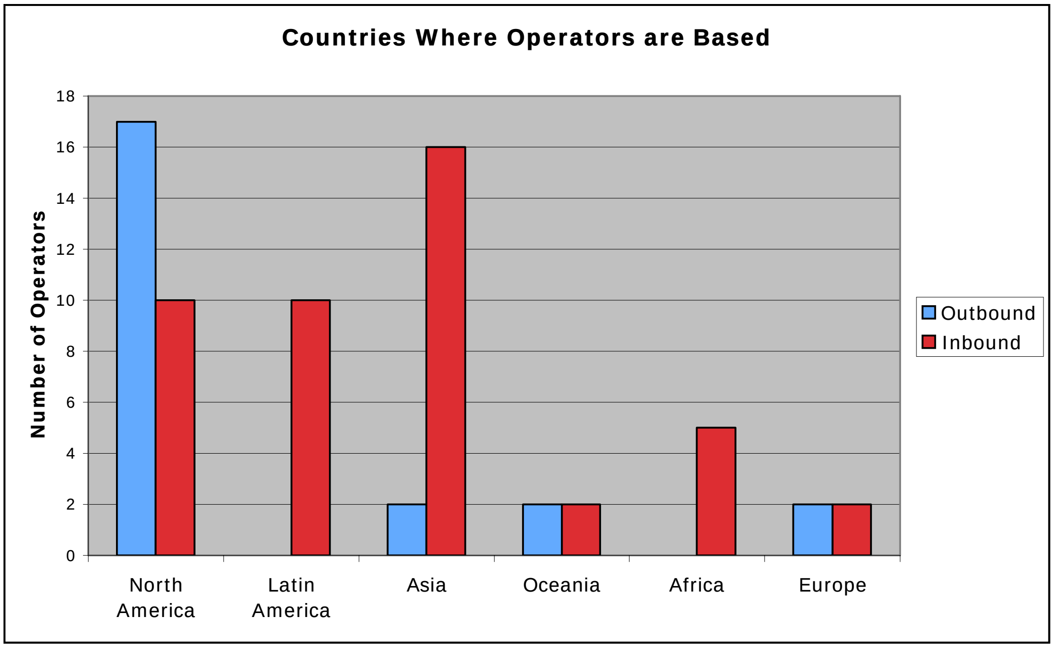

Figure 2.1
Outbound N = 23 Inbound N = 45

Figure 2.2 shows the affiliations of the respondents. These numbers do not add up to the total number of respondents because many of the tour operators belong to more than one of the groups. The outbound operators belong to more of these groups; that is to say, they are more likely to belong to more than one group.

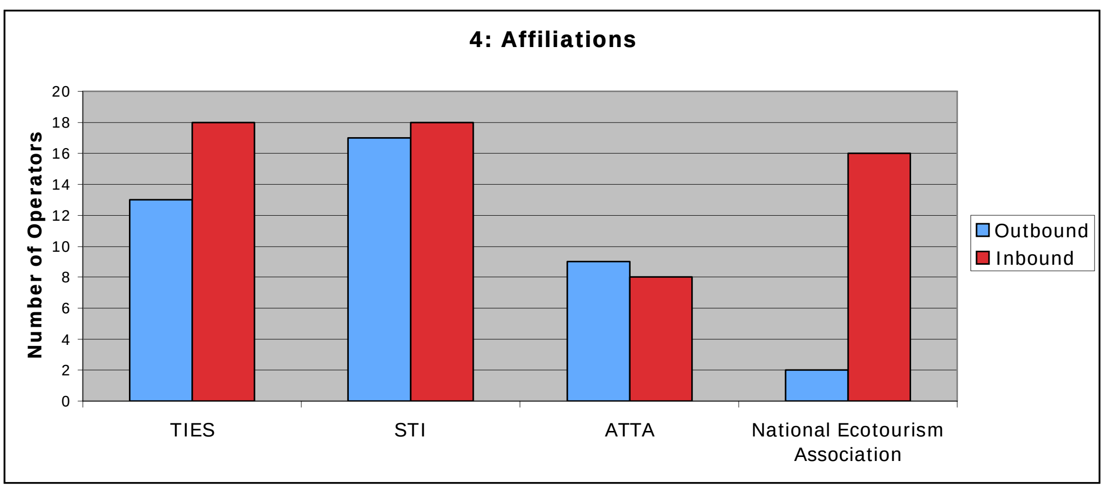

Figure 2.2 *Outbound N = 23 Inbound N = 45*

Question 6 asked which kind of activities the tour operators offered. Most of these organizations responded that they offered nature-based tours or adventure/activity-based tours, and some also mentioned a cultural aspect to their offerings. No relation was found between the type of product offered and the companies' response to climate change.

