

## Hotels Involvement in Sustainable Tourism Practices in Klang Valley, Malaysia

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### ABSTRACT

The hotel sector has been described as an industry of which activities constitute a great impact on the environment. Hotels consume vast amount of energy, water and non-durable goods, and has been reported to discharge huge amount of raw and solid waste in different quantities. Serious impacts on the environment were highlighted, calling for greater hotel's participation in sustainable tourism practices by committing to environmental management system (EMS). Comprehensive studies among hotels in Malaysia on their contributing efforts in curbing environmental degradation have been inadequate. Hence, a current study was conducted and this paper presents findings on sustainable tourism practices most commonly adopted by Malaysian hotels within Klang Valley. The main findings indicate the use of occupancy sensor/key card control system as energy saving measures, as well as the use of energy-efficient equipments and products. This result, therefore, confirms a number of preliminary studies which indicates widespread adoption of energy management among hotels. Adopting these practices has enabled Malaysian hotels to benefit from improved image to the guests and the local communities as well as the enhancement of a safe and healthy environment for hotel guests and employees.

**Keywords:** Sustainability, Environmental Management System, Hotels, Klang Valley

### INTRODUCTION

Tourism, often described as the movement of people away from home to other places of interest (Bhatiah, 2001; Bukart and Medlik, 1987), is one of the largest and fastest growing industries in the world (Scheyvens and Momsen, 2008; World Travel and Tourism Council [WTTC], 2007). As an alternative form of export to other commodities, many countries of the world now adopt tourism as a major

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source of foreign exchange earnings. In Malaysia, for instance, statistics indicate that revenue from the tourism sector in 2010 contributes RM53,367.70 million, with a corresponding tourist's arrival of 23.6 million (Tourism Malaysia, 2010). This ranked tourism to be the second major source of revenue to Malaysian economy.

Tourism being a major source of income and employment for many countries depends heavily on environmental resources that include: pristine beaches, warm climate, clean air, landscape formation among others (Mensah, 2005; Bhatiah, 2001; Bukart and Medlik, 1987). Many tourist destinations harnessed some of these environmental resources for the overall development of their tourism industry. However, lack of proper management of these resources may lead to environmental inefficiency (Bohdanowicz, 2005; Mensah, 2006). According to Pigram (1995: 19), "tourism can certainly contribute to environmental degradation and be self-destructive. It also has the potential to bring about significant enhancement of the environment". Available evidence indicates that tourism has led to the deterioration of environmental resources in different forms. For instance, McDonald (2009) study in Vietnam discovered a proliferation of wildlife restaurant outside national parks in the country. These restaurants served wild game and rare or endangered species to the tourists (Le *et al.*, 2006) thereby threatening the continued existence of animal species, a major component of forest resources.

To minimise any negative impacts that may arise as the result of tourism activities, efforts are now geared towards alternative form of tourism (Butler, 1993), which most academic literatures described as 'sustainable tourism' (Kirk, 1995; Edwards, 2004; Mensah, 2006; Bohdanowicz, 2005). Environmental management system (EMS), as a core initiative to achieve sustainable tourism is the conscious management of environmental resources of the destination in such a way that minimises any negative effects (Edwards, 2004).

Among the various components of tourism, the hotel industry is an industry of which activities constitute a threat to the environment due to its high consumption in energy, water, and non-durable goods (Kasim, 2009; Bohdanowicz, 2005; Mensah, 2006; Chan, Wong and Lo, 2009; Bramwell and Alletorp, 2001). Hotels are located within, or close to tourist attractions and they provide food, drinks, accommodation and other forms of recreational services to the customers. Hotels as service providers consumes vast amount of energy, water and non-durable goods in all the functional zones which includes guest rooms, kitchen, laundry, swimming pools, and public toilets (Chan, Wong and Lo, 2009) and discharge different types of waste to the environment. Evidence discovered suggests that hotels afflict the environment in the form of air and water pollution, waste generation, and energy induced emission (Bohdanowicz, 2005; Park, 2009; Kasim, 2009; Chan, Wong and Lo, 2009). For instance, a normal hotel releases between 160 and 200 kg of CO<sub>2</sub> per square metre of room annually (Bohdanowicz, 2005).