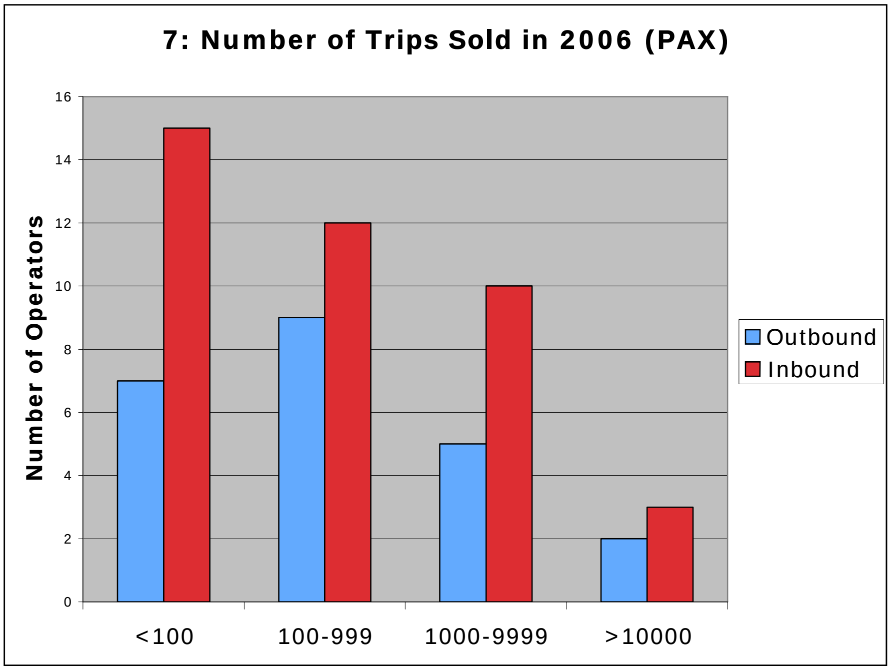

Figure 2.3 *Outbound N = 23* *Inbound N = 40*

Figure 2.3 (relating to Question 7) shows that most respondents represent small to very small companies selling less than 1,000 or even less than 100 trips per year. Less than a handful of companies sell over 10,000 trips annually.

B. General Information in Relation to Sustainable Management

For outbound operators, 21 out of 23 stated that they do have a sustainability code of conduct. For inbound, 36 of 44 said to have a code of conduct. Proportionally, these results are fairly similar between inbound and outbound. Overall, the figure was 83%. These findings could be expected as they are from a sample of companies that are in some way committed to sustainable tourism.

In terms of certification, eleven companies claimed to be certified (6 outbound, 5 inbound operators) and even fewer of these listed actual certification systems as their certifiers. Some believed that simply being a member of an ecotourism association or a sustainable tourism platform would qualify as certification. Apparently there has been a certain degree of misconception about the nature of certification. Only two operators were actually certified by established programs, both by Smart Voyager (Galapagos).

C. Tourism and Global Warming

Questions 10-15 gauge respondents' opinions regarding a series of assertions about tourism's relationship with global warming.

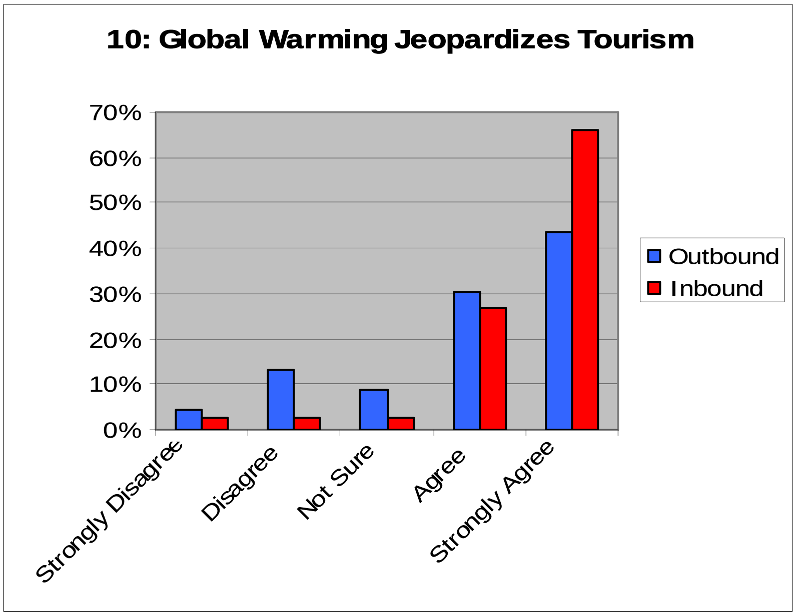

Figure 2.4 *Outbound N =23 Inbound N = 41*

Question 10 (see Figure 2.4) asserted that global warming jeopardizes tourism. There is overwhelming agreement with this. Inbound operators can be seen to be more concerned about this reality, with more distribution in the responses of outbound operators. Inbound operators seem to be experiencing the effects of global warming first hand: several cited changing landscapes such as melting glaciers, and worried over how that would affect tourism in the area. One outbound operator mentioned that climate effects would occur mainly in developing countries, where much of this nature tourism is taking place. Given such changes, the developing economies could lose millions of dollars in tourism revenue, which could significantly alter their development progress. Another outbound respondent who doubted how much impact global warming would have on tourism argued that tourism would simply shift to other locations with changing weather patterns.

Question 11 (see Figure 2.5) tested whether operators believed that tourism played a large role in causing global warming. Here, though they do not agree as strongly as before, operators on both sides admit that tourism does play a role. Aviation and transportation in general as well as other energy use (e.g. by air conditioning) are being mentioned in this context. Some of the inbound operators could cite particular instances of destinations being ruined by tourism, given all the emissions and development necessary for mass transit of tourists. Other respondents point to other, more important polluters and to the fact that ecotourism can contribute positively to the local environment.

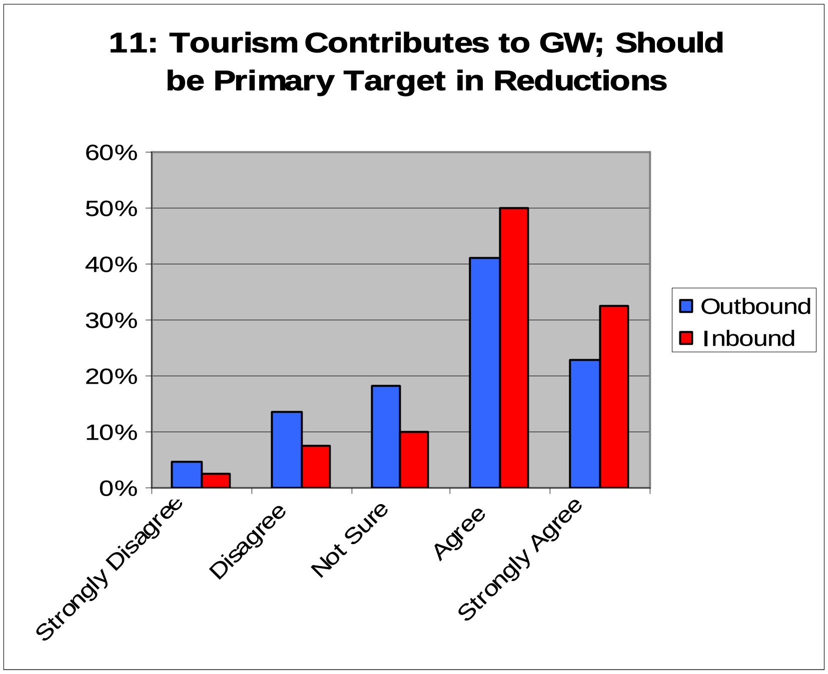

Figure 2.5 *Outbound N = 22* *Inbound N = 40*

Question 12 (see Figure 2.6) stated that nature tourism was not to blame for global warming because of its dedication to sustainable practices. Interestingly, the results here are split in both cases. There were two camps of justification for these responses: one on side, many respondents argued that nature tourism has even more responsibility as a model for mass tourism and therefore had to hold itself to very high standards; on the other, they argued that sustainable tourism companies were doing everything they could already to address these issues.

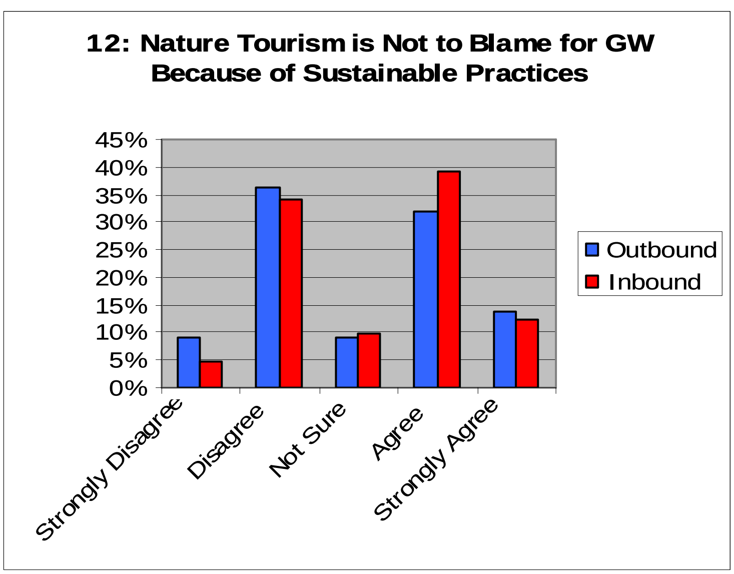

Figure 2.6 *Outbound N = 22* *Inbound N = 41*

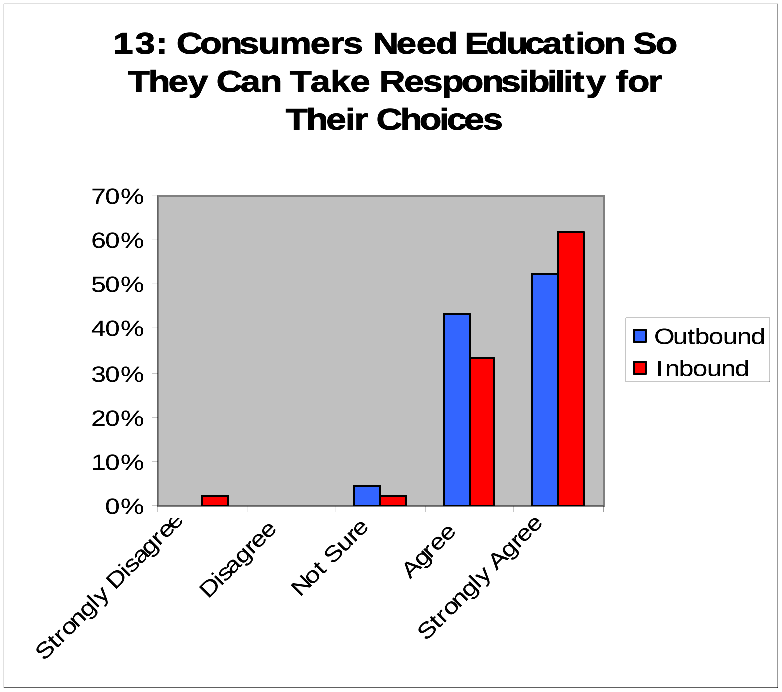

Figure 2.7 *Outbound N = 23 Inbound N = 42*

Question 13 (Figure 2.7) asked whether respondents thought consumers needed education and increased awareness to prompt them to take responsibility for their own consumption choices. In this case, almost everyone agreed that this was true. In questions 16, 17, and 20, the same result surfaces: there are a number of organizations that cite education of tourists as one of their main goals in addressing global warming issues. Some of the companies who agreed also added the disclaimer that one cannot try to educate the consumer too much, or they will not have an enjoyable experience and might choose another operator. This idea of "travel should be a relaxing more than an educational experience" means still keeping the tourist generally away from the harsh reality of climate change. This factor may have bearing on why operators communicate environmental issues to their consumers in the sometimes vague manner that was observed in the website analysis. This point is also raised in the barriers to implementation of sustainable transportation and offsetting programs(Question 21), as operators worry that the consumers will not want to hear about how negatively their travel impacts the world.