Previous studies have indicated three major areas of sustainable tourism practices are to include the followings: 1) energy management; 2) waste

management; and 3) water conservation (Bohdanowicz, 2005; Iwanowski and Rushmore, 1994; Mackie, 1994; Chan, Wong and Lo, 2009; Park, 2009; Mensah, 2006; Middleton and Hawkins, 1993; Faulk, 2000; Forte, 1994; Webster, 2000; Sloan et al., 2004; Shanklin, 1993). These practices have been identified as the most popular environmental management practices that promote the quality of the environment, image building, and cost-savings among hotels (Hawkes and Williams, 1993; Forte, 1994; Mensah, 2006). Furthermore, Mensah (2006) described these practices as a major process adopted by hotel management which help them to monitor their activities and to also implement appropriate programs in order to reduce the negative impacts of their activities on the environment. Similarly, Ayuso (2006) stressed that Spanish hotels have adopted some of these practices having realised their responsibilities in protecting the environment. Therefore, some hotels around the world now initiate some of these practices in major sections of the housekeeping department, food and beverage production, food and beverage service, laundry, guest rooms, conference and meeting facilities. Therefore, this paper presents findings on the current level of hotels' participation in sustainable tourism practices in relation to the three key operational areas involving energy management, waste management, and water conservation. Similarly, this paper will attempt to identify the benefits of hotels' participation in adopting current practices in environmental management. This will provide a platform on how Malaysian hotels can improve on different programs which safeguard the environment since previous studies in Virginia and some other countries of the world provide a detailed explanation on the contributing factors of these practices among hotels (see Park, 2009; Chan and Ho, 2006; Mensah, 2006).

## METHODOLOGY

Sustainable Tourism Practices (STP) in Malaysia has been an under researched area. Therefore, a study on STP among Klang Valley hotels was conducted and data was collected between October to December 2009. The survey involved a data collection using questionnaires to obtain information on the current level of hotels' contribution to environmental practices and the obligation of hotel managers in adopting practices which protect the environment. In measuring STP, 19 items, adapted from Park (2009) were used to collect information on the current level of hotels' participation in sustainable tourism practices, while 14 items were used to measure the benefits of adopting EMS among hotels in Kuala Lumpur and Selangor. For all questions, Likert-type scales from Park (2009) were adopted with minor modifications.

Data for this study was obtained from a sample of different categories of hotels within Klang Valley. The target respondents initially, comprised of hotels listed by Malaysian Association of Hotels (MAH), located in Klang Valley as listed in the MAH website as at September, 2010. The MAH website has a posting of 156

registered hotels spread across Kuala Lumpur and the state of Selangor. A major factor for the choice of MAH listing is because it provides a comprehensive location of all member hotels, their telephone numbers, postal address and their e-mail addresses. These hotels are of different categories ranging from 1 star hotel to 5 star hotels as well as budget hotels (often described as 'others'). The choice of star ranking to describe the different types of hotels is because this system provides a more accurate description of the relative status of hotel properties in terms of facilities and services offered (Kasim, 2009). To avoid a low response rate (see Kirk, 1995; Chan and Wong, 2006; Park, 2009; Bohdanowicz, 2005; Sloan, Legrand and Chen, 2004), and to further increase the probability of getting a large sample size, all the 156 hotel managers and/or owners of small, medium and large hotels were initially included in the sampling list for this study. Personal visits and telephone calls were made to the hotels to seek for their cooperation. The initial process of the data collection was very challenging as some hotels were under renovation and some others refused to take part in completing the questionnaire. Questionnaires were addressed to each General Manager of the hotel, however upon self-delivery; questionnaires were delivered to the Human Resource Manager. The final list of respondents comprised of 104 hotels in Klang Valley, and the hotels have responded that they are willing to receive the questionnaires.

## RESULTS AND DISCUSSION

A total of 62 responds were finally received however, two copies were rejected due to poor completion, leaving the researcher with 60 (58.82%) valid copies of the questionnaires. This figure represents 59.61% response rate. With an overall response rate of more than 59 percent, it shows the success of the survey (see Le et al., 2006; Chan, 2007; Park, 2009). Most of the completed copies of the questionnaires were personally collected by the researcher, while a few others were collected through post.