Question 14 (see Figure 2.8) asked whether respondents believed that airlines were the main perpetrator in terms of emissions, and should be targeted in the effort to reduce emissions. Surprisingly, although airplanes do emit large amounts of greenhouse gases, most respondents disagreed on this question. From the comments, it could be observed that some operators do not trust the airlines to do much about their emissions. One inbound operator mentioned the ongoing growth of low cost carriers and resulting "cutthroat prices" at the expense of global warming. Another wrote: "Airlines are providing the demand. They can admit that they are the culprit, but it's unlikely they'll be racing to do so. All parties in the industry need to collaborate on this one. Especially when there are easier ways to get from points A to B and they are not considered, due to cheap airline deals." It is remarkable how most respondents are hesitant to put all the blame on the airlines, although it would be "an easy way out". Rather they see their own responsibility as tour operators.

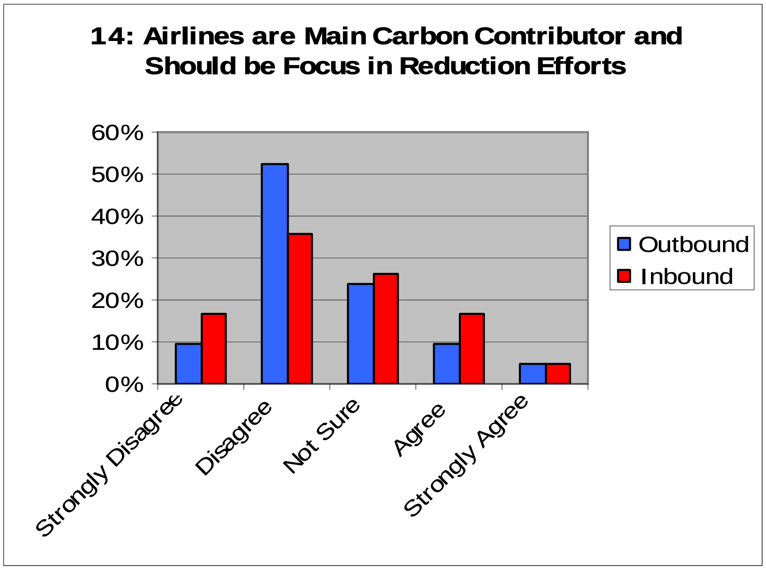

Figure 2.8 *Outbound N = 23   Inbound N = 42*

Finally, Question 15 (see Figure 2.9) follows up on the former statement by stating that tour operators have a particular responsibility to fight global warming because they are in charge of designing trips and contracting suppliers. Most agree, but not strongly- and a few responses are scattered around among the other answers. One very important point made by several outbound operators was that they simply designed the trips that people demanded, so they could only alter their product and practices up to the point where consumers would decide not to purchase it. Another inbound operator made the same point: “Here again, [the consumers] are supplying demand. It's a catch 22 for a tour operator not to offer a trip to Asia just because it's far away. People will go there anyway if that's the plan. The only thing a tour operator can do is limit the travel time. [Operators will] always look for the cheapest, not the shortest route, depending on the amount of money the client can pay.”

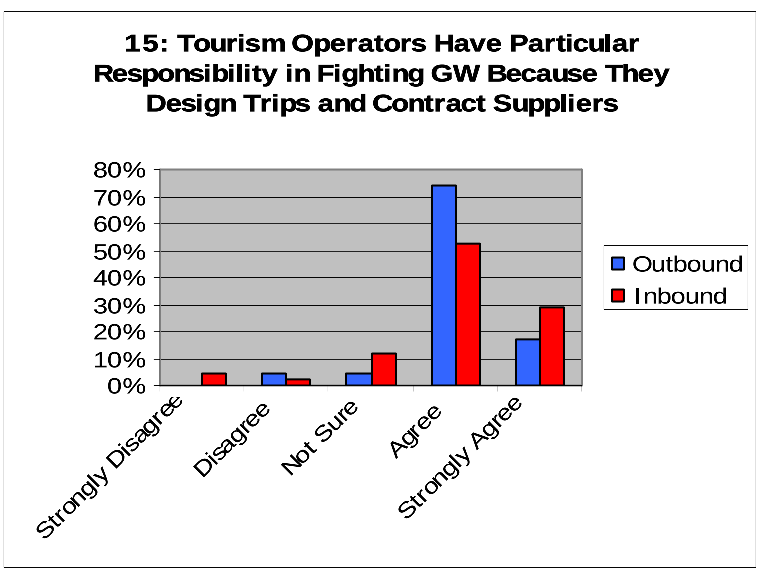

Figure 2.9 *Outbound N = 23   Inbound N = 42*

D. Sustainable Transport and Saving Energy

After this initial analysis of attitudes, the survey examines how respondents have integrated sustainable transport into their environmental goals, and whether they are involved in carbon offsetting.

Question 16 asked whether achieving sustainable transportation was part of companies' overall goals and environmental management 73% responded that this was in fact the case. However, when asked to specify and what exactly they do in this respect (Question17), only about two thirds gave some kind of specification (see Figures 2.11 and 2.12).