The two major research variables analysed in this study are: (1) the current level of hotel's participation in sustainable tourism practices; and (2) the advantages derived in sustainable tourism practices. Accordingly, the first variable comprised nineteen items and the second variable comprised fourteen items. All the attributes were measured using the seven-point Likert type scale with a response value of 1=strongly disagree, 2=disagree, 3=partially disagree, 4=neutral, 5=partially agree, 6=agree, 7=strongly agree.

Data from 60 hotels was finally analysed, in which 25% comprised of the 1 and 2 star hotels, 38.3% was the three star hotels and 36.7% was the luxury hotels within the category of the 4 and 5 star hotels. As such those hotels within the budget accommodation category (3 star and below) stand at 54.9%. As medium range hotels (Kasim, 2009) a sizeable number of them have local ownership, independently owned having self- management structure. Previous studies have indicated that

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**Table 1** Demographic Profile of Sample Hotels (n=60)

Variables	Frequency	%
Hotel Type		
International Hotels	11	18.3
Resort Hotels	3	5
Commercial Hotels	39	65
Budget Hotels	7	11.7
Classification		
Small Hotels	15	25
Medium Hotels	23	38.3
Large Hotels	22	36.7
Location		
City Centre	46	76.7
Commercial Centre	5	8.3
Tourist Resort	1	1.7
Along a Major Highway	3	5
Airport	3	5
Other Locations	2	3.3
Ownership and Management Structure		
Independently owned, Self-managed	24	40.4
Independently owned, Managed by Franchise Agreement	6	10
Independently owned, Managed by Contract agreement	21	35
Chain owned, Managed through Chain	9	15
Number of Guestrooms		
Less than 50 Rooms	7	11.7
50-100 Rooms	9	15
100-300 Rooms	30	50
300 Rooms and above	14	23.3
Percentage Occupancy		
Less than 25%	1	1.7
25-40%	2	3.3
41-55%	7	11.7
56-75%	33	55
76% and above	17	28.3
Participation in STP		
Yes	52	86.7
No	8	13.3
Year of Participation		
Before 2000	10	16.7
2000-2005	13	21.7
Since 2006 Till Date	37	61.7

Table 1 (*Cont'd*)

Green Certification		
Yes	1	1.7
No	59	98.3
Green Award		
Yes	2	3.3
No	58	96.7
Type of Award		
Landscaping Award	1	1.7
RICOH Award	1	1.7
Yet to received	58	96.6
Environmental Policy		
Yes	13	21.7
No	47	78.3

small and medium-size hotels with local ownership tends to show a more positive response to survey (see Kasim, 2009: 6), unlike the larger hotels (4-5 star hotels) which belong to international chain. Most of the larger hotels refused to participate in this study because of restriction policy from their head offices and the fear of lack of confidentiality, despite written and verbal assurance from the author. In terms of the management structure, independently owned and managed hotels are the largest group (40 %), while hotels which are managed through contract agreement comprised of 35 % of the total 60 respondent hotels. In terms of hotel size, the respondent hotels mainly comprised of large hotels having more than 100 rooms. As seen in Table 1, only 11.7% of the hotels have rooms less than 50, while 15 % belongs to those with 50-100 rooms and 50% of the hotels have 100-300 rooms. From the survey result, 23.3% of the sample hotels have more than 300 rooms. As also displayed in Table 1, 65.0 % of the participating hotels are commercial hotels (39 properties). To summarise, the data was derived from various types of hotels, thus this provides a very important indication related to the level of commitment towards Environmental Management System (EMS) in Malaysian hotels.

### **Hotel participation in sustainable tourism practices**

One of the primary purposes of this study is to identify sustainable tourism practices most commonly adopted by Malaysian hotels within Klang Valley. Therefore, hotels managers were requested to provide answers to all the 19 closed-ended questions. Table 2 displays the level of hotels' participation in sustainable tourism practices; energy, waste and water management. Having performed an internal reliability analysis of all the 19 items, the result indicates a Cronbach's coefficient alpha of .765. This value has met the acceptance criteria of .70 and is considered acceptable

(see Pallant, 2005). This indicates the items used to measure sustainable tourism practices in this study are highly reliable. Hair et al. (1998) further mentioned that an alpha value of .60 is also acceptable in exploratory study

Among all the items, the finding reveals that energy control management, that are the installation of occupancy sensor/key card control system and uses of energy efficient equipment as the major environmental management practices among the participating hotels. The first variable has a mean score of 5.82 (SD=1.80), followed by the use of energy efficient equipment and products (Mean=5.68, SD=1.22). Therefore, energy management has been the core concern for the hotel industry in Malaysia. As one of the most widely adopted environmental management practices, this findings support evidence from previous studies by Hobson & Essex, (2001); Park, (2009); Bohdanowicz, (2005); Mensah, (2006); Edwards, (2004); Chan and Lam, (2003); Faulk, (2000); Stipanuk, (1996); Kirk, (1995); Patterson, (1995). For instance, Stipanuk (1996) cited a survey conducted by the American Hotel and Motel Association (AH&MA) in which the reduction of energy consumption has been highly rated among other priorities. Furthermore, Starwood Hotels and Resorts worldwide decided to launch a new brand "ELEMENT" as means of energy saving device among its properties. This practice ensures that hotels are designed to effectively utilise natural light for heating their guestrooms and to also use energy-efficient appliances and lighting (Park, 2009). Going by the number of hotels now adopting different energy-saving measures, this practice has been regarded as the main thrust in the hotel sector (Chan and Lam, 2001).

As presented in Table 2, this study also found that only three items related to waste management received mean scores of above 5.0. These are uses of refillable dispensers, reuses of cloth napkins and glass cups and uses of environmental-friendly cleaners or detergents. These practices have not only helped to reduce waste and waste water to the environment, but the reuse of linens and towels saves water and energy to the hotel. This can be translated to lower water and electricity bills. For instance, linen and towel reuse program among Marriot International hotel group has contributed in saving 11-17% of hot water (Marriott International, 2007). This led Brodsky (2005) to propose that linen and towel reuse program can help a 100-guest room property with 75% occupancy to save an estimated \$25,000 per year. This can be achieved through a reduction of 81,000 gallon in water consumption and a reduction in the use of 84 gallons of detergent. The respondents however have largely indicated as 'neutral' to other variables of waste management (purchase of food items and cleaning chemicals in bulk containers and composting of kitchen waste). This shows that these practices have not been too familiar to the hotels. The participating hotels appears to be very unfamiliar to the use of treated waste water for garden, as this variable only has a mean score of 2.73.

In terms of water management, this study indicates that the practice of reuse linens and towels as the most water saving measures (Mean=5.40, SD=1.73), followed closely by providing low-water-volume toilets in the hotel guest rooms and

other public areas (Mean=5.30, SD= 1.47), as well as waste management practices in the provision of reusable items such cloth napkins and glass cups (Mean=5.25, SD= 1.67) are largely in practise. The most unpopular move among the respondents is the placing of water meters in all guest rooms to track usage. This may be due to high cost of procuring and installation of these facilities. Similarly, as mentioned earlier, the use of treated waste water for garden irrigation was not popular among the participating hotels probably due to the high cost of water treatment facilities which most small and medium hotels cannot afford.

**Table 2** Items in measuring sustainable tourism practices<sup>a</sup>

Constructs (Alpha .765)	Mean	SD
<b>Energy Management</b>		
Installation of occupancy sensors/key card	5.82	1.80
Energy efficient equipments and products	5.68	1.22
Renovation of facilities	4.92	1.23
<b>Waste Management</b>		
The use of refillable soap and shampoo dispenser	5.50	1.56
The use of reusable items of cloth napkins and glass cup	5.25	1.67
The use environmentally friendly cleaners/detergents	5.22	1.48
Recycle bins in front and back-of house areas	4.95	1.66
Bulk purchase of food items and cleaning agents	4.57	1.73
Composting of kitchen waste	3.70	1.98
Grinding of guest soap as laundry detergent	3.15	1.64
Treated waste water for garden irrigation	2.73	1.59
<b>Water Conservation</b>		
Reuse linens and towels	5.40	1.73
Low-water-volume toilets	5.30	1.47
The use of dual piping system	4.00	1.32
Water saving campaigns in the kitchen	3.95	1.52
Water meters in the guestrooms	2.52	1.69
<b>General Support to STP</b>		
Environmental Management involving waste, energy, and water conservation	5.13	1.20
The display of leaflets in hotel rooms	4.67	1.59
Hiring of environmental management advisor	3.47	1.44