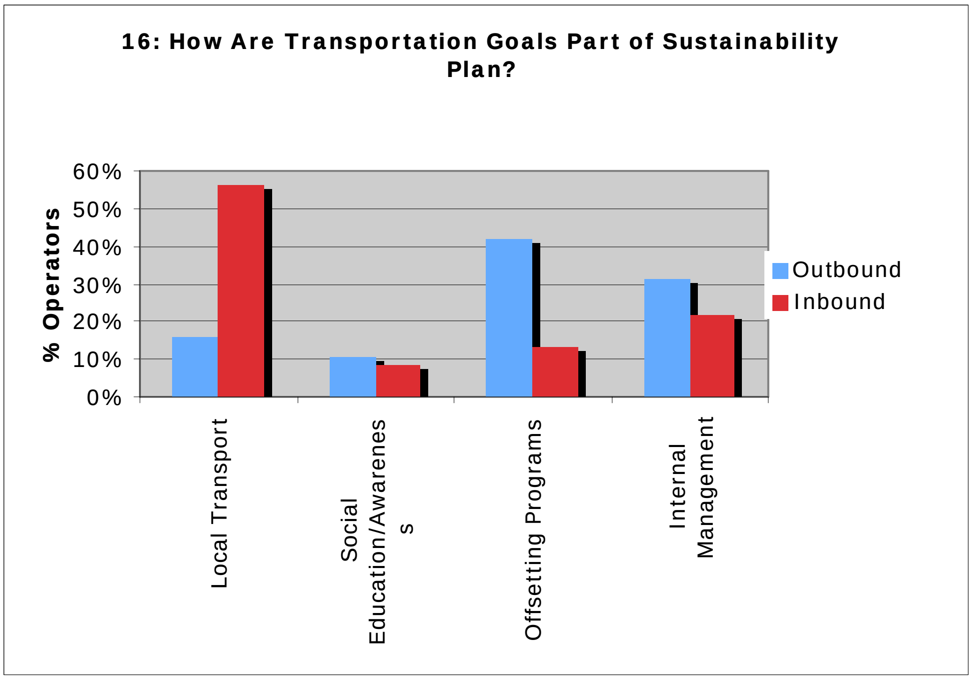

Figure 2.10 *Outbound N = 19 Inbound N = 23*

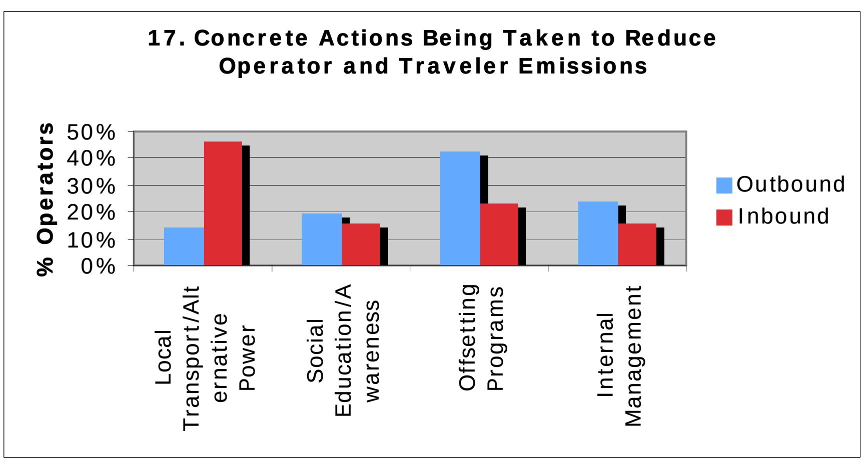

Figure 2.11 *Outbound N = 21 Inbound N = 26*

There is an interesting pattern that mirrors what had been seen in the website analysis as well. Inbound operators are much more involved with local transportation initiatives (including converting to biofuels or low-emissions vehicles, using solar power, non-fuel transport, or public transportation for the travelers). They have also achieved some reductions through internal management, such as increasing staff awareness of the issues and cutting down on operations emissions from mailing and travel. As for outbound operators, the reverse trend is true: They are currently more involved in carbon offsetting programs than with local transport initiatives. Once again, the logic from the website analysis holds true: These companies are more in control of the international travel aspect than with the actual environmental situation in the destination, so they are more likely to favor offsetting.

Question 18 asked whether companies are involved in carbon offsetting, and if so, which provider they use. 10 out of 21 outbound respondents said they did use offsetting, and 10 out of 35 inbound respondents did as well. Once again, a higher percentage of outbound than inbound operators are currently involved in carbon offsetting. The majority of both types of operator use the MyClimate/STI program, with the rest of the results scattered amongst other providers. This makes sense in that many respondents are STI members.

Finally, Figure 2.12 (Question 19) demonstrates the application of funds from these carbon offsetting payments. Several companies had overlap between two of the types of project (energy efficiency, forestry, or renewables). Some companies offered vague explanations as to the ultimate destination of the money; some cited contributions to local NGOs or efforts to strengthen "community", or were themselves unsure where the money was directed. The inbound operators were less concrete in general as to where carbon offset money was invested, whereas the outbound operators appeared to be more knowledgeable about it. Some of this result is due to the fact that the outbound operators are often more closely associated with their offsetting program or aware of what that offsetting company does, but another important consideration is that the sample of outbound is only seven responses here. Therefore, it is unclear if any solid conclusions can be drawn from these results.