<sup>a</sup>Seven-point Likert type Scale (1=strongly disagree, and 7=strongly agree)

M=Mean, SD=Standard Deviation

Source: Author, 2010

As previously explained, providing refillable soap and shampoo dispensers in hotel rooms and public areas may be viewed as not hygienic and comfortable to the guests. Against the old practice of providing bar of soap in all hotel rooms including public toilets, hotels now provide different types of refillable soap and



shampoo dispensers. This practice led some of the hotel guests perceived that some of the dispenser may not be hygienic and some were not sure of the contents in the dispensers (Millar & Baloglu, 2008), while some equate refillable dispensers with going to the gym (Kasim, 2004). In support to this claim, Millar and Baloglu, (2008) mentioned that hotels operators were yet to provide dispensers which can be acceptable and attractive to hotel guests.

As conclusion, findings of this study revealed that even though the participating hotels indicate their commitment to various practices which support to sustain the environment, however, their level of commitment varies to some extent. Certain practices are unpopular such as grinding of left over soap to use as laundry detergent for staff uniform (Mean=3.15, SD= 1.64), use of treated waste water for garden irrigation (Mean=2.73, SD= 1.59), and placing the water meters in all guest rooms (Mean=2.52 SD= 1.69).

Although participating hotels are strong to agree that they are committed to participate in sustainable tourism practices (as shown in Table 1, 86.7 % confirmed this commitment), the practice to hire environmental-related professionals in their hotels were not too well supported. This is seen in Table 2, the general support in terms of hiring these professionals has a mean score at 3.47 only. In fact, the support for doing renovation and distributing leaflets related to environmental practices do not receive the highest support. Apparently, the hotels are mainly focused on the ordinary measures related to waste, water and energy management, as revealed in the findings in this study, but some specific measures may take sometimes to be practised widely. This is evidence as majority of the participating hotels, indicated that the year 2006 onwards as the period they started to be focusing on STP (refer Table 1).

### **Benefits of Hotels Participation in Sustainable Tourism Practices**

The benefits for hotels adopting the various programs which sustain the environment are measured by 14 items according to seven-point Likert-type scale (Table 3). Findings revealed that improvement of hotels' image to the guests and the local communities as the most important benefit. This scale has a mean score of 5.95 (SD=1.17) followed by the need to provide safety and healthy environment for the hotel guests and the employees (M=5.77, SD= 1.11). This result is quite surprising as financial related benefits such as reduced costs in energy, waste, and water management practices have been lesser of importance, when compared to hotel's image. From the survey result, some of the participating hotels do not benefit in the reduction of operational cost through water consumption (M=4.72, SD=1.49). This may be due to the reason that most of the hotels did not adopt various practices of water management. As discovered earlier, most of the hotel rooms were not equipped with water meters to track down users. Hence, most of the participating hotels did not consider adopting water conservation measures as playing a significant role in

environmental management. This is rather disappointing as water saving measures among hotels is supposed to be one of the widely adopted practices. Moreover, water is considered as an important resource for the tourism. This explains why some hotels adopt water saving programs and were able to reduced water consumption by more than 28% (see Sweeting and Sweeting, 2003). Some had even reduced their level of water consumption by 50% (see Hotel Online, 2002).

As displayed in Table 3, this study also discovered some benefits that were of less importance to the hotel, which include: lack of customer loyalty to the hotel (Mean=4.50, SD= 1.35), less marketing advantage of the participating hotels over their competitors (Mean=4.55, SD= 1.29), and, sustainable tourism practice not considered as a public relations campaigns among the hotels (Mean=4.65, SD= .971). As such, top managers in this study indicated that sustainable tourism practices have not provided them a marketing advantage over their competitors. This finding is in tandem with Park (2009) where environmental management contributes less to hotel profitability and market share. Furthermore, increasing market share among US hotels was reported to show a weak correlation with top managers' environmental attitudes (Park, 2009). Even though image appears to be very important, participating hotels do not expect customer loyalty will come around immediately as they are to be more environmentally savvy.

On the other hand, other benefits receiving higher scores include the enhancement of customer and employee satisfaction and motivation (M=5.62, SD= 1.15), good future for the tourism industry (M=5.47, SD= 1.40), improved revenue generation due to customer satisfaction (M=5.45, SD= 1.28), and the improvement in revenue generation due to a better image (M=5.18, SD= 1.34).

Hotel managers appears to achieve benefits that are related to building the hotels' image in the eyes of their guests and the local communities and to also provide services that are tailored in providing safe and healthy environment for their guests and employees is a major factor which can be used to described Malaysian hotels as taking steps to become green hotels. According to Kasim (2004), green hotels are those hotels which "...operate in a responsible manner towards its employees, the local community, the local culture, and the surrounding ecology" (p. 10).

Even though most of the hotels have not pursued green certification, but their efforts in taking conscious steps to reduce energy consumption and save resources can be seen as a basic level in environmental management. With majority of the hotels being 3 star hotels or less, improving their image to the guests and the local community will enable them attract a larger share of the tourist market. It will also enable them fair better among their competitors. Now that Malaysia is enjoying a favourable tourist market, the provision of safe and healthy hotels will go a long way in determining the choice of tourists' accommodation.

**Table 3** Benefits of sustainable tourism participation<sup>a</sup>

	<b>Items (Alpha .932)</b>	<b>Mean</b>	<b>SD</b>
1.	Sustainable tourism practices also improve our hotel image to the guests and the local communities	5.95	1.17
2.	Sustainable tourism practices helps to provide a safe and healthy environment for our guests and employees	5.77	1.11
3.	To our hotel, sustainable tourism practices enhance customer and employee satisfaction and motivation	5.62	1.15
4.	By adopting various measures of sustainable tourism practices, our hotel ensures a good future for the tourism industry	5.47	1.40
5.	Guest satisfaction has help to improve our revenue generation	5.45	1.28
6.	Our hotel has improved on revenue generation due to a better image	5.18	1.34
7.	Sustainable tourism practices have helped to improve the relationship between our hotel and the local communities	5.03	1.39
8.	Our hotel has reduced its operational cost through energy management	5.02	1.39
9.	Our hotel has reduced its operational cost through waste management	4.80	1.31
10.	Our hotel has reduced its operational cost through water consumption	4.72	1.49
11.	Sustainable tourism practices has help our hotel to increase environmental quality enhancement	4.67	1.21
12.	Sustainable tourism practices is now a major public relations campaigns in our hotel	4.65	.971
13.	Involvement in sustainable tourism practices has given us a marketing advantage over our competitors	4.55	1.29
14.	Our involvement in Sustainable tourism participation has increased our customer loyalty	4.50	1.35

<sup>a</sup>Seven-point Likert type scale (1=strongly disagree, and 7=strongly agree)

M=Mean, SD=Standard Deviation

Source: Author, 2010

## CONCLUSION

This study has sought to investigate the current state of environmental management practices among hotels in Klang Valley. The study goes further to identify the benefits of going green. Findings from this paper indicate greater participation in energy management practices among the participating hotels. Specifically, the most popular practices were the installation of occupancy sensor/key card control system in hotel guestrooms as well as the use of energy efficient equipments and products. This is in tandem with findings from previous studies across different parts of the world, indicating wide concentration in energy management among

hotels. This can be explained in terms of cost reduction measures most especially now that energy management has become a critical issue. With recent economic conditions all over the world, reduction in energy utilities and resource conservation practices among hotels has become imperative.

This paper also examined hotel managers' perceived benefits of going 'green'. Initial analysis suggests that one of the major advantages is the improvement of hotels' image to the guests and the local communities, as well as the provision of a safe and healthy environment for the hotel guests and employees. This is rather surprising. It appears that Malaysian hotel industry has recognised the need for guests' satisfaction and the relevance of the community in the overall development of tourism. Therefore, the effort of the hotel organisation to promote its image is now a welcomed development. This in turn will attract tourists both within and from other countries of the world, most especially now that the tourism industry in Malaysia is enjoying an impressive patronage.

Conclusively, the current level of environmental management practices among hotels in Malaysia has been encouraging. Therefore, hotels in the country should continue to adopt sustainable tourism practices that will extend to other areas of water conservation and waste management. This will go a long way to reduce the negative impacts of hotels on the environment, increases operational efficiency, and above all, customer satisfaction.

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