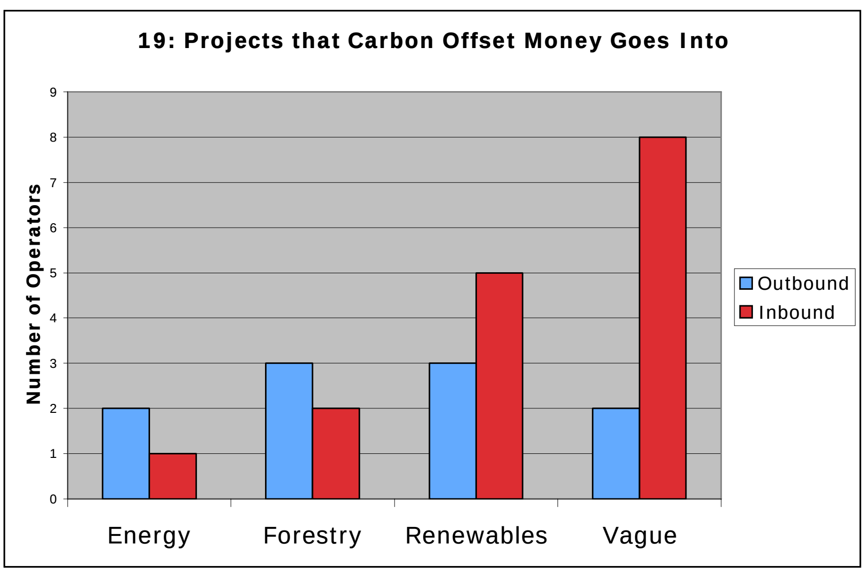

Figure 2.12 *Outbound N = 7 Inbound N = 15*
**Numbers do not add up to total number of respondents, due to overlap in responses.*

E. Outlook

The outlook section of this paper addresses the companies' future goals for sustainable transportation initiatives, as well as the possible barriers they see to implementing those plans. Over 90% of respondents had plans to expand present activities or to get involved in new ones.

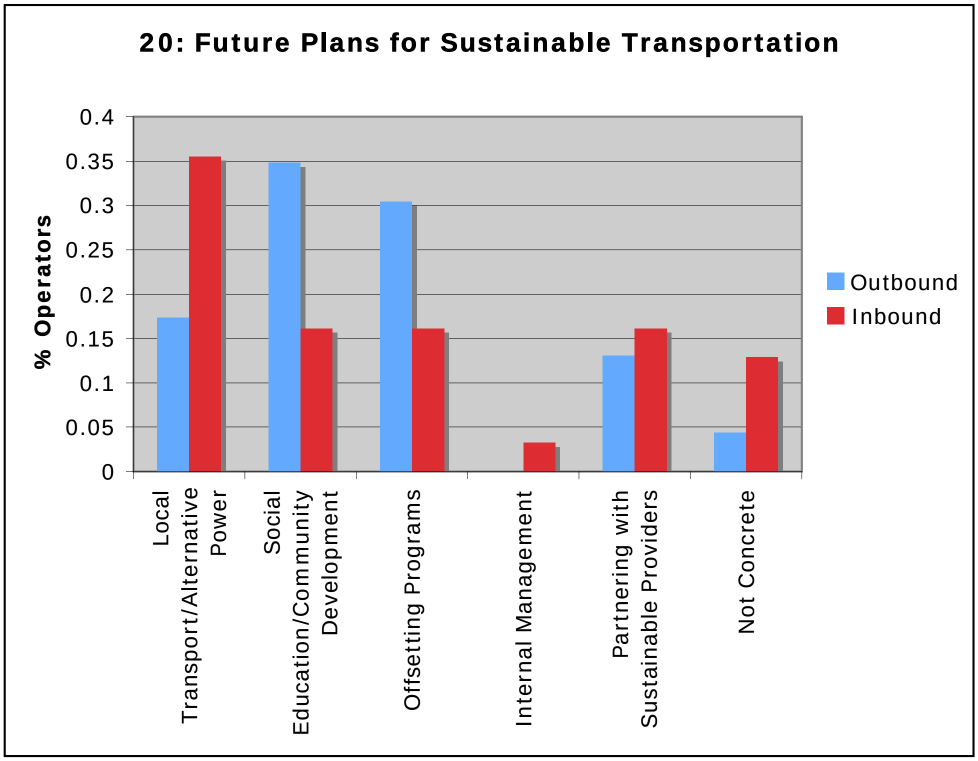

Figure 2.13 *Outbound N = 23* *Inbound N = 31*

Figure 2.13 shows the specific initiatives that operators would like to pursue in the future. For outbound tour operators, the most energy is planned to go into community development or social awareness efforts, including consumer and staff awareness of issues and projects within local communities (one might point out that these goals were often vague, and not directly related to sustainable transportation – and could perhaps be considered a manner of copping out of directly dealing with a tough and complex issue). They are also very interested in offsetting: either joining an offsetting program, making it mandatory for travelers, or fully offsetting operations. A very interesting development that we see here is the entrance of another category of initiatives, which is that of partnering with other sustainable-minded organizations (sustainable supply chain management). Some outbound companies said they were planning on contracting more local companies that were explicitly committed to environmental goals. This is the type of vertical networking that could have major effects in the market for carbon offsetting and sustainable transportation, as local companies could stand to make a profit off these more affluent and connected outbound operators for providing sustainable services, such as bio-fueled transportation.

As for inbound operators, the big goal lies in local transportation, again. This includes switching to alternative fuels or using solar power. Inbound operators also mentioned some plans for social education and awareness, as well as offsetting (some said they were looking for an easy, reliable provider; others were in the process of joining MyClimate/STI or other programs). The idea of partnering also comes up with inbound operators, who said they were looking for the support of other environmentally-minded companies around them to make their product more solidly sustainable.

We also see that a fair amount of responses that were not concrete – i.e., they were promising to get better about emissions, but could not provide a possible manner of doing so. Either these companies do not want to commit to a plan they would not be able to carry out, or they actually do not have access to realistic methods of changing what they are doing. International encouragement and access to information and resources could help these companies better understand what they can do.

Finally, and perhaps most importantly of all the topics discussed in this survey, Figure 2.14 (Question 21) shows the expected barriers to implementation as viewed by the operators. Barriers are seen by a majority of those who plan to become more active in terms of sustainable transportation.

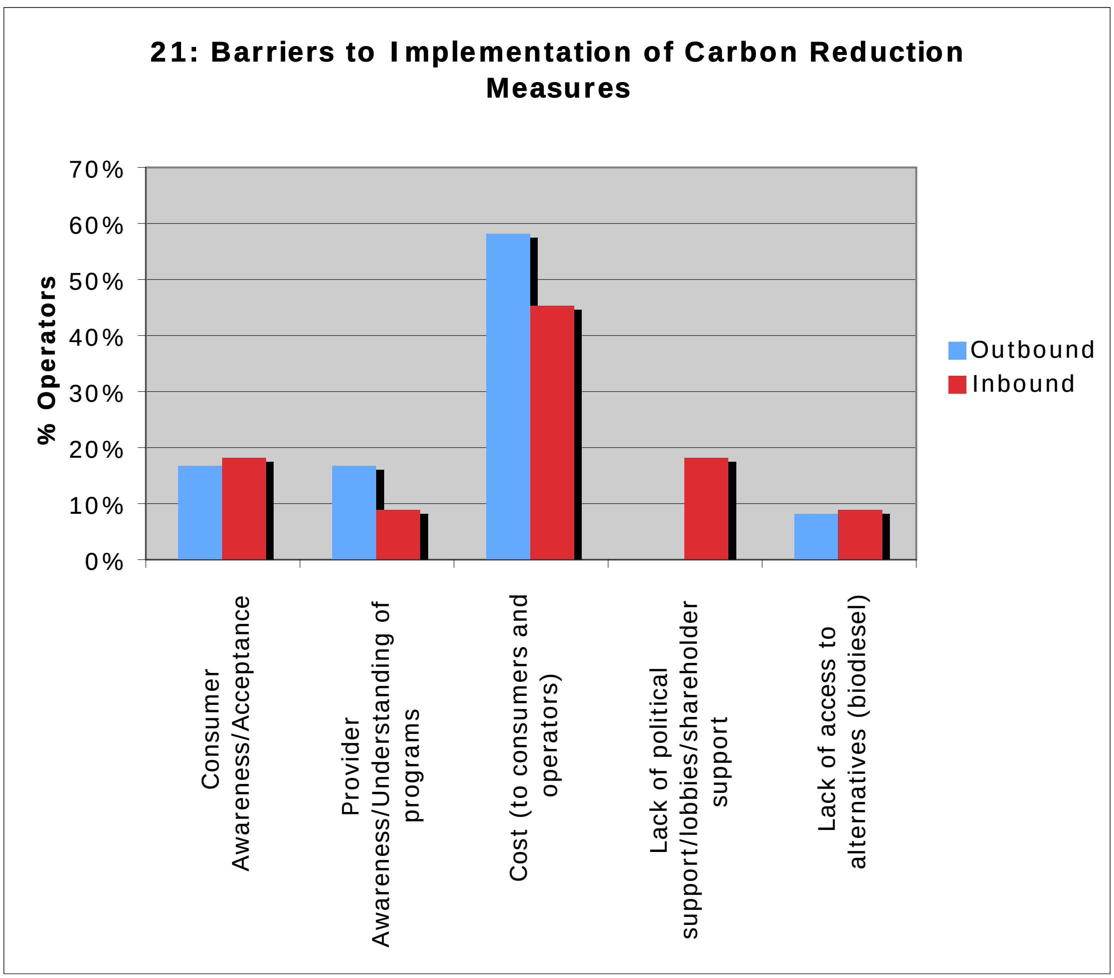

Figure 2.14 *Outbound N = 12   Inbound N = 22*

For both inbound and outbound operators who did propose barriers in this field, "cost to consumers and operators" was overwhelmingly the largest concern. The operators worry that if they push carbon offsetting and other measures (such as less comfortable public transportation) on their customers, they will just lose those customers to other less scrupulous companies. Tied closely into this concept is that of consumer awareness and acceptance – basically that customers will not understand what offsetting is or will not want to hear about the negative impacts of their travel. The cost to the operator is the most concrete of these concerns, it seems. Especially for small companies, working with carbon offsetting programs or alternative fuels requires a fair amount of time and resources, which they might not be able to afford.

Inbound operators also cite lack of political support, which is an important factor for small companies. With a clear government mandate or incentives for such actions, they would be more likely to implement sustainable transportation actions. Both inbound and outbound cited some problem with whether or not compensation service providers were reliable; that is, whether the money being directed towards carbon offsetting was actually going efficiently towards that end. Lack of access to alternative fuel sources or other alternative technologies was noted by inbound and outbound, as in many remote locations, these are not viable alternatives due to their relative scarcity outside the developed world.

Limitations of this study

Though some interesting results can be gleaned from the survey responses that were received, there are some limitations to the data that must be acknowledged. Perhaps the most important is the low response rate. A total of only 67 respondents filled out the survey, which makes it difficult to draw too strong of a statistical inference from any of the results. Given the lower N value in most of these charts, the percentages are strongly swayed by only a few answers in many cases.

Further, as was acknowledged earlier, there is probably a strong bias in favor of sustainable transportation which is not representative of most ecotourism/sustainable travel companies, and especially not of the broader tourism market. The companies who chose to respond to this survey may be those who are already most strongly committed to these issues and want to talk about what they are doing. Alternatively, there could have been a broader sample who, when faced with the topic of the survey and the introductory letter responded as they think they ought to, rather than reflecting the reality of their operations and outlooks.

With this in mind, the greatest value of the survey lies in what was being written by respondents in the form of comments and answers to open questions. Furthermore, the survey can be expected to provide a valuable insight into the views of an environmental "avant-garde" of nature-based tour operators keenly aware of the challenge and generally willing to counteract it.

Appendix I: Web-based Survey on Sustainable Transportation

Ecotourism and Sustainable Transportation

Analysis of current practice among nature tour operators

Questionnaire for survey of tour operators

Dear Madam or Sir:

You are invited to participate in a research study about sustainable transportation in the context of nature-based tourism. The background of this study has been explained to you in a previous e-mail. If you are not a tour operator, please disregard this survey. If you are, please proceed.

We ask you to fill in a short questionnaire that will take approximately 10-20 minutes to complete. Please understand that your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without consequences. You have the right to refuse to answer particular questions by leaving them blank. Your individual privacy will be maintained in all written data or publications resulting from the survey. The results of this study will not be used for commercial purposes.

Following completion of the survey, you may be asked to participate in a follow-up phone interview. This is entirely voluntary and you have the right to decline. If you choose to participate, you will be asked to supply your name and phone number so that we can contact you.

This study has been approved by the Institutional Review Board for Human Subjects (IRB) at Stanford University as being in compliance with current research regulations regarding human subjects involvement (Protocol No. 7996).

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Administrative Panels Office, Stanford University, Stanford, CA (USA) 94305-5401 (or by phone (650) 723-2480 - you may call collect).

By answering the following questions and e-mailing them back, you indicate that you have read and understood the description of the study and agree to participate.

A. Background information on your company

1. Name of your company: ……………………………………………………………………………………

2. Country and state/province where you are based: ………………………………………………………….

3. Is your company
   - ☐ an outbound tour operator (i.e. organizing trips to destinations abroad)?

- ☐ an inbound tour operator (i.e. organizing trips within your own country for domestic or foreign customers)

4. Are you a member of
☐ TIES ☐ STI ☐ ATTA ☐ a national ecotourism association

5. If you are an outbound tour operator, which are your three most important destinations in terms of number of trips sold?
....

6. What type of trips/activities do you mainly offer?
....

7. Approximately, how many trips (PAX) did you sell in 2006? ....

B. General information in relation to sustainable management

8. Does your company have a written commitment to environmental and/or social sustainability and/or have you signed up to a code of conduct in this respect?
☐ yes ☐ no

9. Is your company certified under any kind of sustainability certification scheme?
☐ yes ☐ no
If yes, which one?..

C. Tourism and global warming

Please indicate to what extent you agree or disagree with the following statements.

10. Global warming is a reality that increasingly jeopardizes tourism in many destinations around the world.
☐ strongly disagree, ☐ disagree, ☐ not sure, ☐ agree, ☐ strongly agree
Comments: ....

11. Tourism substantially contributes to global warming and should be a primary target for emissions reduction.
☐ strongly disagree, ☐ disagree, ☐ not sure, ☐ agree, ☐ strongly agree
Comments: ....

12. Nature-based tourism is hardly to blame. It is too insignificant compared to other economic sectors and often mitigates its environmental impacts through sustainable management.
☐ strongly disagree, ☐ disagree, ☐ not sure, ☐ agree, ☐ strongly agree
Comments: ....

13. Consumers need to be educated about their contribution to global warming when they travel so that they assume more responsibility for the choices they make.
☐ strongly disagree, ☐ disagree, ☐ not sure, ☐ agree, ☐ strongly agree
Comments: ....

14. Within the tourism industry, tour operators play a minor role when it comes to combating the effects that travelling has on the world climate. It is predominantly the airlines who have to take action in this respect.
☐ strongly disagree, ☐ disagree, ☐ not sure, ☐ agree, ☐ strongly agree

Comments: ……………………………………………………………………………………………………….

15. Tour operators have a particular responsibility in reducing tourism's impacts on the world climate and the environment in general since they are the ones who design trips and contract suppliers.
□ strongly disagree, □ disagree, □ not sure, □ agree, □ strongly agree
Comments: ……………………………………………………………………………………………………….

D. Sustainable transportation and saving energy

16. Are sustainable transportation and energy saving *currently* a part of your company's environmental goals and the overall way you do business?
□ yes □ no
If yes, please describe briefly. *If not, please proceed to section E.*
………
………
………
………
………
………
………

17. What does your company do to reduce its impact on the world climate? Please describe briefly.
1) ……
………
2) ……
………
3) ……
………
4) ……
………
5) ……
………
………

18. Are you currently engaged in carbon offsetting?
□ yes □ no (*Please proceed to Section E*)
If yes, are you working with a specific carbon offset provider?
□ yes Name of the company/organization: …………………………………………… □ no

19. What kind of compensation project(s) do your or do your customers' payments go to?
□ Renewable energies □ Energy efficiency □ Forestry □ other *(please specify)*

………

E. Outlook

20. Do you expect your company to become more involved in the issue of sustainable transportation, energy saving and/or carbon offsetting in the near future?
□ yes □ no
If yes, what are you planning to do?

1) ………
……
2) ………
……
3) ………
……
……

21. Do you perceive any barriers to implementing any of these measures that otherwise would be desirable in your opinion?

☐ yes ☐ no

If yes, what are these potential barriers?

1) ………
……
2) ………
……
3) ………
……
……

22. Would you be interested in a follow-up phone interview to discuss details concerning the issues brought up in this survey?

☐ yes ☐ no

If yes, name and function of the person to contact: ………………………………………………………….

Phone # of the person to contact: …………………………………………………………………………………….

23. Would you be interested in participating in TIES' upcoming campaign on ecotourism and sustainable transportation and related activities?

☐ yes ☐ no

Thank you for your time and interest!